

ORIGINAL

**NORTHERN KENTUCKY WATER DISTRICT
CASE NO. 2006-00315
RESPONSE TO ORDER OF MAY 10, 2007**

RECEIVED

JUN 27 2007

**PUBLIC SERVICE
COMMISSION**

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

APPLICATION OF NORTHERN KENTUCKY)
WATER DISTRICT FOR A CERTIFICATE OF) CASE NO.
CONVENIENCE AND NECESSITY FOR THE) 2006-00315
CONSTRUCTION OF SUBDISTRICT F WATER MAIN)
EXTENSIONS, FINANCING AND SURCHARGE)

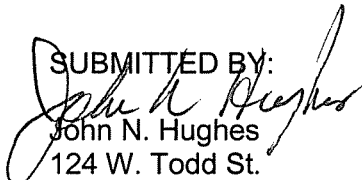
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PUBLIC SERVICE
COMMISSION

RESPONSE TO ORDER OF MAY 10, 2007


Northern Kentucky Water District (Northern), by counsel, submits the attached original and eight bound volumes of approximately 1,200 pages each in response to the Commission's data request. The affidavit of Richard Harrison is included with the responses.

SUBMITTED BY:

John N. Hughes
124 W. Todd St.
Frankfort, KY 40601

ATTORNEY FOR NORTHERN
KENTUCKY WATER DISTRICT

Certificate:

I certify that a copy of this Response was served on David Spenard, 1024 Capital Center Dr., Frankfort, KY 40601 by personal delivery the 27th day of June, 2007.



John N. Hughes

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**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC COMMISSION**

**JUN 27 2007
PUBLIC SERVICE
COMMISSION**

**NORTHERN KENTUCKY WATER DISTRICT'S RESPONSE TO THE
COMMISSION STAFF'S INFORMATION REQUEST IN CASE 2006-00315,
DATED 5-10-2007**

Q1. Provide all studies, analyses, and reports that NKWD prepared or commissioned regarding the extension of water service to the outlying areas of Campbell and Kenton counties, Kentucky.

A1. Witness: Harrison

RESPONSE: See Tab 1

Q2. Provide the minutes of all meetings of the NKWD Board of Commissioners since January 1, 1991 in which the creation of subdistricts to serve the outlying areas of Campbell and Kenton counties, Kentucky and the extension of water service to those areas is discussed.

A2. Witness: Harrison

RESPONSE: See Tab 2

Q3. Provide all NKWD written policies, guidelines, procedures and directives on the creation of subdistricts to serve the outlying areas of Campbell and Kenton counties, Kentucky and the extension of water service to those areas.

A3. Witness: Harrison

RESPONSE: NKWD does not have written policies, guidelines, procedures and directives on the creation of subdistricts since they are created on a case by case basis that can vary depending on the grant funding requirements and the grant applicant. The overall guideline for the formation of subdistricts is to serve the most households per mile within the area being considered for the subdistrict. For example, when Ryland Heights and Fairview were the applicants for the CDBG grant, the service area being considered was primarily within their city boundaries. However, for projects where the applicant was the County Fiscal Court, the service area being considered was within their respective County. When the District is the applicant, it looks system wide for the areas with the highest customer density. Additional factors may include geotechnical concerns, hydraulic considerations and other related factors.

Q4. Provide all correspondence, memoranda, electronic mail messages, and other written communication between NKWD and the county judge/executives of Campbell or Kenton counties since January 1, 1991 in which the creation of subdistricts to serve the outlying areas of

Campbell and Kenton counties, Kentucky and the extension of water service to those areas is discussed.

A4. Witness: Harrison

RESPONSE: See Tab 4

Q5. Explain why NKWD has not created one subdistrict to encompass all areas in Campbell and Kenton counties that are “rural, remote from existing water distribution facilities and have no access to potable water other than cisterns and wells” for the assessment of a single surcharge to finance water main extensions.

A5. Witness: Harrison

RESPONSE: In prior orders, the Commission has treated each subdistrict as an individual project. The surcharges applicable to each subdistrict project have been required to be recalculated annually and reduced if additional customers would accommodate a surcharge reduction. Additionally, certain funding or contributions have been targeted to particular counties, income groups or areas. A unified subdistrict might not be able to qualify for such funding or may not be able to maximize available funding if the subdistrict is system wide. This makes treating them all the same and creating one subdistrict not feasible. Additionally, this would be inconsistent when compared to the Commission’s 50 foot rule, where each extension is tracked and managed individually and the cost of each extension varies street by street depending on the number of customers that agree to connect and the cost for each extension.

The premise that appears to be utilized in the Commission’s 50 foot method is that each individual extension stands alone and is tracked alone and it would not be fair to turn around and charge households who paid for their extension on their street for future extensions on other streets. That is the general premise followed for each of the District’s subdistricts. Customers benefiting from an extension should help pay for the cost of that extension not future extensions that they do not benefit from. In other words, customers in Subdistrict A who have paid their surcharge since 1992, should not now have to bear the cost of future extensions that they have not received benefit from. Creating one subdistrict would not be fair.

Q6. Provide all correspondence, electronic mail messages, and other written communication that NKWD officials and employees received or sent regarding water service to Flagg Springs Market.

A6. Witness: Harrison

RESPONSE: See Tab 6

Q7. Provide the calculations upon which NKWD bases its estimate that “to serve the remaining 2,300 plus households within its service area would cost over \$65,000,000.” State all assumptions that were used to derive this estimate.

A7. Witness: Harrison

RESPONSE: See Tab 7 for the updated cost estimate of over \$79,000,000 to serve the remaining 2,300 plus households within NKWD's service area. This is based upon an average project cost of \$70 per foot for an 8 inch main extension.

Q8. Provide all studies and analyses that NKWD has conducted or commissioned that address the effect on the average customer's monthly bill for water service if the cost of water main extensions to the remaining rural areas were financed through general rates.

A8. Witness: Harrison

RESPONSE: NKWD has not made any specific studies and analyses to address the effect on the average customer's monthly bill for water service if the cost of water main extensions to the remaining rural areas were financed through general rates. NKWD has significant challenges that relate to new regulatory mandates, aging infrastructure and system growth challenges that have resulted in a projected capital improvement program of \$191,051,000 over the next five years. Trying to complete \$79,000,000 in extension cost projects to serve the remaining 2,300 plus households within NKWD's service area is not reasonable, when balanced with the challenges facing the District's almost 80,000 customers that it serves. NKWD is not aware of any statutory or regulatory requirement that mandates that water district's providing free extensions to every unserved household. Additionally, this would be inconsistent with how the NKWD's service area has developed in the past, with extensions normally being paid for by the benefiting customer that receives service through the extension.

Q9. Refer to the Prefiled Testimony of Richard Harrison at 2.

Q9a Describe how Mr. Harrison makes his assessment of the need for a subdistrict.

A9a. Witness: Harrison

RESPONSE: The assessment of the need for a subdistrict is based upon the existence of unserved households in NKWD's service area, the potential availability of grant funds and the inability of the households to afford an extension of service through the Kentucky Public Service Commission's 50 foot rule, which is the basis for NKWD's extension method.

Q9b. List the criteria that Mr. Harrison used to determine whether a subdistrict should be created.

A9b. Witness: Harrison

RESPONSE: The basic criteria for determining whether a subdistrict should be created is whether adequate grant funds are available, when combined with a District extension contribution and a \$30 monthly customer surcharge to make the subdistrict feasible.

Q9c. List the criteria that Mr. Harrison used to determine whether a geographical area should be included in a subdistrict.

Q9c. Witness: Harrison

RESPONSE: Finding a geographically contiguous area is not a critical portion of the criteria used for the formation of a subdistrict. Unfortunately, the highest density areas do not lie in the same geographical area, so this is not a part of the criteria that is used for subdistricts. While NKWD appreciates the Public Service Commission's concern for the effort expended to administer subdistricts, this has not been a problem for NKWD or the customers served by the subdistricts and with the technology that exists with NKWD's billing system and metering system, the customers are aware of the subdistrict they are part of and NKWD is aware of the proper subdistrict that relates to each customer. It hasn't been any problem at all. I am not aware of the Public Service Commission receiving any complaints or concerns from any subdistrict customer regarding this issue. In fact, Tab 9c shows that the Attorney General's office does not have any concern regarding the District's proposed Subdistrict F.

Additionally, There is no geographical component associated with the Public Service Commission's 50 foot rule. This method, established through 807 KAR 5:066, Section 11. Extension of Service, is assumed to be the baseline extension method that is used by KRS 74 established Water District's unless the Public Service Commission approves another arrangement such as the subdistricts that have been previously approved over the past 15 years. For example, assuming customers could have afforded the large lump sum payment associated with this extension method, which they can't based upon its extremely limited use over the past decade, NKWD would have had a minimum of 70 different projects to administer in a street by street manner, instead of the current 9 subdistricts and that assumes each extension covers the same distance a subdistrict does. In reality, there could have been hundreds of small projects to track if the 50 foot method had been utilized to serve the approximately 2400 customers that are currently served through the District's 9 subdistricts. This would be extremely difficult for NKWD and the customers to administer and a financial burden to the customers.

Q10. In his testimony, Mr. Harrison lists 2 alternatives that NKWD has considered in lieu of the creation of subdistricts – NKWD's normal extension policy and assessments. State whether NKWD has considered any other alternatives.

A10. Witness: Harrison

RESPONSE: The other alternatives that have been discussed regarding unserved households would include:

- Having a group of residents on a street to work together cooperatively to extend a water line themselves. The District would facilitate the design but the actual

extension would be made by the residents. This has not been very feasible because rarely, does a group of residents have the technical and financial capabilities to install a main themselves.

- **Having a City or other governmental body pay the entire difference between any grant funding, the District 50 foot contribution or related extension contribution and the total project cost. This occurred for an extension in Elsmere and an extension in Villa Hills. Basically, the City paid the potential customers contribution that would have been made through a surcharge or the Public Service Commission's 50 foot rule contribution. This method is not readily utilized by cities because most municipalities are not able to afford the contribution necessary to serve everyone within their city limits.**

Q11. Describe the procedures that NKWD uses to bill for and administer subdistrict surcharges.

A11. Witness: Harrison

RESPONSE: Each subdistrict account is listed in separate billing cycles based on the subdistrict it is in (example: Subdistrict "A" accounts are in cycle 73). When a customer applies for service in one of the subdistricts their account is set up in our CIS billing system in the appropriate cycle. The subdistrict surcharges are set up in our CIS system as a rate and each separate subdistrict is assigned a rate code (example: Subditrict "A" rate code is SAO). This code is then listed on the account as part of the rate for that account. Each separate subdistrict rate code is then tracked by our CIS system with the number of customers billed and dollar amount applied to each surcharge. Bills are sent monthly and the surcharge is reviewed annually based upon the customer total as of 12/31 of the previous year. It is a fairly straight forward process, particularly when compared to the tracking for the Commission's 50 foot method or the KRS Chapter 74 Assessment method. Once a customer moves or if service ceases for any reason, they no longer have to pay the surcharge.

Q12. Describe the differences in the procedures used to administer assessments with those used to bill for and administer subdistrict surcharges.

A12. Witness: Harrison

RESPONSE: Administering assessments is much more difficult than administering subdistrict surcharges. The procedures for administering surcharges are covered in the response to question 11. KRS 74 assessment extensions are based upon acreage and the relative amount of acreage that is located within different distances from the street right-of-way. This creates significant calculations to even determine the amount of contribution by each property owner. That is a significant difference, when compared to the subdistrict surcharge administration. There are significantly more parcels of land than households. The assessment method requires NKWD to manage each individual parcel and any future construction that occurs. Each parcel requires a file and NKWD must be aware of any sale

of each parcel and any subdivision of the land parcel. The surcharge tracking is automated since it is tracked through NKWD's billing and metering system.

Also, assessments become liens against parcels, which requires filing by the District and management of activities such as loans and subordination of the liens. The District staff has to field more complaint calls on assessments since the assessment applies to each parcel and property owner and the subdistrict method participation is permissive and only those customers that connect to the main for service have to pay the surcharge. Also, once a customer stops taking service, the surcharge stops. Residents like the choice and do not like liens against their property. Tracking assessments is very difficult because residents can make 10 annual payments for direct assessments but for deferred assessments, the payment is deferred until a parcel is developed. If a parcel is not completely developed, the subdivided portion of the parcel that is to receive service is the only portion of the assessment that is due to be paid. This requires another complicated calculation.

Q13. At page 4 of his prefiled testimony, Mr. Harrison states that it is difficult, if not impossible, for the prospective customers of Subdistrict F to make the necessary contribution toward the proposed construction project if NKWD's normal extension policy were applied. State the basis for Mr. Harrison's statement.

A13. Witness: Harrison

RESPONSE: Only six households have chosen to pay for an extension under the Public Service Commission's 50 foot rule since NKWD was established in 1997 and the largest up front payment a resident has been willing to pay using this method was \$1,928 per customer for an extension to serve three customers in Campbell County along Ky Route 8. This compares to over 1,200 customers that have been served since 1997 through NKWD's surcharge method and potentially 200 more through Subdistrict F and Subdistrict G if the NKWD is allowed to continue to use its subdistrict method of extension.

Additionally, All phases of Subdistrict F have now been constructed and although NKWD has had numerous inquiries about service, once the residents learned that they would have to pay \$4,900 upfront instead of the \$30 monthly surcharge anticipated through the subdistrict method, only two have signed up and that was a business and a home builder. The residents are very frustrated because they are currently experiencing drought conditions but are unable to afford the \$4,900 payment as required by NKWD's filed Tariff method.

More recently, the calculated cost per customer for the Subdistrict G area is around \$7,000 utilizing NKWD's filed Tariff method should the \$30 monthly customer surcharge not be approved.

This is the basis for my statement.

Q14. Provide a map of Campbell and Kenton counties, Kentucky of suitable scale on which is indicated the geographical areas (not merely roads or highways) that NKWD considers “rural, remote from existing water distribution facilities, and have no access to potable water other than cisterns and wells.”

A14. Witness: Harrison

RESPONSE: See Tab 14

Q15. Refer to NKWD’s Response to the Commission’s Order of October 19, 2006, Item 6. State for each year since 1997 the savings that NKWD has incurred as a result of its exemption of refunds to real estate subdivision developers for certain main extensions.

A15. Witness: Harrison

RESPONSE: NKWD does not track this since it does not provide refunds for extensions within developments.

Q16. Describe how NKWD determined that Flag Springs Market should contribute \$55,000 towards the cost of the proposed water main extension.

A16. Witness: Harrison

RESPONSE: This amount was negotiated with the owner of the Market who without benefit of the subdistrict would have had to bear the majority of the cost of the project or build a cistern. This level of contribution is equivalent to the present value of approximately 10 surcharges and helped make the extension feasible for NKWD and the Market.

Q17. State whether the amount of any NKWD hydraulic improvement contribution to a subdistrict water main extension project is always the difference between the cost of the larger size water main that is installed and the cost of 8-inch water main. If no, explain how NKWD determines its hydraulic improvement contribution towards the cost of a subdistrict water main extension project.

A17. Witness: Harrison

RESPONSE: Yes, The NKWD hydraulic improvement contribution is always the difference between the cost of the larger size water main that is installed and the cost of the 8-inch water main installation.

Q18. Explain how NKWD determines its “Extension Contribution” to the cost of a subdistrict water main extension project. List all factors used to determine the level of this contribution.

A18. Witness: Harrison

RESPONSE: The Extension Contribution to the cost of a subdistrict water main project is a budgeted expense in the District's 5 yr Capital Budget. This level of contribution is developed during the District's annual budget process and is currently at a level of \$250,000 annually.

AFFIDAVIT

COMMONWEALTH OF KENTUCKY

COUNTY OF KENTON

Affiant, Richard Harrison, after being first sworn, deposes and says that he is the Vice President - Engineering and Distribution, that he is authorized to submit this Response on behalf of Northern Kentucky Water District, and that the information contained in the Response is true and accurate to the best of his knowledge, information and belief, after a reasonable inquiry, and as to those matters that are based on information provided to him, he believes to be true and correct.


Richard Harrison

This instrument was produced, signed, acknowledged and declared by Richard Harrison to be his act and deed the 26th day of June, 2007.


Notary Public

My Commission expires: May 26, 2009

Alternatives for Water Main Expansion
for the Sub-District

A. Expansion by Direct Assessment with surcharge;

This alternative would allow for expansion by a direct assessment for each parcel of property along the proposed street receiving water service. These customers would have to pay their assessment as well as the monthly surcharge of \$24.34. The surcharge would be used to retire the debt of the grant project and would be reduced as more customers are served. This alternative does not seem to be compatible with our goal to expand in the south area of Kenton County.

B. Expansion by Deferred Assessment with or without surcharge;

This alternative could be utilized for transmission main extension. Customers that tap the water main would have to pay their assessment as well as the monthly surcharge of \$24.34. The surcharge would be reduced as more customers are served. This alternative does not seem to be compatible with our goal to expand in the south area of Kenton County.

C. Expansion using the surcharge to retire the debt;

This alternative would allow a water line to be installed only if there are enough customers to pay for that line using their monthly surcharge to retire the debt. Currently for an eight inch PVC water main it takes approximately 40 customers per mile to retire the debt. Some decisions need to be made as to whether this project should be a part of the Sub-District A or should be considered a separate Sub-District. It would become very difficult to manage many different Sub-Districts but as more people tap on to the water system and the surcharge goes down it will be increasingly difficult to get the necessary customers per mile at the lower surcharge.

D. Expansion using a combination of surcharge and assessment to retire the debt;

This alternative would require an assessment for the portion of the project debt that can not be retired through the surcharge. This would occur for projects that don't have the necessary customers per mile to retire the debt without an additional assessment. The assessment could possibly be deferred or direct but most likely would be direct.

E. Expansion using the District's current assessment method without surcharge;

This alternative would allow for customers to pay an assessment for water service but would not require the

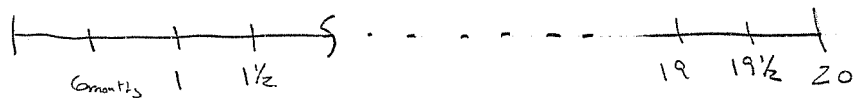
payment of an additional monthly surcharge. They would not be part of the Sub-District even though they were within the boundaries of the Sub-District. This would provide possible complications for billing and the pipe material required would also be in question since the Sub-District allows the use of PVC pipe.

Surcharge per customer for expansion projects

Assume 1 mile project and 10, 20, 30, 40 or 50 customers per mile
 8" pipe projects are \approx \$35 / foot total cost

$$\text{Project Cost} = 5280 \text{ LF} \times \$35 / \text{LF} = \$184,800$$

Payment Period = 20y, Interest rate (i) = 7 1/2% comp. semi-annually



$$n = 40 \text{ periods} \quad i = 3.75\% \text{ each 6 months}$$

A = Amortized cost for 6 month period

$$A = P \left[\frac{i (1+i)^n}{(1+i)^n - 1} \right]$$

$$= \$184,800 \left[\frac{0.0375 (1+0.0375)^{40}}{(1+0.0375)^{40} - 1} \right]$$

$$= 184,800 \left[\frac{.163514}{3.360379} \right]$$

$\times .857$ for \$30/ft

$$= \$8992.26 \text{ every 6 months or } \$4496.13 / \text{quarter}$$

# cust/mile	customer	surcharge per quarter @ 7 1/2% int for 20y
10	\$ 449.61	
20	224.81	
30	149.87	
40	112.40	
50	89.92	

10y 200 people 56 \$ per 1/4 surcharge

(cont)	# Cost/mile	Customer surcharge/Quarter
	60	74.94
	70	64.23
	80	56.20
	90	49.96
	100	44.96
	Not feasible to have more than 100 cost. per mile	

# Cost/mile	Customer Surcharge /Quarter ^{10%} _{for 20%}
10	538.49
20	269.25
30	179.50
40	134.62
50	107.70
60	89.75
70	76.93
80	67.31
90	59.83
100	53.85

Use 10y payback at

7 1/2 % + 10.0 %

6649.3 - 13,298.60

# Cust/mile	Customer Surcharge per quarter at 7 1/2 % for 10
10	\$ 664.93
20	332.48
30	221.64
40	166.23
50	132.99
60	110.82
70	94.99
80	83.12
90	73.88
100	66.49

7414.42

# Cust/mile	Customer Surcharge per quarter at 10% for 10
10	741.44
20	370.72
30	247.15
40	185.36
50	148.29
60	123.57
70	105.92
80	92.68
90	82.38
100	74.14

KENTON COUNTY RURAL WATER SYSTEM STUDY

SEPTEMBER 1986

KENTON COUNTY RURAL WATER SYSTEM DESIGN CRITERIA

1. NUMBER OF SERVICES

- METERED CUSTOMERS

2. FLOW DESIRED.....GALLONS PER MINUTE

- DOMESTIC DEMAND.....1000gpm
- FIRE FLOW DEMAND.....0
- IRRIGATION DEMAND.....0
- INDUSTRIAL DEMAND.....0

3. TYPE OF PIPE

- Ductile Iron(DI) or Polyvinyl Chloride(PVC)

4. NUMBER OF VALVES

- Required for shut off and maintenance

5. NUMBER OF FIRE HYDRANTS

- Where required

KENTON COUNTY RURAL WATER SYSTEM
1986 COST ESTIMATE PER LINEAR FOOT

PROJECT (STREETS OR ROADS)	MAIN SIZE (INCHES)	DOLLAR COST PER FOOT	
		DUCTILE IRON PIPE (KCWD STD.)	PVC PIPE (OPTIONAL)
Lincoln & BelAire* <i>Ball Curve +</i>	6	\$28.30	\$23.30
Hickory Grove* ~ <i>20</i>	6	28.30	23.30
Don St.	6	28.30	23.30
Riggs Rd.	6	28.30	23.30
Bowman Rd. <i>11 total</i>	6	28.30	23.30
<i>Seagarden 15</i>			
KY 17 to Piner	16/12	\$56.55	\$35.45
KY 17 to Co. Line	12	42.45	35.45
KY 14 to U.S. 25	12	42.45	35.45
Hemphling Rd.	10	35.50	29.50
Rich Rd.	10	35.50	29.50
Spillman Rd.	6	22.30	17.30
Stephenson Rd.	6	22.30	17.30
Lunsford Rd.	6	22.30	17.30
Bird Rd.	6	28.30	23.30

Note: Cost figures include construction (pipe, valves, hydrants, etc.), engineering and contingencies.

* STREETS LOCATED WITHIN COUNTY'S URBAN SERVICE AREA

KIMBERLY 24

ELIZABETH 17 1.2 mi

KENTON COUNTY RURAL WATER SYSTEM

1986 PROJECT COST ESTIMATE

PROJECT (STREETS OR ROADS)	MAIN SIZE (INCHES)	LENGTH (FEET)	NUMBER OF SERVICES	PROJECT COSTS	
				DUCTILE IRON PIPE (KCWD STD.)	PVC PIPE (OPTIONAL)
Lincoln & BelAire*	6	1150	15	\$ 32,545	\$ 26,795
Hickory Grove*	6	1850	24 20	52,355	43,105
Don St.	6	2700	30	76,410	62,910
Riggs Rd.	6	6700	74	189,610	156,110
Bowman Rd.	6	8076	67 71	228,550	188,170
KY 17 to Piner	16/12	28,500	77	1,611,675	1,010,325
KY 17 to Co. Line	12	21,650	124	919,043	767,492
KY 14 to U.S. 25	12	17,952	80	762,062	636,398
Hemphling Rd.	10	13,200	41	468,600	389,400
Rich Rd.	10	18,480	41	656,040	545,160
Spillman Rd.	6	5,280	26	117,744	91,344
Stephenson Rd.	6	5,808	13	129,518	100,478
Lunsford Rd.	6	4,224	7	94,195	73,075
Bird Rd.	6	1,584	8	44,827	36,907
<u>TOTAL PROJECT COST</u>				\$ 5,383,174	\$ 4,127,669

Note: Cost figures include construction (pipe, valves, hydrants, etc.), engineering, and contingencies.

* STREETS LOCATED WITHIN COUNTY'S URBAN SERVICE AREA

KENTON COUNTY WATER DISTRICT NO. 1
1986 WATER RATE SCHEDULE
BILLED QUARTERLY (EVERY 3 MONTHS)

GALLONS USED	CUBIC FEET	CHARGE PER QUARTER	
28000	3743	\$32.09	
24000	3209	27.66	
21000	2808	\$24.30	AVERAGE BILL*
20000	2674	23.21	
16000	2139	18.77	
12000	1604	14.33	
8000	1070	9.90	
4488	600	\$6.00	MINIMUM BILL
0	0		

* BASED ON 936 CUBIC FEET OF WATER USED PER MONTH BY RESIDENTIAL UNITS

KENTON COUNTY RURAL WATER SYSTEM

WATER SERVICE CHARGES PER CUSTOMER

ASSUMPTIONS

- Total Project Cost:.....\$4,127,700
(includes PVC pipe, engineering and contingencies)
- Financing-Debt Service:.....\$275,370/year
- Water Rates Per Quarter:.....\$6.00(minimum)
\$24.30(average)
- Total Customers:.....627

WATER SERVICE CHARGES	MINIMUM	AVERAGE
PER YEAR		
Debt Service	\$439	\$439
Water Rate Range	<u>24</u>	<u>96</u>
TOTAL	\$463	\$535
PER QUARTER		
Debt Service	\$110	\$110
Water Rate Range	<u>6</u>	<u>24</u>
TOTAL	\$116	\$134
PER MONTH		
Debt Service	\$37	\$37
Water Rate Range	<u>2</u>	<u>8</u>
TOTAL	\$39	\$45

ESTIMATED COST OF REQUESTED EXPANSION PROJECTS

6/30/86

<u>WITHIN INDEPENDENCE CITY LIMITS</u>	<u>LENGTH</u>	<u>EST. COST</u>	<u>EST. SERV.</u>	<u>EST. COST/SE</u>
Ridgeview Hts.	4,100'	\$ 116,030	70	\$1,658
Kimberly Dr. ✓	2,400'	67,920	25	2,717
Webster Rd., off Richardson Rd. ✓	4,100'	91,430	30	3,048
Pelly Rd. & Scenic Ridge ✓	2,512'	56,018	15	3,741
Independence-Banklick Sta. Rd.	6,600'	147,180	36	4,088
Independence Station Rd. —	15,840'	353,232	65	5,434
Stephens Rd. - Frontier Dr.	5,660'	137,241	24	5,718
Tamarita Dr.	693'	19,612	3	6,537
Crowe Rd.	<u>1,775'</u>	<u>39,583</u>	<u>5</u>	<u>7,917</u>
Subtotal Ind. City Limits	43,680'	\$1,028,246	273	\$3,766
 <u>OUTSIDE CITY LIMITS</u>				
Lincoln Dr. & Bel Aire ✓	1,150'	32,545	15	2,170
Hickory Grove Rd. ✓	1,850'	52,355	24	2,181
Don St.	2,700'	76,410	30	2,547
Riggs Rd. ✓	6,700'	189,610	74	2,562
Bromley-Crescent Springs Rd.	2,700'	76,410	27	2,830
Bowman Rd.	8,076'	228,550	67	3,411
St. John's Rd.	2,083'	46,451	13	3,573
Ky. 17, South 1.8 Miles	<u>9,504'</u>	<u>211,939</u>	<u>30</u>	<u>7,065</u>
Subtotal Outside City Limits	34,763'	\$ 914,270	280	\$3,265
 TOTAL	 78,443'	 \$1,942,516	 553	 \$3,716

Average Monthly Residential Bill

6-19-86

7000 gal. or 936 cubic feet per month

1. Walton	\$ 25.50
2. Boone Co.	18.50
3. Campbell Co.	16.60
4. Taylor Mill	14.75
5. Independence	14.50
6. Winston Park	12.53
7. Newport	10.24
8. Florence	9.41
9. Wilder	8.11
* 10. Kenton Co.	8.10
11. Bromley	7.02
12. Ludlow	6.88
13. Highland Heights	6.54



KENTON COUNTY WATER DISTRICT No. 1

3049 Dixie Highway
 P.O. Box 17010
 Covington, Ky. 41017
 Phone (606) 331-3066

FACT SHEET

	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1982</u>	<u>1981</u>
Total Water Treated	7,351 MG	7,282 MG	6,711 MG	6,361 MG	6,872 MG
- Ft. Thomas Plant	3,909 MG	4,292 MG	4,419 MG	3,404 MG	3,521 MG
- Taylor Mill Plant	3,441 MG	2,990 MG	2,292 MG	2,957 MG	3,351 MG
Total Water Sold	5,976 MG	5,721 MG	5,513 MG	5,421 MG	5,570 MG
Water for Plant Use	216 MG	219 MG	268 MG	232 MG	274 MG
Fire Dept. Usage	10 MG	N/A	N/A	N/A	N/A
Accounted-for Water Losses	20 MG	N/A	N/A	N/A	N/A
Unaccounted-for Water Losses	1,129 MG	1,342 MG	930 MG	707 MG	1,027 MG
Avg. Daily Production	20.1 MGD	19.9 MGD	18.4 MGD	17.4 MGD	18.8 MGD
Max. Day Production	29.0 MG	30.1 MG	28.6 MG	25.4 MG	25.5 MG
Max Production Date	Sept. 8	June 13	July 22	July 18	July
Active Metered Services	30,230	29,790	29,519	29,202	29,000
Meters Replaced	2,135	2,775	1,782	1,567	2,200
New Services Installed	515	493	395	233	300
Water Breaks	116	106	112	106	100
Feet of Main \geq 6" Installed	12,364	17,878	18,130	13,270	67,900
Fire Hydrants Repaired	238	255	182	183	300
Fire Hydrants Replaced	25	48	24	15	N/A
Fire Service Installations	8	10	8	8	0
Full Time Employees	56	53	53	53	0
Job Related Accidents	16	14	17	10	0
Lost Time Days	21	54	15.5	3.5	6
Total Income	\$6,252,098	\$6,009,202	\$5,305,147	\$4,980,225	\$4,179,400
Operating Revenue	5,580,704	5,345,285	4,937,583	4,267,820	3,829,500
Total Expense	5,759,791	5,366,488	5,188,748	5,247,688	4,076,900
O & M Expense	3,532,901	3,246,923	3,167,074	3,108,460	2,984,100
Elec. Pumping Expense	1,184,208	1,100,976	1,095,949	1,005,959	954,000
Fire Hydrant Maint. Exp.	41,054	48,791	25,798	27,634	55,700
Net Income (Loss)	45,956	642,714	116,399	(267,463)	102,500

MG - Million Gallons
 MGD - Million Gallons Per Day

Avg. Net Income per Class of Customer 1983

Net Income \$180,329
 Total Water Sold 5,512,875,000 gal.
 " " " 737,015,370 C.F.

$$\begin{aligned} \$180,329 \div 737,015,370 \text{ CF} &= \$.000245 / \text{CF} \\ \text{Net Income} / 100 \text{ CF} &= \$.0245 / 100 \text{ CF} \end{aligned}$$

	No. of Customers	Gal.	C.F.
Residential	27,689	2,459,311,800 gal	328,785,000 C.F.
Commercial	1,633	767,268,800 gal	102,576,040 C.F.
Industrial	189	410,702,400 gal	54,906,737 C.F.
Wholesale	9	1,875,592,000 gal	250,747,590 C.F.
Florence	1	769,410,800 gal	102,862,400 C.F.
BCWD	1	387,104,400 gal	51,751,925 C.F.

Residential $\$.0245 \times 328,785,000 / 100 = \$80,552.32$
 $\$80,552.32 \div 27,689 \text{ customers} = \boxed{\$2.91} / \text{customer/yr}$

Commercial $\$.0245 \times 102,576,040 / 100 = \$25,131.13 \div 1633 = \boxed{\$15.39} / \text{customer/yr}$

Industrial $\$.0245 \times 54,906,737 / 100 = \$13,452.15 \div 189 = \boxed{\$71.18} / \text{customer/yr}$

Wholesale $\$.0245 \times 250,747,590 / 100 = \$61,433.16 / \text{yr}$

Florence $\$.0245 \times 102,862,400 / 100 = \underline{\$25,201.29 / \text{yr}}$

BCWD $\$.0245 \times 51,751,925 / 100 = \underline{\$12,679.22 / \text{yr}}$

DHW

7-25-84

AVERAGE NET INCOME PER CLASS OF CUSTOMER

1984

NET INCOME \$ 642,714
 TOTAL WATER SOLD 5,720,668,800 GAL.
 764,795,294 CU.FT.

$$\begin{aligned} \$ 642,714 \div 764,795,294 &= \$ 0.000840 / \text{CU.FT.} \\ \text{NET INCOME} / 100 \text{ CU.FT.} &= \$ 0.084 / 100 \text{ CU.FT.} \end{aligned}$$

CLASS	NO. OF CUSTOMER	GALLON	CUBIC FEET
RESIDENTIAL	27,999	2,483,091,200	331,964,064 C.F.
COMMERCIAL	1,670	821,404,200	109,813,396 C.F.
INDUSTRIAL	111	451,687,300	60,386,003 C.F.
WHOLESALE	10	1,964,486,100	262,631,832 C.F.
FLORENCE	1	768,049,300	102,680,388 C.F.
BCWD	1	460,875,200	61,614,332 C.F.

RESIDENTIAL	$\$.084 \times 331,964,064 / 100 \text{ CU.FT.} = 278,849.81 \div 27,999 =$	$\underline{\$ 9.959 / \text{CUSTOMER} / \text{YR.}}$
COMMERCIAL	$.084 \times 109,813,396 / 100 \text{ CU.FT.} = 92,243.25 \div 1,670 =$	$55.235 / \text{CUSTOMER} / \text{YR.}$
INDUSTRIAL	$.084 \times 60,386,003 / 100 \text{ CU.FT.} = 50,724.24 \div 111 =$	$456.975 / \text{CUSTOMER} / \text{YR.}$
WHOLESALE	$.084 \times 262,631,832 / 100 \text{ CU.FT.} = 220,610,738 \div 10 =$	$22,061.074 / \text{CUSTOMER} / \text{YR.}$
FLORENCE	$.084 \times 102,680,388 / 100 \text{ CU.FT.} =$	$= 86,251.526 / \text{CUSTOMER} / \text{YR.}$
BCWD	$\$.084 \times 61,614,332 / 100 \text{ CU.FT.} =$	$= \$ 51,756.039 / \text{CUSTOMER} / \text{YR.}$

AVERAGE NET INCOME PER CLASS OF CUSTOMER 1985

NET INCOME \$ 45,956
 TOTAL WATER SOLD 5,975,940,200 GAL
 798,922,487 CU. FT.

$\$45,956 \div 798,922,487 = \$.000058 \text{ CU. FT.}$
 NET INCOME / 100 CU. FT. = $\$.006 / 100 \text{ CU. FT.}$

	No. of CUSTOMERS	GALLON	CUBIC FT
RESIDENTIAL	27,396	2,283,998,500	305,347,393/cu.
COMMERCIAL	2,717	1,104,397,600	147,646,738/cu.F
INDUSTRIAL	107	491,586,500	65,720,120/cu.F
WHOLESALE	10	2,095,957,600	208,208,235/cu.F
FLORENCE	1	820,380,100	109,676,484/cu.F
BCWD	1	474,894,100	63,485,842/cu.F.

RESIDENTIAL $.006 \times 305,347,393/100 = 18,320.84 \div 27,396 = \underline{\$.0669/\text{CUSTOMER/YR}}$
 COMMERCIAL $.006 \times 147,646,738/100 = 8,858.80 \div 2,717 = 3.260/\text{CUSTOMER/YR}$
 INDUSTRIAL $.006 \times 65,720,120/100 = 3,943.21 \div 107 = 36.852/\text{CUSTOMER/YR}$
 WHOLESALE $.006 \times 208,208,235/100 = \underline{\$12,492.49} \div 10 = 1,249.249/\text{CUSTOMER/YR}$
 FLORENCE $.006 \times 109,676,484/100 = 6,580.589/\text{CUSTOMER/YR}$
 BCWD $.006 \times 63,485,842/100 = \underline{\$3,809.150}/\text{CUSTOMER/YR}$

FEASIBILITY STUDY

FOR

PINER WATER SYSTEM

PREPARED FOR

KENTON COUNTY FISCAL COURT

JUNE, 1987

PREPARED BY

CARDINAL ENGINEERING CORPORATION
618 BUTTERMILK PIKE
COVINGTON, KENTUCKY 41017

RECEIVED
MAY 21 1987
KCWD NO. 1

BACKGROUND

At present, the City of Piner, and surrounding urban areas are without a water treatment or distribution system. Residents of Piner, and the areas South of Nicholson and South of Walton collect water from rooftops, or have water delivered from other areas for storage in their cisterns. Potability and supply of water cannot be guaranteed, and the residents must burden the expense and inconvenience of having water hauled during dry weather.

It is therefore desirable to construct a water distribution system to supply the residents with an adequate source of treated water. Investigation of the feasibility of providing a treated water source will be limited to the construction of an underground P.V.C. (Polyvinyl Chloride) distribution system, with the purchase of potable treated water from the Water District No. 1 of Kenton County directly, or via Walton's system. Water supply will be obtained by connection to the existing systems in Nicholson and/or Walton. The lack of an adequate water supply near Piner would prohibit the construction of a treatment plant, and makes the construction of the 12" supply line along Ky. Rt. 17 to Nicholson a necessity. *

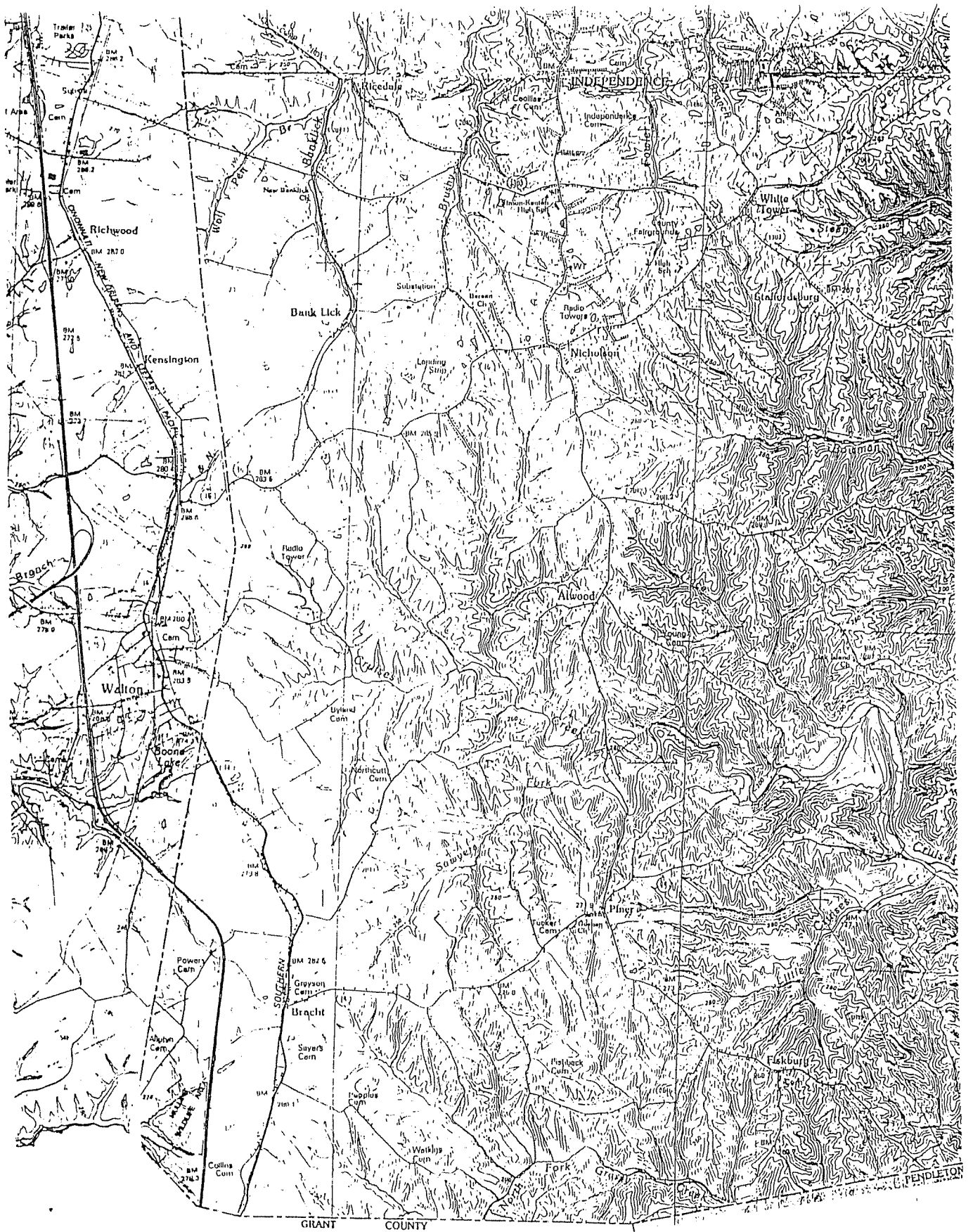
*(Excluding Alternate 4)

ALTERNATE NO. 1

Alternate No. 1 investigates the possibility of serving the residents along Ky. Rt. 17 from Nicholson to the Kenton/Pendleton County line South of Piner, residents along U.S. 25 from Walton to Bracht, residents along Ky. Rt. 14 from Bracht to Piner, and adjoining streets where density would permit a water user at intervals not exceeding 550 feet.

Benefits received from this system include a wide area of service for present and future users, looping of the systems serving Nicholson and Walton, and two sources of water supply to Piner maintaining a water source if repairs become necessary on one of the supply lines.

Disadvantages of this system include the large construction cost of the 12" supply line along Ky. Rt. 17 from Nicholson to Piner. Included in this expense is the replacement of a portion of the present system in Nicholson, southerly from the water tower along Ky. Rt. 17 where present water lines are smaller than 12" diameter.



GRANT COUNTY

PENDLETON

KENTON COUNTY RURAL WATER SYSTEM

PRELIMINARY

1987 PROJECT COST ESTIMATE

ALTERNATE 1

PROJECT (Streets or Roads)	MAIN SIZE (Inches)	ESTIMATE COST/FT	LENGTH (FEET)	NUMBER OF SERVICES	AVG. LIN.FT. PER SERVICE	AVG. CONST. COST/SERVICE	PROJECT COST - PVC
Ky. 17 Nicholson to Piner.	12"	\$35.45	28,150	80	352	\$12,470	\$ 997,918
Ky. 17 Piner to County line	12"	35.45	22,000	108	204	7,221	779,900
Ky. 14 Piner to Bracht	12"	35.45	17,952	81	217	7,857	636,399
Bird Rd.	8"	22.50	1,584	8	198	4,455	35,640
Hempfling Rd.	10"	29.50	12,000	40	300	8,850	354,000
Spillman Rd.	8"	22.50	5,300	26	204	4,587	119,250
Rich Rd.	10"	29.50	18,480	44	420	12,390	545,160
Paxton Rd.	8"	22.50	1,700	8	213	4,781	38,250
Gardnersville Rd.	8"	22.50	4,400	17	259	5,824	99,000
Lunsford Rd.	8"	22.50	4,200	8	525	11,813	94,500
Stephenson Rd.	8"	22.50	5,808	13	447	10,052	130,680
Dixie Hwy.(U.S. 25) Walton to Bracht	10"	29.50	18,000	70	257	7,586	531,000
Green Rd.	8"	22.50	16,500	45	366	8,250	371,250

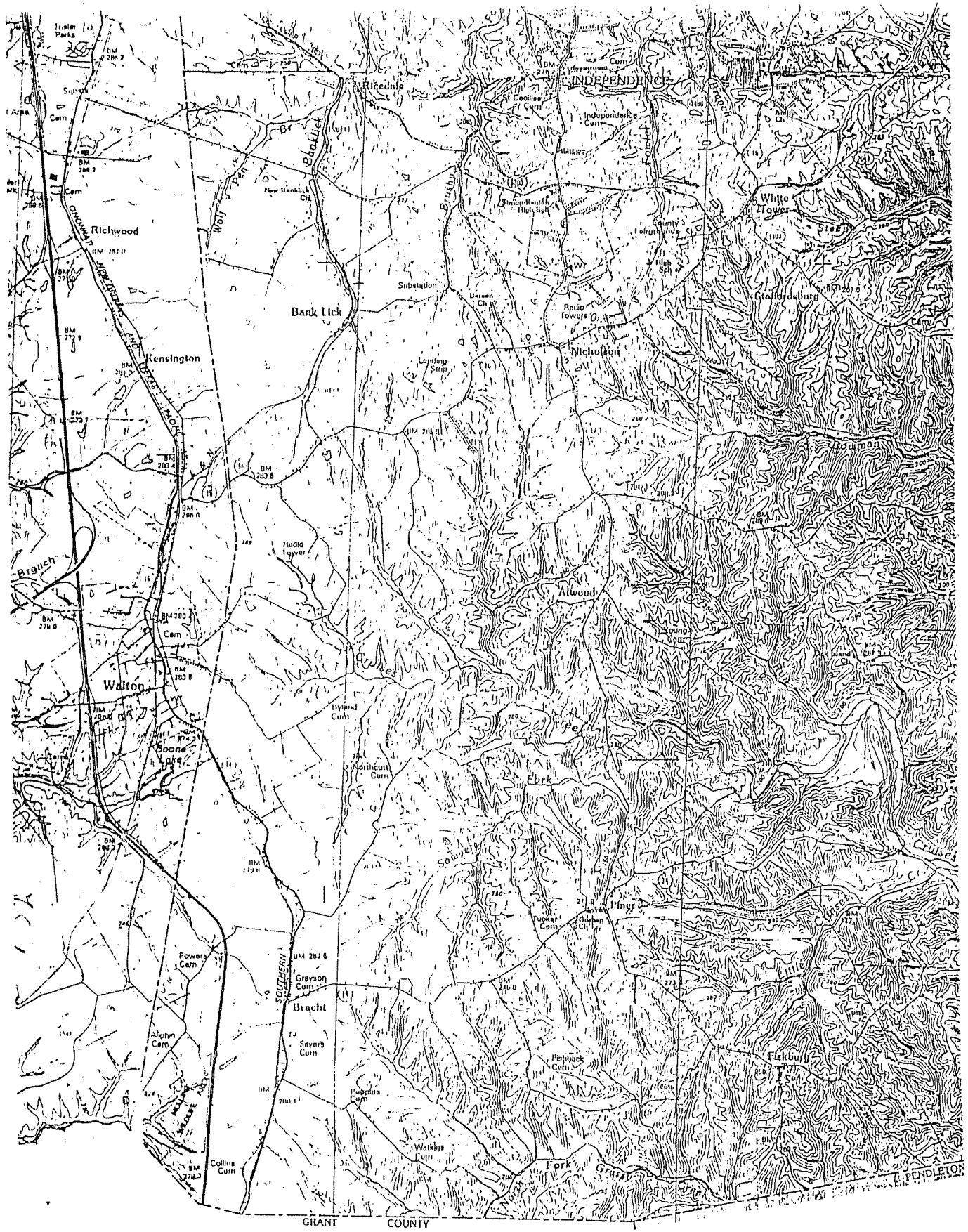
Total Users 548 User Cost \$8,637 Total Cost \$4,732,950

ALTERNATE NO. 2

In Alternate No. 2 an attempt is made to reduce the costs to the users by eliminating the adjoining streets in Alternate No. 1 where the density is not currently sufficient to provide a user at intervals closer than 300 feet.

Benefits received from this approach are service of the majority of the area with the ability to expand the system when population density (growth) permits. The looped system from Nicholson to Walton has been retained.

Disadvantages of this system remain as in Alternate No. 1. The user cost has been reduced by only 6%.



KENTON COUNTY RURAL WATER SYSTEM
PRELIMINARY
1987 PROJECT COST ESTIMATE

ALTERNATE 2

PROJECT (Streets or Roads)	MAIN SIZE (Inches)	ESTIMATE COST/FT	LENGTH (FEET)	NUMBER OF SERVICES	AVG. LIN. FT. PER SERVICE	AVG. CONST. COST/SERVICE	PROJECT COST - PVC
Ky. 17 Nicholson to Piner	12"	\$35.45	28,150	80	352	\$12,470	\$ 997,918
Ky. 17 Piner to County Line	12"	35.45	22,000	108	204	7,221	779,900
Ky. 14 Piner to Bracht	12"	35.45	17,952	81	217	7,857	636,399
Bird Rd.	8"	22.50	1,584	8	198	4,455	35,640
Spillman Rd.	8"	22.50	5,300	26	204	4,587	119,250
Paxton Rd.	8"	22.50	1,700	8	213	4,781	38,250
Gardnersville Rd.	8"	22.50	4,400	17	259	5,824	99,000
Dixie Hwy. (U.S. 25) Walton to Bracht	10"	29.50	18,000	70	257	7,586	531,000

Total Users 398 User Cost \$ 8,134 Total Cost \$3,237,360

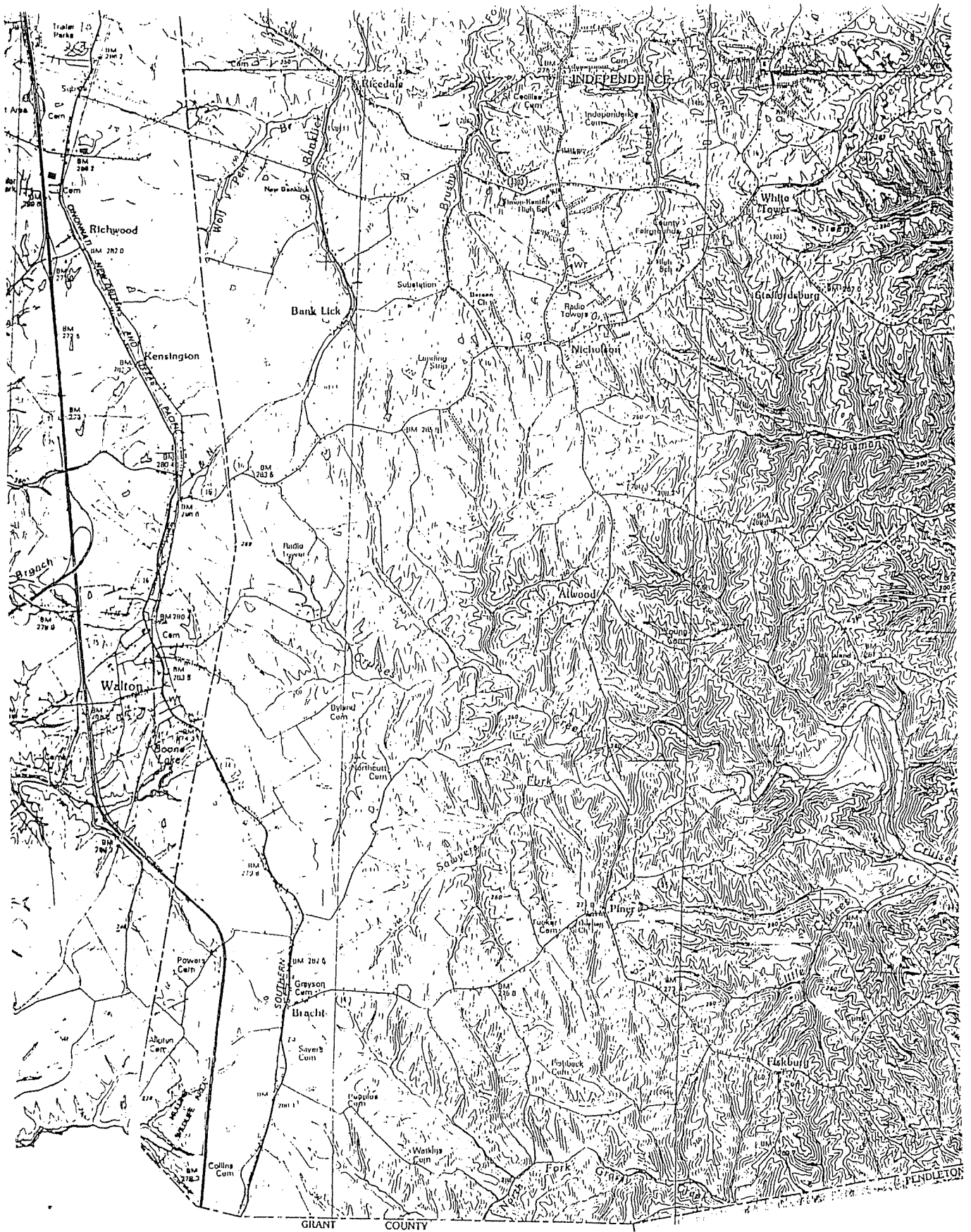
ALTERNATE NO. 3

In Alternate No. 3 a further reduction in the individual user's cost has been achieved by eliminating the 12" supply line along Ky. Rt. 17 from Nicholson to Hempfling Road. This is a 3.1 mile section with only 16 potential users along Ky. Rt. 17, and 8 potential users on the adjoining Bird Road.

The system would receive the water supply from Walton along U.S. 25 to Bracht, Ky. Rt. 14 from Bracht to Piner, and along Ky. Rt. 17 from Piner to the Kenton/Pendleton County line. The system would extend North along Ky. Rt. 17 to Hempfling Road.

Benefits of this system include the ability for expansion of the system when density (growth) permits, and service to the majority of the area in Alternate No. 1 including Piner Elementary School.

Disadvantage of this alternate include the elimination of the looped system between Nicholson and Walton, and the high user cost. The cost to the individual user has only been reduced by 12% from the user cost in Alternate No. 1, and the number of users has been reduced by 20%.



KENTON COUNTY RURAL WATER SYSTEM
PRELIMINARY

1987 PROJECT COST ESTIMATE ALTERNATE 3

PROJECT (Streets or Roads)	MAIN SIZE (Inches)	ESTIMATE COST/FT	LENGTH (FEET)	NUMBER OF SERVICES	AVG. LIN. FT. PER SERVICE	AVG. CONST. COST/SERVICE	PROJECT COST - PVC
Ky. 17 Hempfling to Piner	12"	\$35.45	11,750	44	267	\$ 9,467	\$ 416,537
Ky. 17 Piner to County Line	12"	35.45	22,000	108	204	7,221	779,900
Ky. 14 Piner to Bracht	12"	35.45	17,952	81	217	7,857	636,399
Hempfling Rd.	10"	29.50	12,000	40	300	8,850	354,000
Spillman Rd.	8"	22.50	5,300	26	204	4,587	119,250
Paxton Rd.	8"	22.50	1,700	8	213	4,781	38,250
Gardnersville Rd.	8"	22.50	4,400	17	259	5,824	99,000
Dixie Hwy. (U.S. 25)	10"	29.50	18,000	70	257	7,586	531,000
Walton to Bracht	8"	22.50	16,500	45	366	8,250	371,250
Green Rd.	8"						

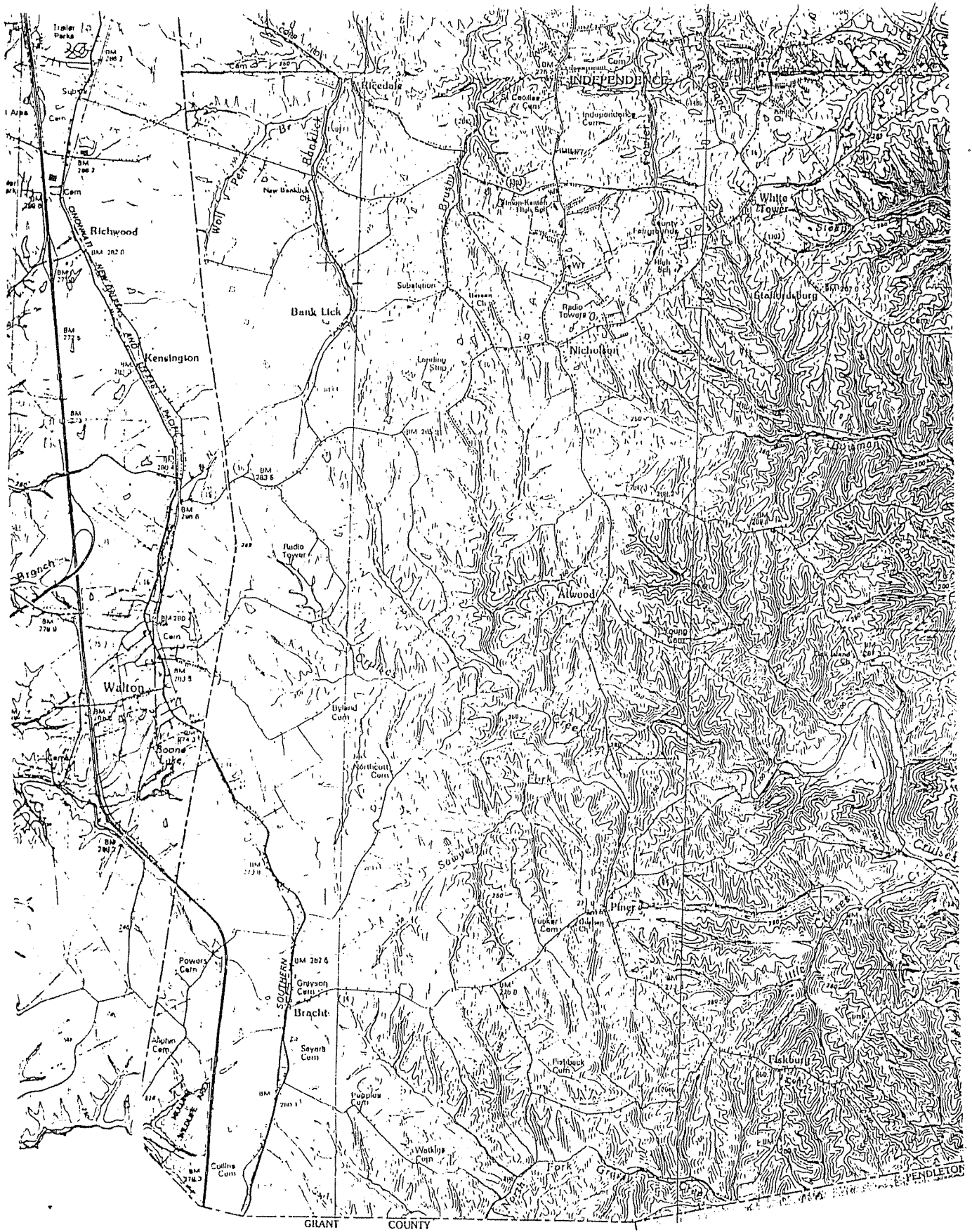
Total Users 439 User Cost \$7,620 Total Cost \$3,345,586

ALTERNATE NO. 4

In Alternate No. 4 we have attempted to represent the lowest relative user cost obtainable, while still planning for population growth and subsequent expansion of the system. Water supply would be from Walton, and the line would extend southerly along U.S. 25 to Bracht, then along Ky. 14 from Bracht to Piner, along Ky. Rt. 17 to the Kenton/Pendleton County line, and northerly along Ky. Rt. 17 and Rich Road to the Piner Elementary School.

Benefits received from this system would include supplying water to approximately half of the users in Alternate No. 1, and providing a closer source of water for those who will still need to haul water for their cistern.

Disadvantages of this system include the limited service area, and the high user cost. A reduction of the user cost by only 15% below the user cost in Alternate No. 1 is achieved, with a reduction of users by 48%.



KENTON COUNTY RURAL WATER SYSTEM
 PRELIMINARY
 1987 PROJECT COST ESTIMATE

ALTERNATE 4

PROJECT (Streets or Roads)	MAIN SIZE (Inches)	ESTIMATE COST/FT	LENGTH (FEET)	NUMBER OF SERVICES	AVG. LIN.FT. PER SERVICE	AVG. CONST. COST/SERVICE	PROJECT COST - PVC
Ky. 17 School to Piner	8"	\$22.50	150	2	75	1,688	\$ 3,375
Ky. 17 Piner to County Line	12"	35.45	22,000	108	204	7,221	779,900
Ky. 14 Piner to Bracht	12"	35.45	17,952	81	217	7,857	636,399
Rich Rd.	10"	29.50	600	1	420	17,700	17,700
Paxton Rd.	8"	22.50	1,700	8	213	4,781	38,250
Gardnersville Rd.	8"	22.50	4,400	17	259	5,824	99,000
Dixie Hwy. (U.S. 25) Walton to Bracht	10"	29.50	18,000	70	257	7,586	531,000

Total Users 287 User Cost \$7,337 Total Cost \$2,105,624

SUMMARY OF ALTERNATES

In reviewing the alternates, it is evident that the low density of the rural area makes it difficult to provide an economical water distribution system. Additionally, the distance necessary to obtain a water source is a significant portion of the cost of the system. The construction of the 12" supply line from Nicholson to Piner represents 20% - 30% of the total project cost, and extension of the distribution system to the Kenton/Pendleton County line represents an additional 16% - 24% of the first two alternates. Therefore, approximately 50% of the construction cost is involved in constructing the 12" supply line along Ky. Rt. 17 from Nicholson to the Kenton/Pendleton County line.

Investigation of the construction cost to each user reveals that from Alternate No. 1 to Alternate No. 4, a 15% reduction in user construction cost has been achieved with a reduction of the available users by 48% and elimination of the looped system between Nicholson and Walton. Alternate No. 1 is considered to be of the most benefit and will therefore be used throughout the remainder of this study for investigation of financing, demographics and grant availability.

DEMOGRAPHICS

Piner is located in Southern Kenton County at the intersection of U.S. 25 and KY 14. The area is developed in a rural residential manner, and random counts in the area indicate a density of approximately one dwelling unit per 25 acres of land. The Northern Kentucky Area Planning Commission classifies this area as a non-urban service area in their Comprehensive Plan for Development (1980-2000) in that the full range of urban services are not provided. Urban services provided are basic police and fire protection, public education, streets and highways, parks and recreation, libraries, public housing, code enforcement, health services, planning and zoning, solid waste disposal, civil defense, courts, jails, general government, and others. Services which are not provided, and are generally provided when the density becomes sufficiently large to classify the area as "Urban" are: a centralized water supply, centralized sewage collection and disposal, solid waste collection, street cleaning, street lighting, storm sewers, and a higher level of government, police and fire protection. It is the availability of the above services that help promote new development within the service area. Generally, the centralized sewer and water systems are extensions of immediately available systems serving adjacent urban, commercial or industrial areas.

The Northern Kentucky Area Planning Commission's projections obtained from the Urban Studies Center, University of Louisville project a population increase of 9.6% from 1980 to 2000, and a 3.6% increase from 2000 to 2010 for Kenton County. The Northern Kentucky Area Planning Commission anticipates that the majority of the new development will occur within the Urban Service Area as indicated in the following excerpt from the Comprehensive Plan for Development - 1980-2000: "Southern Kenton County Sector - The southern Kenton County area is identified as "Non-Urban Service Area". Because land located within the Non-Urban Service Area is not anticipated or planned to be provided with the full range of urban services during the planning period, it is recommended to be utilized for agricultural and rural residential uses. Residential Recommendations - A Summary The foregoing description identifies land within the "Urban Service Area" to be used for residential development at a variety of densities, and land within the "Non-Urban Service Area" to be utilized in agricultural or very low-density residential use. In this regard, it is important to note that the amount of undeveloped land recommended for residential development in the "Urban Service Area" is substantial. As an illustration, if development of such areas were to take place in accordance with the recommended land use plan, and develop to full saturation, over 36,500 additional dwelling units would be built -- a far greater number than needed to accommodate the projected population increase of approximately 15,000 persons. Thus, it is evident that development within the "Urban Service Area" can, and should, be phased to make the most

effective use of the existing infrastructure (e.g., streets, utilities, community facilities) and to provide for orderly growth. Proper phasing of urban development will also contribute to efforts to conserve energy (e.g., shortening trips to work, shopping, etc.) and obtaining the most efficient use of the taxpayer's dollars (e.g., obtaining maximum utilization from major capital improvements such as extensions of primary water and sanitary sewer lines).

This phasing plan recommends that new development first take place in the northern portion of the two-county area (e.g., Highland Heights, Cold Spring, Villa Hills, Edgewood, etc.) and those areas close to major employment centers. In addition to their good location (e.g., close proximity to major community and shopping facilities, employment centers, downtown Cincinnati, major transportation routes, etc.), these areas are so recommended because large amounts of undeveloped land are still available and are already served by the full-range of urban services. If new development first occurs in these areas, it would aid in reducing the length of automobile trips to work, shopping, etc., create concentrated areas of development which can more easily be served with a mass transportation system, and reduce the actual costs of development to the public (i.e., there would be minimum costs required to expand primary water and sewer facilities, police and fire protection, etc., where such facilities are already in place). This recommendation also appears realistic because there is more than enough undeveloped

land within these areas to accommodate the projected population increase during the planning period (e.g., nearly 21,000 of the 36,500 dwelling units that can be accommodated within the "Urban Service Area" could be built in areas already served with the full range of urban services). As development in these areas reaches full saturation, then the recommended phasing is for new development to proceed as a logical extension of these areas. This enables the gradual extension of the required urban services only as they are necessitated by actual development. In summary, timing, direction, and extent of new development are most critical parts of the plan's recommendations for future residential development, and good regulatory measures, adequately enforced, will be necessary to ensure such a phasing of new development"

Commercial or Industrial development is not projected to occur within the Non-Urban Service area of the County.

It is therefore anticipated that the population of the unincorporated areas of the county, and specifically the Piner area will experience only small increases in population for the limits of the projection period.

GRANT AVAILABILITY

Although outside grant programs are more limited than in previous years, several funding sources still remain generally available to assist with water and sewer system projects.

Farmer's Home Administration can make both grants and loans available, frequently together in the same project. The amount of grant funds is relatively limited, however, and tends to be directed to localities in which assistance is needed to supplement customers' ability to pay, but not for a project in which overall rates will be excessively high.

Community Development Block Grant assistance is funded at higher levels than other programs, but is limited to situations in which at least 51% of the customers are low or moderate income. To be competitive, a project must address a critical threat to health or safety, an unusually high number of lower income persons, or an inability to expand services in a high growth area. At the present time, sewer projects tend to be funded more than water projects due to the requirements that sewer systems comply with national water quality standards by 1988.

Area Development Fund monies are allocated to Area Development Districts every two years. Funding levels are not sufficient to

address a large project, except to constitute a share of a match requirement. Eligibility criteria currently does not allow for water lines that serve only residential or commercial uses.

Economic Development Funds are used for utility line extensions to projects that create jobs. Several agencies have these funds available. In most cases, residential customers can be served directly by the line extensions, or customers can pay their share of lines in addition to those serving the source of job creation. Some of the Piner area is near land that is planned or zoned industrial. As development takes place, there may be an opportunity to complete the proposed Piner system in conjunction with an industrial or commercial project.

In summary, grant assistance is somewhat limited, both in magnitude and in applicability to general water line extensions such as desired by the Piner system. Even with a grant, a significant share of the project would most likely require a local match provided by a loan, bonds, assessments, rate increases, taxes, or appropriations from general local government budgets.

FEASIBILITY

Financing through loans is available through Farmers Home Administration for projects felt to be economically feasible as detailed in the section on Grant Availability. Using the estimated user construction cost of \$8,637.00 for Proposal No. 1, and 20 year financing at a rate of 10% would yield a monthly bill of \$83.35 for purchase of the water system. Adding to this an estimated average cost of \$8.10 for the water and the monthly bill would be approximately \$91.45 per user.

In an effort to reduce the amount of the monthly billing; if Alternate No. 4 were to be used to provide service to a smaller area at an individual user construction cost of \$7,337.00, with 40 year financing, at a rate of 10%, with an average water cost of \$8.10, the monthly bill in total would be approximately \$70.40 per user.

The above monthly billings are excessive, and indicate that the system is not economically feasible without financial aid or support from outside of the income that could be provided through reasonable expense to the potential users. The population forecast for the unincorporated areas of Kenton County indicate that the increases in population will not be significant during the planning period (2010), and will not provide significant help in the financing of the water system. Conditions which could

effect a change in the non-feasible character of the water system for the Piner area would be:

1) the extension of the Kenton County Water District No. 1 system South of Nicholson along Ky. Rt. 17.

2) Significant population change along Ky. Rt. 17, U.S. 25 or Ky. Rt. 14.

3) Commercial or Industrial Development in the area.

4) Grants or aids for construction of the water system.

Review of the Piner area water system feasibility study should be initiated if any change as listed above occur in a magnitude great enough to influence the area significantly.

ESTIMATED COST FOR WATER MAIN EXTENSIONS
SOUTHERN PORTION OF KENTON COUNTY

STREET NAME	EXTENSION LENGTH Lin. Ft.	PIPE SIZE Inch	Ductile Iron Pipe Class 52 350Lb.	ESTIMATED COST		
				C900 PVC DR-14 200 Lb.	Pressure Pipe PVC DR - 26 160 Lb.	
St. Johns Road	2083	8	\$62,490.00	\$58,324.00	\$29,162.00	
Webster Road	4100	8	\$123,000.00	\$114,800.00	\$57,400.00	
Crowe Road	1775	8	\$53,250.00	\$49,700.00	\$24,850.00	
Kimberly Drive, Kimberly Ct. & Elizabeth Drive	2400	8	\$72,000.00	\$67,200.00	\$33,600.00	
Rust Drive	888	8	\$26,640.00	\$24,864.00	\$12,432.00	
Pelly Road	1100	8	\$33,000.00	\$30,800.00	\$15,400.00	
Scenic Ridge Road	1412	8	\$42,360.00	\$39,536.00	\$19,768.00	
Independence Sta. Rd. No.	7510	8	\$225,300.00	\$210,280.00	\$105,140.00	
Independence Sta. Rd. So.	4275	8	\$128,250.00	\$119,700.00	\$59,850.00	
Oliver Road	8448	8	\$253,440.00	\$236,544.00	\$118,272.00	
Harris Pike	8540	8	\$256,200.00	\$239,120.00	\$119,560.00	
Banklick Station Rd.	1000	8	\$30,000.00	\$28,000.00	\$14,000.00	
Tamarita Drive	693	8	\$20,790.00	\$19,404.00	\$9,702.00	
Lincoln Drive	800	8	\$24,000.00	\$22,400.00	\$11,200.00	
Belle Aire	100	6	\$2,600.00	\$2,300.00	\$1,400.00	
Hickory Grove	1839	8	\$55,170.00	\$51,492.00	\$25,746.00	
Bowman Road	8076	8	\$242,280.00	\$226,128.00	\$113,064.00	
Riggs Road	6700	8	\$201,000.00	\$187,600.00	\$93,800.00	
Percival Road	6350	8	\$190,500.00	\$177,800.00	\$88,900.00	
Don Street	2700	8	\$81,000.00	\$75,600.00	\$37,800.00	
Ky. 17 D.E. to County Line	43750	12	\$1,968,750.00	\$1,968,750.00	\$962,500.00	
Bird Road	1584	8	\$47,520.00	\$44,352.00	\$22,176.00	
Spillman Road	5280	8	\$158,400.00	\$147,840.00	\$73,920.00	
Hempfling Road	13200	8	\$396,000.00	\$369,600.00	\$184,800.00	
Stephenson Road	5808	8	\$174,240.00	\$162,624.00	\$81,312.00	
Lunsford Road	4224	8	\$126,720.00	\$118,272.00	\$59,136.00	
Rich Road	18480	8	\$554,400.00	\$517,440.00	\$258,720.00	
TOTAL COST			\$5,549,300.00	\$5,310,470.00	\$2,633,610.00	

Ductile Iron Pipe Class 52 350Lb.	C900 PVC DR-14 200 Lb.	Pressure Pipe PVC DR - 26 160 Lb.
6" = \$26.00/Ft.	6" = \$23.00/Ft.	6" = \$13.00/Ft.
8" = \$30.00/Ft.	8" = \$28.00/Ft.	8" = \$14.00/Ft.
12" = \$45.00/Ft.	12" = \$45.00/Ft.	12" = \$22.00/Ft.

Date: April 16, 1990

VERY ROUGH ESTIMATE FOR THE EXTENSION OF
WATER MAINS ON OR ALONG KY. 17

KY. 17 PROJECTS	LENGTH Lin. Ft.	ESTIMATED COST		ESTIMATED NUMBER OF CUSTOMERS	AVERAGE COST TO CUSTOMER KRS 74 METHOD	COST TO CUSTOMER USING PSC SUGGESTED METHOD	COST TO KCWD USING KRS 74 METHOD	COST TO KCWD USING PSC METHOD
		8"	12"					
D.E. To Spillman Rd.	10,600	\$318,000	\$477,000	40	\$7,950	\$6,450	\$159,000	\$219,000
D.E. To Gleason Rd.	18,000	\$540,000	\$810,000	69	\$7,826	\$6,326	\$270,000	\$373,500
D.E. To Bridge	21,100	\$633,000	\$949,500	82	\$7,720	\$6,220	\$316,500	\$439,500
D.E. To Rich Rd.	26,400	\$792,000	\$1,188,000	92	\$8,609	\$7,109	\$396,000	\$534,000
D.E. To County Line	47,500	\$1,425,000	\$2,137,500	210	\$6,786	\$5,286	\$712,500	\$1,027,500

VERY ROUGH ESTIMATE FOR THE EXTENSION OF
WATER MAINS ON OR ALONG VARIOUS STREETS

PROJECTS	LENGTH Lin. Ft.	ESTIMATED COST 8"	ESTIMATED NUMBER OF CUSTOMERS	AVERAGE COST TO CUSTOMER KRS 74 METHOD	COST TO CUSTOMER USING PSC SUGGESTED METHOD	COST TO KCWD USING KRS 74 METHOD	COST TO KCWD USING PSC METHOD
Kimberly Drive, Kimberly Circle, & Elizabeth Drive	2,400	\$72,000	43	\$1,674	\$174	\$0	\$64,500
Webster Road (off Richardson Rd.)	4,100	\$123,000	30	\$4,100	\$2,600	\$0	\$45,000
Pelly Road & Scenic Ridge Rd.	2,500	\$75,000	15	\$5,000	\$3,500	\$0	\$22,500
Lincoln Drive & Bel Aire	1150	\$34,500	15	\$2,300	\$800	\$0	\$22,500
Hickory Grove Rd.	1850	\$55,500	24	\$2,313	\$813	\$0	\$36,000
Riggs Road	6700	\$201,000	74	\$2,716	\$1,216	\$0	\$111,000

ESTIMATED COST FOR WATER MAIN EXTENSIONS
SOUTHERN PORTION OF KENTON COUNTY

STREET NAME	EXTENSION LENGTH Lin. Ft.	PIPE SIZE Inch	ESTIMATED COST	
			Ductile Iron Pipe Class 52	350Lb.
St. Johns Road	2083	8	\$62,490.00	
Webster Road	4100	8	\$123,000.00	
Crowe Road	1775	8	\$53,250.00	
Kimberly Drive, Kimberly Ct. & Elizabeth Drive	2400	8	\$72,000.00	
Rust Drive	888	8	\$26,640.00	
Pelly Road	1100	8	\$33,000.00	
Scenic Ridge Road	1412	8	\$42,360.00	
Independence Sta. Rd. No.	7510	8	\$255,240.00*	
Independence Sta. Rd. So.	4275	8	\$128,250.00	
Oliver Road	8448	8	\$253,440.00	
Harris Pike	8540	12	\$384,300.00	
Banklick Station Rd.	1000	8	\$30,000.00	
Tamarita Drive	693	8	\$20,790.00	
Lincoln Drive	800	8	\$24,000.00	
Belle Aire	100	6	\$2,600.00	
Hickory Grove	1839	8	\$55,170.00	
Bowman Road	8076	8	\$242,280.00	
Riggs Road	6700	8	\$201,000.00	
Percival Road	6350	8	\$190,500.00	
Don Street	2700	8	\$102,174.00*	
Ky. 17 D.E. to County Line	43750	12	\$1,968,750.00	
Bird Road	1584	8	\$47,520.00	
Spillman Road	5280	8	\$158,400.00	
Hempfling Road	27456	12	\$1,235,520.00	
Stephenson Road	5808	8	\$174,240.00	
Lunsford Road	4224	8	\$126,720.00	
Rich Road	18480	12	\$831,600.00	
Old Decoursey (top of hill @ Ballinger Dr. to Rt. 16)	5808	12	\$261,360.00	
Old Decoursey (Ky 16 to Stewart Road)	16368	12	\$736,560.00	
Stewart Road	3696	12	\$166,320.00	
Rt. 177 (Porter Rd. to top Ryland Hill)	12144	12	\$546,480.00	
Visalia Staffordsburg Rd.	15840	12	\$712,800.00	
Klein Road (off Visalia Staff. R Rt. 177 (Salvage yard to White Villa)	7920	8	\$237,600.00	
	22176	12	\$997,920.00	
Moffett Road	25344	12	\$1,140,480.00	
Green Road	30624	12	\$1,378,080.00	
U.S. 25 Intersection US 14 & 2	15312	12	\$689,040.00	
Gene Street	1320	8	\$39,600.00	
Martin Road	5808	8	\$174,240.00	
Rector Road	7920	8	\$237,600.00	

ESTIMATED COST FOR WATER MAIN EXTENSIONS
SOUTHERN PORTION OF KENTON COUNTY

STREET NAME	EXTENSION LENGTH Lin. Ft.	PIPE SIZE Inch	ESTIMATED COST	
			Ductile Iron Pipe Class 52	350Lb.
Teegarden Lane	2112	8	\$63,360.00	
Manor Lake Drive	1584	8	\$47,520.00	
Taylor Mill Road	2640	12	\$118,800.00	
Ridgeview Avenue	3696	8	\$110,880.00	
Misty Lane	435	6	\$17,429.40*	
Stith Road	595	8	\$26,144.10*	
TOTAL COST			\$14,547,447.50	

*Actual Preliminary Estimate for Construction Cost

Ductile Iron Pipe
Class 52 350Lb.
6" = \$26.00/Ft.
8" = \$30.00/Ft.
12" = \$45.00/Ft.

Date: June 11, 1990

ESTIMATED COST FOR WATER MAIN EXTENSIONS
PORTION OF KENTON COUNTY

STREET NAME	ESTIMATED EXTENSION LENGTH Lin. Ft.	ESTIMATED COST D.I. PIPE CL. 52	ESTIMATED Number of Customers
St. Johns Road	2083	\$56,241.00	13
Webster Road	4100	\$110,700.00	30
Crowe Road	1775	\$47,925.00	9
Kimberly Drive, Kimberly Ct. & Elizabeth Drive	2400	\$60,000.00	43
Rust Drive	1100	\$34,243.00	10
Pelly Road	1100	\$29,700.00	see below
Scenic Ridge Road	1412	\$38,124.00	15
Independence Sta. Rd., Justice So. to Ky. 17	7850	\$211,950.00	38
Oliver Road	8448	\$228,096.00	34
Harris Pike	8540	\$230,580.00	70
Warren Drive	625	\$23,402.50	10
Tamarita Drive	693	\$18,711.00	3
Lincoln Drive	800	\$21,600.00	see below
Belle Aire	100	\$2,700.00	15
Taylor Mill Road	see below	see below	see below
Ridgeview Ave, Ridgeview Ct. Carter Lane	8200	\$246,000.00	22
Misty Lane	435	\$17,429.40	see below
Stith Road	595	\$26,144.10	8
Bullock Pen Road	4225	\$114,075.00	20
Garvey Avenue	1600	\$43,200.00	10
Bromley-Crescent Springs Rd.	2700	\$72,900.00	27
Whitaker, Mc Donald & Stephen Street	1466	\$46,986.70	see below 6
Pleasure Isle Drive	1461	\$41,754.20	10
Worthington Drive	1055	\$28,485.00	6
Amsterdam Rd., Villa Hills to Ky. 8	6336	\$171,072.00	12
Droege Road	580	\$15,660.00	6
Wilson Road	720	\$19,440.00	8
Mason Road	2640	\$71,280.00	9
Narrows Road, So. of Surrey to Ridgeview	504	\$13,608.00	4
Narrows Road, Nelson Rd. to Richardson	2050	\$55,350.00	4
Old Fowler Creek Raod	1100	\$29,700.00	6
TOTAL		\$2,097,356.90	439

DATE: July 22, 1991
REVISION: Aug. 28, 1991

09/14/92

PROJECT COST/FEASIBILITY STUDY

Mills Road cost estimate
including customer sign ups

Revised Cost Estimate

<u>Route</u>	<u>Length</u>	<u>Est.Cost/Ft</u>	<u>Proj.Cost</u>
Old Dec. to Alt. Ent	1900LF	\$22.15	\$42,100.00
Old Dec. to Main Ent	3860LF	\$22.15	\$85,500.00
Old Dec. to Taylor Mill System	5860LF	\$22.15	\$129,800.00

The Sub-District surcharge is \$24.34 per customer per month. Surcharge conversion to project cost is accomplished using bonds financed at 6% interest for 20 years, including a 3.6% Bond Issuance Fee. The following is a breakdown of the estimated costs for each of the alternative projects and the additional funds necessary to make the projects feasible:

<u>Project</u>	<u>Cust. Signing Contract</u>	<u>County Services</u>	<u>Add. Funds Needed With County Serv.</u>	<u>Add. Funds Without County Serv.</u>
Old Dec. to Alt. Entrance	10 of 16	1	\$6,500.00	\$9,800.00
Old Dec. to Main Entrance	14 of 24	2	\$33,000.00	\$39,600.00
Old Dec. to Taylor Mill Syst.	18 of 28*	2	\$66,000.00	\$72,600.00

* The four potential customers located between the end of Taylor Mill's system and the end of the project titled Old Decoursey to Main Entrance did not actually sign up yet but have indicated that they would.

Richard,
 Bring this to
 our 3:00 mtg.
 not Steve Hatfield
 & Wayne Beck

	A (all of proposed Subdistrict B)	B (1.2miles K17 from dead end south)
Project Cost for 8" mains on roadways:	\$1,253,250	\$167,777
Project Length:	47,340 feet	6,336 feet
Potential Customers:	260	25
Anticipated Customers (63%):	165	14
Projected Cost per foot:	\$26.48	\$26.48

PROJECT A				
Financial Entities	CCWD Method	BCWD Method	All Present Customers Contribute	Present Customers Do Not Contribute
Fiscal Court finances 10%		125,325	125,325	125,325
KCWD finances 50 ft. per customer	218,460			
KCWD finances 55 ft. per customer		240,306		
KCWD finances thru bond issue			518,555	
Customer surcharge at \$22.73/mo			609,370	609,370
All benefitted property owners assessed		887,619		518,555
New customers divide balance equally	1,034,790			
PROJECT B				
Fiscal Court finances 10%		16,778	16,778	16,788
KCWD finances 50 ft. per customer	18,536			
KCWD finances 55 ft. per customer		20,390		
KCWD finances thru bond issue			103,399	
Customer surcharge at \$22.73/mo			47,600	47,600
All benefitted property owners assessed		130,609		103,399
New customers divide balance equally	149,241			

NCR CORPORATION

Cincinnati District



Thomas B. Ellis
District Manager
Financial Systems Division

805 Central Avenue
Cincinnati, Ohio 45202
Telephone 513 852-7213

*RYLAND LAKES
COUNTRY CLUB*

JAMES S. WACHS
ATTORNEY AT LAW

FROST & JACOBS
2500 CENTRAL TRUST CENTER
201 EAST FIFTH STREET
CINCINNATI, OHIO 45202

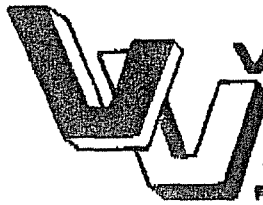
(513) 651-6817

(513) 793-9170

crilley
HOMES, INC.

PATRICK R. CRILLEY
*RYLAND
LAKES*

9781 COOPERWOODS CT. • CINCINNATI, OHIO 45241



VIOX & VIOX, P.S.C.
CONSULTING ENGINEERS & SURVEYORS
488 ERLANGER ROAD
ERLANGER, KENTUCKY 41018
PHONE: (606) 727-3220

\$265,000

JAMES H. VIOX, III, P.E.
KY. REG. NO. 8880
KY. LAND SURVEYOR NO. 797

WILLIAM R. VIOX, P.E.
KY. REG. NO. 8209
KY. LAND SURVEYOR NO. 1781

ENGINEER'S ESTIMATE
TO
INSTALL PUBLIC WATER SYSTEM
FOR
RYLAND LAKES COUNTRY CLUB

<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>COST</u>	<u>COST</u>
8" Ductile-Iron Pipe Class 52 & Fittings	22,615	LF	21.00	474,915.00
8" X 8" X 8" Ductile- Iron Tees & Blocks	7	EA	300.00	2,100.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	30	EA	625.00	18,750.00
16" Steel Casing Pipe by Boring & Jacking (Wall Thickness to Railway Spec.)	180	LF	175.00	31,500.00
1" Air-Relief Valve Model #200A	2	EA	750.00	1,500.00
Fire Hydrant Assembly, (High Pressure), Incl. 6" Ductile- Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor, Coupling, 6" Ductile-Iron Anchor, Elbow, Block & Necessary Extension	27	EA	2,000.00	54,000.00
8" X 8" X 6" Anchoring Tee	27	EA	325.00	8,775.00
8" X 8" X 8" Ductile-Iron Tee	4	EA	325.00	1,300.00
Pressure Reduction Valve	1	EA	10,000.00	10,000.00
Driveway Restoration	2,000	SY	30.00	60,000.00
Street Restoration	800	SY	35.00	28,000.00

<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT COST</u>	<u>COST</u>
Yard Restoration	LUMP		<u>40,000.00</u>
			780,840.00
Engineering, Approximate			<u>58,467.20</u>
			\$789,307.00

NOTE: Estimate does not include cost of water services or Geotechnical Engineering services that might be necessary.

2/4/94

RYLAND LAKES WATER PROJECT
MEETING MINUTES
Friday, September 1, 8:30 a.m.
Engineering Conference Room

ATTENDEES:

Tom Ellis Terry Sargent
Ken Palisin Richard Harrison
Pat Crilley

- 1) Richard Harrison explained that the Kenton County Water District was not requiring looping of the Ryland Lakes mains in locations that required the main to be constructed under the Railroad and across lake dams in accordance with it's 1995 standards. These physical features are considered to be justifiable obstacles to the reasonable looping of dead-ends.

Pat Crilley and Tom Ellis expressed Ryland Lake's concern that the water quality could be severely impacted by not looping the mains and wanted a better understanding of the future water quality. Richard Harrison explained that Ryland Lakes contained a single feed from essentially a single source located on Ky. 177. This creates reduced movement thru the system which minimizes the impact looping has on maintaining chlorine residuals. The District has a regulatory obligation to maintain chlorine residuals in it's system and will do so by utilizing it's strong flushing program. This has been very effective on systems containing lined pipe such as Ryland Lakes.

The primary benefit in looping the mains would be the minimization of interruptions of service to Ryland Lake's residents. Ryland Lakes must weigh the benefits of looping to the additional expense.

- 2) Pat Crilley and Tom Ellis were updated as to the estimated revised schedule for the overall project. Ken Palisin distributed the attached revised schedule. This is predicated on the State/County funding the stabilization of Wards Road, final approval by the Department of Local Government for the proposed amendment, the passing of a resolution by the City of Ryland Heights approving the revisions to the project

and the Kentucky Public Service Commission approval of the project including the surcharge amount.

- 3) The financing of the Ryland Lakes portion of the project was discussed. It was determined that to finance the project privately would increase the surcharge by over 30% based upon projected rates of 6% for public financing and 9% for private financing. Richard Harrison indicated that the District would prefer private financing if Ryland Lakes choose to proceed with that method. Mr. Harrison also stated that if Ryland Lakes is not a part of the overall project it would not be possible to publicly finance Ryland Lake's portion. Mr. Crilley and Mr. Ellis stated that Ryland Lakes was committed to the project as long as it was feasible.
- 4) Pat Crilley and Tom Ellis expressed their concern that construction needs to be completed by May 15th, 1996 or it would be necessary to reschedule the construction for September of 1996. Richard Harrison explained the sequence of events that need to occur for Kentucky Public Service Commission approval and indicated that it would be possible to start construction before February but it was difficult to project exactly when P.S.C. would complete their review and issue an Order. He explained that it was definitely questionable whether construction could be completed by May 15th, 1996.
- 5) Pat Crilley indicated that Ryland Lakes would apply for the second railroad permit to anticipate the future looping of the Ryland Lakes system. It was suggested that provisions be made to install the casing pipe also at this time.

WORKSHEET FOR CALCULATION OF
 CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

33 CUSTOMERS

Name of Extension: ANDERSON LANE
 Location - Beginning at: _____
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

- | | | |
|--|------|------------------------------|
| 1. Total cost of construction of main
(not including meter connections) | | \$ <u>37115⁸⁰</u> |
| 2. Divided by total length of water
main in feet | + | <u>3300'</u> ft. |
| 3. Cost per foot of main | = \$ | <u>11.25</u> /ft. |
| 4. 50 feet times cost/foot | x | <u>50 ft.</u> |
| 5. District's portion of cost per
customer | = | \$ <u>562⁵⁰</u> |
| 6. Times number of customers
connected to main | x | <u>33</u> |
| 7. District's total portion of cost | = \$ | <u>18,562⁵⁰</u> |
| 8. Total cost of construction of
main (Line 1) | \$ | <u>37,115⁸⁰</u> |
| 9. Minus District's total portion of
cost (Line 7) | - | <u>18,562⁵⁰</u> |
| 10. Part to be paid by customers | = \$ | <u>18,553³⁰</u> |
| 11. Divided by number of customers
(Line 6) | + | <u>33</u> |
| 12. Each customer's required
contribution for the water main
extension itself (Subject to
refund) | \$ | <u>562²²</u> |
| 13. Plus the approved "Tap-on-fee"
(Not refundable) | + \$ | <u>650⁰⁰</u> |
| 14. Total contribution to be paid by
each customer connected to the
main extension at this time | = \$ | <u>1212²²</u> |

**WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION**

Name of Extension: ANDERSON LANE MELB. Ky.
 Location - Beginning at: RT. 8
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

1. Total cost of construction of main (not including meter connections)		\$ <u>49,565⁴³</u>
2. Divided by total length of water main in feet	+	<u>4,292' ft.</u>
3. Cost per foot of main	=	\$ <u>11.55 /ft.</u>
4. 50 feet times cost/foot	x	<u>50 ft.</u>
5. District's portion of cost per customer	=	\$ <u>577.50</u>
6. Times number of customers connected to main	x	<u>45</u>
7. District's total portion of cost	=	\$ <u>25,987⁵⁰</u>
8. Total cost of construction of main (Line 1)	-	\$ <u>49,565⁴³</u>
9. Minus District's total portion of cost (Line 7)	-	<u>25,987⁵⁰</u>
10. Part to be paid by customers	=	\$ <u>23,577.93</u>
11. Divided by number of customers (Line 6)	+	<u>45</u>
12. Each customer's required contribution for the water main extension itself (Subject to refund)	=	\$ <u>523.95</u>
13. Plus the approved "Tap-on-fee" (Not refundable)	+	\$ <u>650⁰⁰</u>
14. Total contribution to be paid by each customer connected to the main extension at this time	=	\$ <u>1,173⁹⁵</u>

WORKSHEET FOR CALCULATION OF CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

Name of Extension: ANDERSON LANE ; Melb. Ky
Location - Beginning at: ROUTE 8
Ending at:
Date placed in service:
Date refund period expires:

Table with 14 rows of calculations: 1. Total cost of construction of main (not including meter connections) \$ 43,813.21; 2. Divided by total length of water main in feet + 3,727 ft.; 3. Cost per foot of main = \$ 11.76 /ft.; 4. 50 feet times cost/foot x 50 ft.; 5. District's portion of cost per customer = \$.588.00; 6. Times number of customers connected to main x 34; 7. District's total portion of cost = \$ 19,992.00; 8. Total cost of construction of main (Line 1) \$ 43,813.21; 9. Minus District's total portion of cost (Line 7) - 19,992.00; 10. Part to be paid by customers = \$ 23,821.21; 11. Divided by number of customers (Line 6) + 34; 12. Each customer's required contribution for the water main extension itself (Subject to refund) \$ 700.62; 13. Plus the approved "Tap-on-fee" (Not refundable) + \$ 650.00; 14. Total contribution to be paid by each customer connected to the main extension at this time = \$ 1,350.62

**WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION**

Name of Extension: ANDERSON LANE Melb. Ky.
 Location - Beginning at: RT. 8
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

- | | | | |
|-----|--|-----|--|
| 1. | Total cost of construction of main
(not including meter connections) | = | \$ <u>34,010⁹⁹</u> |
| 2. | Divided by total length of water
main in feet | + = | <u>2,732 ft.</u> |
| 3. | Cost per foot of main | = | \$ <u>12.45</u> /ft. |
| 4. | 50 feet times cost/foot | x | <u>50 ft.</u> |
| 5. | District's portion of cost per
customer | = | \$ <u>622⁵⁰</u> |
| 6. | Times number of customers
connected to main | x | <u>1</u> |
| 7. | District's total portion of cost | = | \$ <u>622⁵⁰</u> |
| 8. | Total cost of construction of
main (Line 1) | = | \$ <u>34,010⁹⁹</u> |
| 9. | Minus District's total portion of
cost (Line 7) | - | <u>622⁵⁰</u> |
| 10. | Part to be paid by customers | = | \$ <u>33,388⁴⁹</u> |
| 11. | Divided by number of customers
(Line 6) | + = | <u>1</u> |
| 12. | Each customer's required
contribution for the water main
extension itself (Subject to
refund) | = | \$ <u>33,388⁴⁹</u> |
| 13. | Plus the approved "Tap-on-fee"
(Not refundable) | + = | \$ <u>PLUS THE COST OF
THE SIZE OF METER</u> |
| 14. | Total contribution to be paid by
each customer connected to the
main extension at this time | = | \$ _____ |

**WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION**

Name of Extension: ANDERSON LANE ; MELB. Ky
 Location - Beginning at: ROUTE 8
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

- | | | |
|--|---|----------------------------------|
| 1. Total cost of construction of main
(not including water connections) | | \$ <u>43,813 ²¹</u> |
| 2. Divided by total length of water
main in feet | + | <u>3,727 ft.</u> |
| 3. Cost per foot of main | = | \$ <u>\$11.76 /ft.</u> |
| 4. 50 feet times cost/foot | x | <u>50 ft.</u> |
| 5. District's portion of cost per
customer | = | \$ <u>\$588.⁰⁰</u> |
| 6. Times number of customers
connected to main | x | <u>34</u> |
| 7. District's total portion of cost | = | \$ <u>\$19,992 ⁰⁰</u> |
| 8. Total cost of construction of
main (Line 1) | = | \$ <u>43,813 ²¹</u> |
| 9. Minus District's total portion of
cost (Line 7) | - | <u>19,992 ⁰⁰</u> |
| 10. Part to be paid by customers | = | \$ <u>23,821 ²¹</u> |
| 11. Divided by number of customers
(Line 6) | + | <u>34</u> |
| 12. Each customer's required
contribution for the water main
extension itself (Subject to
refund) | = | \$ <u>\$700. ⁶²</u> |
| 13. Plus the approved "Tap-on-fee"
(Not refundable) | + | \$ <u>650. ⁰⁰</u> |
| 14. Total contribution to be paid by
each customer connected to the
main extension at this time | = | \$ <u>\$1,350 ⁶²</u> |

**WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION**

Name of Extension: ANDERSON LANE MELB. K
 Location - Beginning at: RT. 8
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

1. Total cost of construction of main (not including meter connections)		\$ <u>49,565⁴³</u>
2. Divided by total length of water main in feet	+	<u>4,292' ft.</u>
3. Cost per foot of main	=	\$ <u>11.55 /ft.</u>
4. 50 feet times cost/foot	x	<u>50 ft.</u>
5. District's portion of cost per customer	=	\$ <u>577.50</u>
6. Times number of customers connected to main	x	<u>45</u>
7. District's total portion of cost	=	\$ <u>25,987⁵⁰</u>
8. Total cost of construction of main (Line 1)	=	\$ <u>49,565⁴³</u>
9. Minus District's total portion of cost (Line 7)	-	<u>25,987⁵⁰</u>
10. Part to be paid by customers	=	\$ <u>23,577.93</u>
11. Divided by number of customers (Line 6)	+	<u>45</u>
12. Each customer's required contribution for the water main extension itself (Subject to refund)	=	\$ <u>523.95</u>
13. Plus the approved "Tap-on-fee" (Not refundable)	+	\$ <u>650⁰⁰</u>
14. Total contribution to be paid by each customer connected to the main extension at this time	=	\$ <u>1,173.95</u>

10 CUSTOMERS

WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

Name of Extension: ANDERSON LANE MELBOURNE Ky
 Location - Beginning at: RT. 8
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

- | | | |
|--|------|-------------------------------|
| 1. Total cost of construction of main
(not including meter connections) | | \$ <u>34,013⁴⁰</u> |
| 2. Divided by total length of water
main in feet | + | <u>2,732' ft.</u> |
| 3. Cost per foot of main | = \$ | <u>12⁴⁵</u> /ft. |
| 4. 50 feet times cost/foot | x | <u>50 ft.</u> |
| 5. District's portion of cost per
customer | = | \$ <u>622⁵⁰</u> |
| 6. Times number of customers
connected to main | x | <u>10</u> |
| 7. District's total portion of cost | = \$ | <u>6225⁰⁰</u> |
| 8. Total cost of construction of
main (Line 1) | \$ | <u>34,013⁴⁰</u> |
| 9. Minus District's total portion of
cost (Line 7) | - | <u>6,225⁰⁰</u> |
| 10. Part to be paid by customers | = \$ | <u>27,788⁴⁰</u> |
| 11. Divided by number of customers
(Line 6) | + | <u>10</u> |
| 12. Each customer's required
contribution for the water main
extension itself (Subject to
refund) | \$ | <u>2778⁸⁴</u> |
| 13. Plus the approved "Tap-on-fee"
(Not refundable) | + \$ | <u>650⁰⁰</u> |
| 14. Total contribution to be paid by
each customer connected to the
main extension at this time | = \$ | <u>3428⁸⁴</u> |

9 CUSTOMERS

WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

Name of Extension: ANDERSON LANE MELBOURNE Ky.

Location - Beginning at: Rt. 8

Ending at: _____

Date placed in service: _____

Date refund period expires: _____

1. Total cost of construction of main (not including meter connections) \$ 34,013⁴⁰
2. Divided by total length of water main in feet + 2,732 ft.
3. Cost per foot of main = \$ 12.⁴⁵ /ft.
4. 50 feet times cost/foot x 50 ft.
5. District's portion of cost per customer = \$ 622⁵⁰
6. Times number of customers connected to main x 9
7. District's total portion of cost = \$ 5602⁵⁰
8. Total cost of construction of main (Line 1) \$ 34,013⁴⁰
9. Minus District's total portion of cost (Line 7) - 5,602⁵⁰
10. Part to be paid by customers = \$ 28,410⁹⁰
11. Divided by number of customers (Line 6) + 9
12. Each customer's required contribution for the water main extension itself (Subject to refund) \$ 3156⁷⁶
13. Plus the approved "Tap-on-fee" (Not refundable) + \$ 650⁰⁰
14. Total contribution to be paid by each customer connected to the main extension at this time = \$ 3806⁷⁶

WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

Name of Extension: ANDERSON LANE MELBOURNE Ky.
 Location - Beginning at: RT. 8
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

- | | | |
|--|------|-----------------------------|
| 1. Total cost of construction of main
(not including meter connections) | \$ | <u>34,013⁴⁰</u> |
| 2. Divided by total length of water
main in feet | + | <u>2,732 ft.</u> |
| 3. Cost per foot of main | = \$ | <u>12.⁴⁵/ft.</u> |
| 4. 50 feet times cost/foot | x | <u>50 ft.</u> |
| 5. District's portion of cost per
customer | = | \$ <u>622⁵⁰</u> |
| 6. Times number of customers
connected to main | x | <u>8</u> |
| 7. District's total portion of cost | = \$ | <u>4,980⁰⁰</u> |
| 8. Total cost of construction of
main (Line 1) | \$ | <u>34,013⁴⁰</u> |
| 9. Minus District's total portion of
cost (Line 7) | - | <u>4,980⁰⁰</u> |
| 10. Part to be paid by customers | = \$ | <u>29,033⁴⁰</u> |
| 11. Divided by number of customers
(Line 6) | + | <u>8</u> |
| 12. Each customer's required
contribution for the water main
extension itself (Subject to
refund) | \$ | <u>3629¹⁸</u> |
| 13. Plus the approved "Tap-on-fee"
(Not refundable) | + \$ | <u>650⁰⁰</u> |
| 14. Total contribution to be paid by
each customer connected to the
main extension at this time | = \$ | <u>4,279¹⁸</u> |

5 CUSTOMERS

WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

Name of Extension: ANDERSON LANE MELBOURNE Ky.
Location - Beginning at: Rt. 8
Ending at: _____
Date placed in service: _____
Date refund period expires: _____

1. Total cost of construction of main
(not including meter connections) \$ 34,010⁹⁹
2. Divided by total length of water
main in feet + 2,732 ft.
3. Cost per foot of main = \$ 12.⁴⁵/ft.
4. 50 feet times cost/foot x 50 ft.
5. District's portion of cost per
customer = \$ 622⁵⁰
6. Times number of customers
connected to main x 5
7. District's total portion of cost = \$ 3,112⁵⁰
8. Total cost of construction of
main (Line 1) \$ 34,010⁹⁹
9. Minus District's total portion of
cost (Line 7) - 3,112⁵⁰
10. Part to be paid by customers = \$ 30,898⁴⁹
11. Divided by number of customers
(Line 6) + 5
12. Each customer's required
contribution for the water main
extension itself (Subject to
refund) \$ 6179.⁷⁰
13. Plus the approved "Tap-on-fee"
(Not refundable) + \$ 3/4" TAP 650⁰⁰
14. Total contribution to be paid by
each customer connected to the
main extension at this time = \$ 6829⁷⁰

COST ESTIMATE FOR HECK RD. CAMPBELL CO. ("MR. CLASS")

ITEM	QUANTITY	UNIT COST	TOTAL COST
8" PVC Water Main (.68/mile)	3600	LF	30.00 \$108,000.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA	750.00
8"x8"x6" Ductile Iron Tee & Block	7	EA	375.00 \$2,625.00
8" Plug & Block	1	EA	500.00 \$500.00
Fire Hydrant Assembly	7	EA	2,200.00 \$15,400.00
Remove Existing 8" Plug & Block	1	EA	200.00 \$200.00
Roadway Restoration	30	SY	40.00 \$1,200.00
Driveway Restoration	110	SY	30.00 \$3,300.00
Sub-Total			\$131,975.00
Engineering 7%			\$9,238.25
15% Conting.			19,796.25
Total Cost			\$161,009.50

Average Cost/Foot	Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$44.72	\$2,236.24	1	\$158,773.26	\$158,773.26
		2	\$156,537.01	\$78,268.51
		3	\$154,300.77	\$51,433.59
		4	\$152,064.53	\$38,016.13
		5	\$149,828.28	\$29,965.66
		6	\$147,592.04	\$24,598.67
		7	\$145,355.80	\$20,765.11
		8	\$143,119.56	\$17,889.94
		9	\$140,883.31	\$15,653.70
		10	\$138,647.07	\$13,864.71
		11	\$136,410.83	\$12,400.98
		12	\$134,174.58	\$11,181.22
		13	\$131,938.34	\$10,149.10
		14	\$129,702.10	\$9,264.44

13 Hours
Approved

OST ESTIMATE FOR HECK RD. CAMPBELL CO. ("MR. CLASS")

ITEM	QUANTITY		TOTAL UNIT COST	COST
8" DIP Water Main	2250	LF	30.00	\$67,500.00
8" Cast Iron Res. Seated Gate Valve & Box	5	EA	750.00	\$3,750.00
8"x8"x6" Ductile Iron Tee & Block	5	EA	400.00	\$2,000.00
Fire Hydrant Assembly	5	EA	1,600.00	\$8,000.00
Restoration	1	LS	5,000.00	\$5,000.00
Sub-Total				\$86,250.00
15% Conting. (Eng., Etc.)				12,937.50
Total Cost				\$99,187.50

Cody/Road Proposed
 8" Water Main Extension -
 Cost Estimate -
 Customer Name: Sharp

ITEM	QUANTITY	U/F	TOTAL UNIT COST	COST
8" D.I. Pipe & Fittings	2,750	L/F	\$35.00	\$96,250.00
8" Cast Iron Resil. Seat Gate Valve & Box	2	EA	\$850.00	\$1,700.00
8" X 8" X 6" Ductile Iron Anchoring Tee & Block	5	EA	\$250.00	\$1,250.00
8" Plug & Block	1	EA	\$250.00	\$250.00
Fire Hydrant Assembly	5	EA	\$1,600.00	\$8,000.00
Driveway Restoration	55	SY	\$40.00	\$2,200.00
Restoration (Road)	100	SY	\$50.00	\$5,000.00
Sub-Total				\$116,625.00
Engineering @ 8%				\$9,330.00
Contingencies @ 15%				\$17,493.75
Total				\$143,448.75

our
 spoke to her in
 October of 06.
 SHE Emailed the
 Governor & Michael
 uses going to Stespond

Average Cost Per Foot	\$52.16	50' Participation by District for each Customer	\$2,608.16	Total # of Customers	8	District's Total Portion of Project	\$20,865.27
Total Cost		\$143,448.75					
District's Total Portion of Cost		\$20,865.27					
Total		\$122,583.48					
# of Customers Connecting to Main		Total Customer Cost		Cost For Each Customer			
1		\$140,840.59		\$140,840.59			
2		\$138,232.43		\$69,116.22			
3		\$135,624.27		\$45,208.09			
4		\$133,016.11		\$33,254.03			
5		\$130,407.95		\$26,081.59			
6		\$127,799.79		\$21,299.97			
7		\$125,191.63		\$17,884.52			
8		\$123,583.47		\$15,447.93			
		(Column B - \$2,608.16)/Column A = Column C					
Actual Sign Ups							

Cost does not include \$750.00 Service Tap Fee for each house.
 (3/4 service tap) cost may change yearly

PROJECT COST/FEASIBILITY STUDY

Mills Road to Newnan Farm

<u>Route</u>	<u>Length</u>	<u>Est.Cost/Ft.</u>	<u>Proj.Cost</u>	<u>Est.Customers</u>
Old Dec. to Alt. Ent	1630LF	\$23.00	\$37.490	10 of 15
Old Dec. to Main Ent	3670LF	\$23.00	\$84.410	16 of 25
Old Dec. to Taylor Mill System	5780LF	\$23.00	\$132,940	17 of 27

The Sub-District surcharge is \$24.34 per customer per month. The following is a breakdown of the estimated monthly payment to finance the alternative projects at 6% interest for 20 years, including a 3.6% Bond Issuance Fee:

<u>Route</u>	<u>Cost/Month</u>	<u>Est.Customers</u>
Old Dec. to Alt. Ent.	\$277.80	12
Old Dec. to Main Ent.	\$625.47	26
Old Dec. to Taylor Mill System	\$985.08	41

The proposed Ky 17 12" MAIN PROJECT: Dead End @ 16/17 to
the Kenton/Pend. County line is ≈ 9.0 miles or $\approx 47,500$ LF
@ \$45/LF = \$2,137,500 200 total cust.

IF assessed and all properties have equal acreage.
The average cost would be - $\$2,137,500 / 200 = \$10,687.5$ ea

Using PSC method 200×50 LF = 10,000 LF the
District would pay For = $37,500 \times \$45 = 1,687,500$
Cost per cust = \$8437.5

Smaller projects

1. Deadend @ 16/17 to SPILLMAN RD @ 2.0 m. lvs = 10,560 LF
 $\$45 \times 10,560$ LF = 475,200 \div 40 customers
= \$11,880 EACH

Using PSC method

$$40 \times 50 = 2000 \text{ LF}$$

$$\text{New total } 10,560 \text{ LF} \times 45 \text{ \$/LF} = 475,200$$

$$= \$9630 \text{ EACH}$$

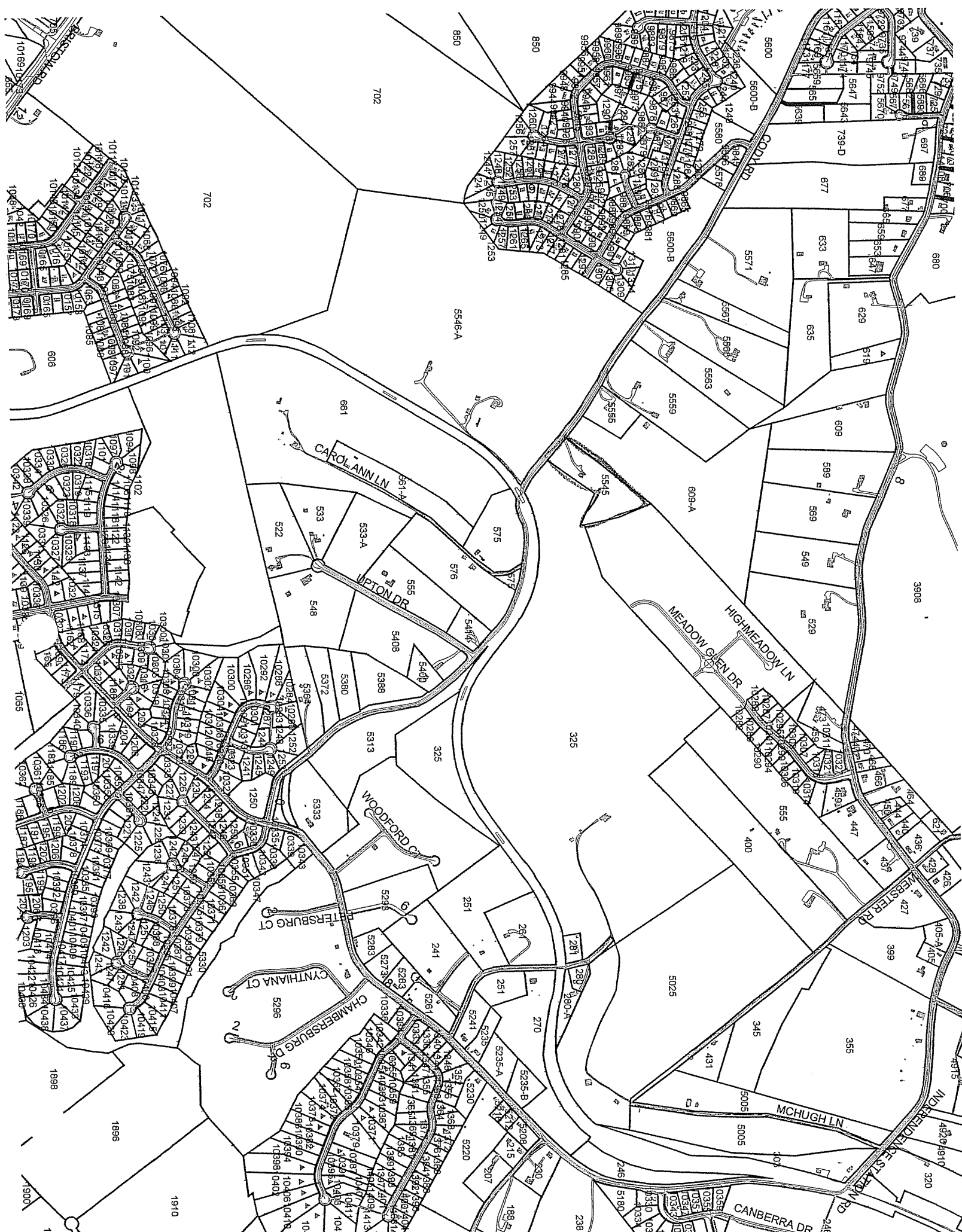
2. Deadend to Gleason

$$3.4 \text{ miles} = 17,952 \text{ LF} \times 45 = \$807,840$$

$$\div 69 = 11,707.82 \text{ each}$$

Using PSC = $69 \times 50 = 3450$ LF

$$17,952 \times 45 = 807,840 \div 69 = 11,707.83 \text{ ea.}$$



JAMES E. BICKFORD
SECRETARY



N.K.W.S.D.
EXHIBIT-C1
PAGE 50 of 51
PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601 .

June 28, 1996

Richard Harrison, P.E., Director
Engineering and Distribution
Kenton County Water District #1
P.O. Box 17010
Covington, Kentucky 41017

RE: PWSID #0590220
CDBG Meeting with
Drinking Water Branch

Dear Mr. Harrison:

The Department of Local Government's Community Development Block Grant requirement for applicants to meet with the Division of Water prior to submittal of applications has been met for Kenton County Water District #1's (KCWD#1) proposed project to extend water lines in Kenton County. A list of those in attendance is enclosed.

The project proposes to serve 454 new customers and extend approximately 20.9 miles of eight inch water lines. KCWD#1 may decide to increase the line size for 1.7 miles to sixteen inch and for fifteen miles to twelve inch at their own expense. Increased line sizes may result if it is determine that potential development in the area would require more capacity than an eight inch line could provide. There is existing water treatment plant and storage capacity available to serve the project.

The Division of Water, Drinking Water Branch has no objection to the proposed project. As mentioned during the meeting, hydraulic analysis will be required when plans and specifications are submitted to our office for approval.



CDBG/Kenton County Water District #1
June 28, 1996
Page 2 of 2

If you have any questions please contact Donald Moccia at
502/564-2225 extension 635.

Sincerely,



Vicki L. Ray, Manager
Drinking Water Branch
Division of Water

VLR:DTM

Enclosure

C: v Will Linder, Will Linder & Associates
Public Service Commission
Ramona Newman, DLG
Drinking Water Files



OFFICE OF THE GOVERNOR
DEPARTMENT OF LOCAL GOVERNMENT
FRANKFORT, KENTUCKY 40601-8204

PAUL E. PATTON
GOVERNOR

BOB ARNOLD
COMMISSIONER

September 4, 1996

Mr. Will Linder
Will Linder & Associates
218 Swiss Hills
Berea, Kentucky 40403

RE: Kenton County Water Expansion Project, Subdistrict C
CFDA# 14.228
SAI#KY960715-0792

Dear Mr. Linder:

The Kentucky State Clearinghouse, which has been officially designated as the Commonwealth's Single Point of Contact (SPOC) pursuant to Presidential Executive Order 12372, has completed its evaluation of the above referenced proposal. The clearinghouse review of this proposal indicates there are no identifiable conflicts with any state or local plan, goal, or objective. Therefore, the State Clearinghouse recommends this project be approved for assistance by the cognizant federal agency.

Although the primary function of the State Single Point of Contact is to coordinate the state and local evaluation of your proposal, the Kentucky State Clearinghouse also utilizes this process to apprise the applicant of statutory and regulatory requirements or other types of information which could prove to be useful in the event the project is approved for assistance. Information of this nature, if any, concerning this particular proposal will be attached to this correspondence.

You should now continue with the application process prescribed by the appropriate funding agency. This process may include a detailed review by state agencies that have authority over specific types of projects.

This letter signifies only that the project has been processed through the State Single Point of Contact. It is neither a commitment of funds from this agency or any other state or federal agency.

September 4, 1996
Page two

The results of this review are valid for one year from the date of this letter. Continuation or renewal applications must be submitted to the State Clearinghouse annually. An application not submitted to the funding agency, or not approved within one year after completion of this review, must be re-submitted to receive a valid intergovernmental review.

If you have any questions regarding this letter, please feel free to contact my office at 502-573-2382.

Sincerely,



Ronald W. Cook, Manager
Kentucky State Clearinghouse

Attachments

cc: Northern Kentucky ADD
Ramona Newman

The Kentucky Heritage Council and State Historic Preservation Officer has made the following comments pertaining to State Application Identifier Number KY960715-0792

The project will have no effect on any property listed in or eligible for listing in the National Register of Historic Places. Further, an archaeological survey will not be necessary. Therefore, we have no objection to the project.

The Transportation Cabinet, Division of Design has made the following advisory comments pertaining to State Application Identifier Number KY960715-0792

The Kentucky Department of Highways is responsible for controlling both public and private usage of right-of-way of the State road system. Any firm, individual, or governmental agency desiring access to a State road or desiring to perform any type of work on State right-of-way must obtain a permit from the Department. A contractor performing the work must have in his possession at all times a copy of the permit, authorization letter, and detailed drawings of work to be done.

The Department encourages the use of private property for placement of utility facilities where possible and practical; but we realize that in some instances highway rights-of-way are the only reasonable places to locate the proposed utilities. In these cases, we expect the conscientious efforts of both the applicant and the contractor to minimize adverse effects on the roadway and on the traveling public due to construction of the applicant's project.

This proposal may affect State maintained road(s). Any proposed access or encroachment should be coordinated at the earliest possible stage with:

J. E. Kearnes, Chief District Engineer
Kentucky Department of Highways
PO Box 17130
Buttermilk & I-75
Covington, Kentucky 41017
Telephone: 606-341-2700

The Kentucky Natural Resources and Environmental Protection Cabinet, Division of Water has made the following comments pertaining to State Application Identifier Number KY960715-0792

PRIOR APPROVAL

The proposed project is subject to Division of Water jurisdiction because the following are involved:

- Water distribution lines and appurtenances.
- Floodplain construction including stream obstructions and crossings.

Prior approval must be obtained from the Division of Water before construction can begin on the above matters. The applicant must cite this State Application Identifier (SAI) when submitting plans and specifications to the Division.

FLOODPLAIN CONSTRUCTION

From the application data, the Division of Water ascertains that the sites of the proposed project are located in floodplain areas. Therefore, application must be made to the Division for a floodplain construction permit. Permission, or exemption, depends upon design and exact site.

The Kentucky Natural Resources & Environmental Protection Cabinet, Division of Waste Management, has made the following advisory comments pertaining to State Application Identifier # 960715 - 0792

Kenton County must be implementing their solid waste management plan in compliance with the approved implementation schedule.

The Human Resource Cabinet has made the following comments pertaining to State Application Identifier Number KY960715-0792

Applicant needs to coordinate project with the Kenton County Health Department environmental programs. Historically, extension of public water into areas served by wells, springs, and cisterns has resulted in widespread failure of existing private sewage systems and creation of public health hazards.

Consideration needs to be given to attend to sewage disposal problems as a part of the waterline service project. Unlimited water availability and use causes existing inadequate sewage disposal systems to hydraulically overload and create health hazards for surfacing sewage.

JAMES E. BICKFORD
SECRETARY



N.K.W.S.D.
EXHIBIT-C1
PAGE 49 of 51
PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

August 19, 1997

Richard Harrison, P.E., Director
Engineering and Distribution
Northern Kentucky Water Service District
3049 Dixie Highway
Ft. Mitchell, Kentucky 41017

RE: PWSID #0590220
CDBG Meeting with
Drinking Water Branch

Dear Mr. Harrison:

The Department of Local Government's Community Development Block Grant requirement for applicants to meet with the Division of Water prior to submittal of applications was met June 1996 for the Northern Kentucky Water Service Area's proposed project to extend water lines in Kenton County.

The project is a resubmission grant application which has not been revised and proposes to serve 436 new customers and extend approximately 17.8 miles of water lines on Staffordsburg, Spillman, Rector, Hempfling, US 25/Green, and Madison Pike Roads.

The Division of Water, Drinking Water Branch has no objections to the proposed project. As mentioned during the meeting, hydraulic analysis will be required when plans and specifications are submitted to our office for approval. If you have any questions please contact Donna Marlin at 502/564-2225 extension 541.

Sincerely,

A handwritten signature in cursive script, appearing to read "Vicki L. Ray".

Vicki L. Ray, Manager
Drinking Water Branch
Division of Water

VLR:DSM

C: Will Linder and Associates
Public Service Commission
Ramona Newman, DLG
Drinking Water Files





OFFICE OF THE GOVERNOR
DEPARTMENT FOR LOCAL GOVERNMENT
FRANKFORT, KENTUCKY 40601-8204
September 4, 1997

PAUL E. PATTON
GOVERNOR

*State
Will
vonder
John*

BOB ARNOLD
COMMISSIONER

Mr. Will Linder
Will Linder & Associates
218 Swiss Hills
Berea, Kentucky 40403

RE: Kenton County Water Expansion Project, Subdistrict C
CFDA # 14.228
SAI #KY960715-0792

Dear Mr. Linder:

The Kentucky State Clearinghouse, which has been officially designated as the Commonwealth's Single Point of Contact (SPOC) pursuant to Presidential Executive Order 12372, is in receipt of your letter dated August 26, 1997 regarding an update for the above-referenced proposal. The State Clearinghouse has contacted the appropriate state agencies and determined the previous comments remain valid.

Should you need any further clarification, please feel free to contact me at 502-573-2382.

Sincerely,

A handwritten signature in black ink that reads "Ronald W. Cook".

Ronald W. Cook
Kentucky State Clearinghouse

Attachment

cc: Scott Kimmich

Memorandum

DATE: June 9, 1997
TO: Richard Harrison
FROM: Don Gibson
RE: Grant Application Possibilities for Grandview
Road, Campbell County

In speaking with the Campbell County Fiscal Court, they stated that they would support the new District in any or all endeavors to obtain grant funds when possible. I quickly briefed Naquanda Deaton on the Grant possibilities on Grandview Road and asked if the Fiscal Court would apply on our behalf if the opportunity to meet requirements were achieved. She explained that the Fiscal Court is in the process of a three (3) county joint application for a grant for sewer repairs and that it would not be able to apply on our behalf on this round. But she stated that we should approach the court again once this project is closed out. This she estimated would be approximately a year to a year and a half.

I also contact the resident, Mrs. Baird, whom I understand initiated this project. I explained to her the circumstances as they are and she seemed satisfied.



NORTHERN KENTUCKY WATER
SERVICE DISTRICT



3049 Dixie Highway, P.O. Box 17010 - Edgewood, Covington, Kentucky 41017

Telephone No: (606) 578-9898 Fax No: (606) 578-5456

FAX COVER SHEET

DATE: 9-11-97

FROM: Don Gibson

TO: Vince Wardrup

RE: Pleasant Ridge Rd.

No. of pages including cover: 3

FAX NO: 606-371-0054

Message: This is an estimate of costs for your project. When I got off the phone, I noticed that I had not included a cast iron to transite pipe coupling, and a short piece of 6" pipe. So costs will vary some.

Thanks
Don.

WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

Name of Extension: "Vivest Wadep" Pleasant Ridge Road

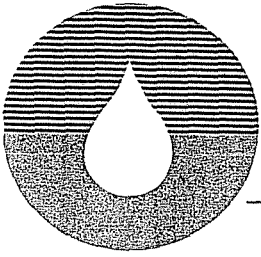
Location - Beginning at: _____

Ending at: _____

Date placed in service: _____

Date refund period expires: _____

- | | | | | |
|-----|--|---|----|-----------------------------|
| 1. | Total cost of construction of main
(not including meter connections) | | \$ | <u>7028⁶⁵</u> |
| 2. | Divided by total length of water
main in feet | + | | <u>280</u> ft. |
| 3. | Cost per foot of main | = | \$ | <u>25¹⁰</u> /ft. |
| 4. | 50 feet times cost/foot | x | | <u>50</u> ft. |
| 5. | District's portion of cost per
customer | = | \$ | <u>1255⁰⁰</u> |
| 6. | Times number of customers
connected to main | x | | <u>1</u> |
| 7. | District's total portion of cost | = | \$ | <u>1255⁰⁰</u> |
| 8. | Total cost of construction of
main (Line 1) | | \$ | <u>7028⁶⁵</u> |
| 9. | Minus District's total portion of
cost (Line 7) | - | | <u>1255⁰⁰</u> |
| 10. | Part to be paid by customers | = | \$ | <u>5773⁶⁵</u> |
| 11. | Divided by number of customers
(Line 6) | + | | <u>1</u> |
| 12. | Each customer's required
contribution for the water main
extension itself (Subject to
refund) | | \$ | <u>5773⁶⁵</u> |
| 13. | Plus the approved "Tap-on-fee"
(Not refundable) | + | \$ | <u>750⁰⁰</u> |
| 14. | Total contribution to be paid by
each customer connected to the
main extension at this time | = | \$ | <u>\$6523⁶⁵</u> |



Northern Kentucky Water Service District

September 25, 1997

Mr. Dick Abel
708 Bromley Crescent Springs Road
Villa Hills, Kentucky 41017

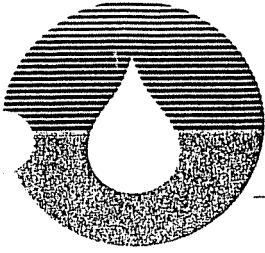
Dear Mr. Abel:

Enclosed is a cost estimate for the extension of the watermain at the intersection of Amsterdam Road and Bromley Crescent Springs Road to your property. The Northern Kentucky Water Service District cannot extend the main from the Bromley System because that is owned by the City of Bromley. In our previous discussion, I informed you of a potential new policy that would allow the District to pay for 50 feet of watermain extension for every new customer connected to the extension. This policy was approved recently by the District's Board of Commissioners but has not yet been approved by the Kentucky Public Service Commission. We cannot commit to this policy without this approval. Our Engineer, Jim Viox has estimated that for a 3,200 foot extension, the cost would be \$149,442.50. I cannot estimate how many customers might be willing to connect, but I can give you the cost per customer under the potential new policy for different numbers of connections. If 10 customers connect then the approximate cost per customer would be \$12,609 per customer. If 12 customers connect then the approximate cost per customer would be \$10,118 per customer. If 15 customers connect then the approximate cost per customer would be \$7,628. There is also a \$750 charge for the construction of the meter setting and service line between the main and the meter. The meter is set on road right-of-way and each customer is responsible for the service line extension from the house to the meter setting.

We are not sure how long it will take the Kentucky Public Service Commission to review this policy. The District's current policy is the assessment method which does not allow for any District contribution towards the project. Alternatively, you could have the extension designed by a Kentucky Registered Engineer (PE) and hire a contractor to construct the waterline but this would limit the involvement of the District.

Sincerely yours,

Richard Harrison
Director, Engineering
& Distribution



Northern Kentucky Water Service District

October 17, 1997

Mr. Pete Barbian
55 Gunkel Road No. 2
Camp Springs, Kentucky

Re: Water Main Extension along Gunkel Road No. 2 from the existing water main on Upper 8 Mile to the end of Gunkel Road No. 2 (end of County Maintenance); Camp Springs, Campbell County Kentucky

Dear Mr. Barbian,

I apologize for the delay in responding to your request on a cost estimate on extending the public water line along Gunkel Road No. 2. Attached is a ballpark estimate to extend the water main of \$133,733.50, this does not include tap fee of \$750.00 for each customer and the service line extension from the house to the meter setting. Under the District's current policy for water main extension, District will pay for 50 feet of water main extension for every new customer connected to the extension. If there is 6 customers which connect into the new water line, the approximate cost per customer would be \$20,006.92. Any additional customers would reduce the cost to each customer.

Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely yours,

John Scheben, Jr.
Engineering Technician

cc:file
attachment

al Road No. 2 - 8" Water Main Extension Estimate

ITEM	QUANTITY		TOTAL UNIT COST	COST
8" PVC Pipe & Fittings	1475	LF	25.00	\$36,875.00
8" DI Pipe & Fittings (High Pressure Area, El. 725)	1455	LF	35.00	\$50,925.00
8" Cast Iron Res. Seated Gate Valve & Box	3	EA	750.00	\$2,250.00
8"x8"x6" Ductile Iron Tee & Block	7	EA	400.00	\$2,800.00
Fire Hydrant Assembly	7	EA	1,600.00	\$11,200.00
8"x8"x8" Ductile Iron Tee & Block	1	EA	550.00	\$550.00
Road Restoration	28	SY	40.00	\$1,120.00
Controlled Density Backfill	19	CY	30.00	\$570.00
Restoration	1	LS	10,000.00	\$10,000.00
Sub-Total				\$116,290.00
15% Conting. (Eng., Etc.)				17,443.50
Total Cost				\$133,733.50

Don

Please call her

& touch base.

We can offer a cost estimate

to workshop

and you could

grant - application



637 Grandview RD.
Alexandria, Ky. 41001
May 11, 1997

Dear Members:

After reading the summary of the April 17, 1997 meeting of the Campbell-Kenton Water Supply Planning Council and noting with much interest the phrase "encourage expansion where feasible" I'm jumping at the chance to help implement that !

Attached is a list of homes in the Campbell County (not city) part of Grandview Rd. (Alexandria) that are not serviced with "city water". What better place to expand? The homes are already there - not just in the planning stage. In about 1½ miles there are approximately 56 homes depending on rain, leaky unsanitary cisterns and water haulers for all their water needs, including fire protection!

Please tell us what we can do to get a water line extended to our end of the road. We personally have lived here for 26 yrs. and the end of the water line hasn't come any closer in all that time!

I am appealing to this planning council to help us obtain what all of you probably take pretty much for granted, a safe, dependable water supply for our families.

In behalf of my neighbors,
Sincerely

Mrs. Jim Baird

Mrs. Jim Baird (635-4491)

@ AD DIST.

3 county

FOR Repairing Sewer Problems.

Dear Ms. Van Keuren;

This is a follow-up on our phone conversation recently about getting water to our homes. You said you would bring it up at the May 15 meeting for me and see if anything can be done for us through this council. Here is some information that might help. Again thank you for anything you can do for us.

Sincerely,

Mrs. Jim Baird

Mrs. Jim Baird

635-4491

401 Tim Decker	680 Leonard Rini
404 Wanda Painter	689 (Empty)
? W. Schwerin	700 Deborah Howard
404A Scott Painter	713 Venita Linville
406 Dayton Hoskins	721 Ken Hall
425 Doug Wooton	729 Mitch Deaton
435 Morris Decker	749 Carl Joyner
448 Donald Gosney	755 Ken Schultz
457 P. Wetterich	765 W. Hildebrand
469 N. Edelbroich	773 Ed. Klaene
470 G. Ortleib	775 Wayne Rogers
474 P. Orzali	843 John Muench
477 Mike Riley	851 Thomas Kramer
485 Wm. Andrew	862 Robert Evans
494 Ken Glahn	
501 W. Whitaker	
504 Jesse Morguson	These are on a lane that runs
543 R. Richmond	off of Grandview called
552 R. Stewart	Amy Lou Drive
558 B.J. Ellis	4152 Larry Kmit
560 Jeff Byrd	4153 Garry Kaffenburger
574 Darryl Norman	4154 Mark Kuntz
590 Tim Goshorn	4154 Mike ?
594 O. Wooten	4162 Jeff Steffen
600 Richard Brummett	4165 Doug Field
637 Jim Baird	4169 Harold Steffen
652 Roy Cunningham	4201 (Empty Farm)
654 Ed. Martin	
656 Michael Brookbank	
658 Luther Hensley	
660 Thomas Hensley	
664 Pauline Deaton	
666 P, Elkins	

WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

1 CUSTOMER

Name of Extension: GRANDVIEW RD (ESTIMATE)
 Location - Beginning at: _____
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

- | | | |
|--|------|-------------------------------|
| 1. Total cost of construction of main
(not including meter connections) | | \$ <u>13,700⁰⁰</u> |
| 2. Divided by total length of water
main in feet | + | <u>1235' ft.</u> |
| 3. Cost per foot of main | = \$ | <u>11⁰⁹</u> /ft. |
| 4. 50 feet times cost/foot | x | <u>50 ft.</u> |
| 5. District's portion of cost per
customer | = | \$ <u>554⁵⁰</u> |
| 6. Times number of customers
connected to main | x | <u>1</u> |
| 7. District's total portion of cost | = \$ | <u>554⁵⁰</u> |
| 8. Total cost of construction of
main (Line 1) | \$ | <u>13,700⁰⁰</u> |
| 9. Minus District's total portion of
cost (Line 7) | - | <u>554⁵⁰</u> |
| 10. Part to be paid by customers | = \$ | <u>13,146³⁸</u> |
| 11. Divided by number of customers
(Line 6) | + | <u>1</u> |
| 12. Each customer's required
contribution for the water main
extension itself (Subject to
refund) | \$ | <u>13,146³⁸</u> |
| 13. Plus the approved "Tap-on-fee"
(Not refundable) | + \$ | <u>650⁰⁰</u> |
| 14. Total contribution to be paid by
each customer connected to the
main extension at this time | = \$ | <u>13,796³⁸</u> |

WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

2 CUSTOMER

Name of Extension: GRANDVIEW RD (ESTIMATE)
 Location - Beginning at: _____
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

- | | | |
|--|------|----------------------------|
| 1. Total cost of construction of main
(not including meter connections) | \$ | <u>13,700⁸⁸</u> |
| 2. Divided by total length of water
main in feet | + | <u>1235 ft.</u> |
| 3. Cost per foot of main | = \$ | <u>11⁰⁹/ft.</u> |
| 4. 50 feet times cost/foot | x | <u>50 ft.</u> |
| 5. District's portion of cost per
customer | = | \$ <u>554⁵⁰</u> |
| 6. Times number of customers
connected to main | x | <u>2</u> |
| 7. District's total portion of cost | = \$ | <u>1109⁰⁰</u> |
| 8. Total cost of construction of
main (Line 1) | \$ | <u>13,700⁸⁸</u> |
| 9. Minus District's total portion of
cost (Line 7) | - | <u>1,109⁰⁰</u> |
| 10. Part to be paid by customers | = \$ | <u>12,591⁸⁸</u> |
| 11. Divided by number of customers
(Line 6) | + | <u>2</u> |
| 12. Each customer's required
contribution for the water main
extension itself (Subject to
refund) | \$ | <u>6295⁹⁴</u> |
| 13. Plus the approved "Tap-on-fee"
(Not refundable) | + \$ | <u>650⁰⁰</u> |
| 14. Total contribution to be paid by
each customer connected to the
main extension at this time | = \$ | <u>6945⁹⁴</u> |

WORKSHEET FOR CALCULATION OF
CUSTOMER CONTRIBUTION FOR WATER MAIN EXTENSION

Name of Extension: GRANDVIEW RD (ESTIMATE)
 Location - Beginning at: _____
 Ending at: _____
 Date placed in service: _____
 Date refund period expires: _____

1. Total cost of construction of main
(not including meter connections) \$ 13,700⁸⁸
2. Divided by total length of water
main in feet + 1235 ft.
3. Cost per foot of main = \$ 11⁰⁹/ft.
4. 50 feet times cost/foot x 50 ft.
5. District's portion of cost per
customer = \$ 554⁵⁰
6. Times number of customers
connected to main x 3
7. District's total portion of cost = \$ 1663⁵⁰
8. Total cost of construction of
main (Line 1) \$ 13,700⁸⁸
9. Minus District's total portion of
cost (Line 7) - 1,663⁵⁰
10. Part to be paid by customers = \$ 12,037³⁸
11. Divided by number of customers
(Line 6) + 3
12. Each customer's required
contribution for the water main
extension itself (Subject to
refund) \$ 4012⁴⁶
13. Plus the approved "Tap-on-fee"
(Not refundable) + \$ 650⁰⁰
14. Total contribution to be paid by
each customer connected to the
main extension at this time = \$ 4662⁴⁶

3-7-91

Estimate for Grandview Road Extension.

LABOR

$$1235' @ \$5.00 \text{ per foot} = \boxed{6175.00}$$

MATERIAL

$$1- 6" \phi \text{ Gate Valve @ } = \boxed{225.00}$$

$$2- 22\frac{1}{2}^\circ \text{ BENDS } 6" \phi @ 56.00 \text{ ea.} = \boxed{112.00}$$

$$1- 6" \phi \text{ M.J. Cap @ } = \boxed{24.18}$$

$$1235' 6" \phi \text{ Asstite Pipe @ } 5.72 \text{ per foot} = \boxed{7064.20}$$

Restoration

$$\text{Seed \& Straw} \quad \boxed{100.00}$$

TOTAL JOB

13,700.88

Memorandum

To: Pat Sommerkamp
Fr: Richard Harrison
Dt: 6/2/98

Re: Update on water main expansion progress in Kenton County and very rough estimate to complete water mains for the entire County

The Water District has made significant progress in extending water lines to the unserved rural areas of Kenton County since 1992. Within this time frame approximately 35 miles of water line have been extended that currently serve 814 households. This has been accomplished through aggressively pursuing federal grants and loans. To date, three projects have been constructed utilizing these funds. Additionally, a fourth project (Subdistrict C) has received grant funding and when constructed will include another 20 miles of construction to serve 340 additional customers. This brings the total up to 55 miles and over 1150 households. We estimate that after Subdistrict C is completed, approximately 120 to 130 miles of water line remain to be extended to serve all public right of ways within Kenton County. This means that since 1992, the unserved area will have been reduced from 185 miles to approximately 130 miles which is a reduction of nearly 30 %.

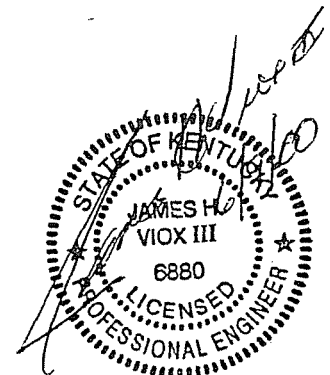
Our Hydraulic Master Plan estimates that approximately 95 % of the Kenton County Population will be served with public water after Subdistrict C is completed. This would indicate that approximately 7500 people or about 2300 households remain to be served in Kenton County. This is a very rough estimate but should be a good working number. The actual cost to extend 130 miles of water line is very hard to determine but \$40/foot for an eight (8) inch water main is a good working number. This results in a cost of over \$27 million to complete this work. It is probably wise to add another \$10 million to the number for geotechnical stabilization based on our experience in Ryland Heights. Additionally, I would recommend that another \$10 million be added to cover the estimated cost to upsize key mains for transmission purposes. This brings the total to \$47 million to serve about 2300 customers. Our experience shows that about 75 % of the available households have signed-up in the past which would bring the estimated total to be served down to 1,725. This places the cost at approximately \$27,247 per customer.

We have selected projects strategically to ensure that strong transmission mains are in place along Ky 17, Green Road, Staffordsburg Road and U.S. 25 to allow for future extensions by the development community or additional grant projects. We have also tried to serve those areas with the highest densities. Unless other entities are willing to contribute millions of dollars to this effort, the grant process appears the way to go in the future. Unfortunately, only about 12 miles of water main can be extended at a time using this method due to the \$30 monthly surcharge limitation per customer and the decreasing prospect of growth per mile as more water lines are extended. **To do the rest of Kenton**

County in one project, I would estimate that we would need additional funds in excess of \$38,500,000.

N.K.W.S.D.
EXHIBIT-C1

PRELIMINARY ENGINEERING REPORT
WATER FACILITY



KENTUCKY GUIDE 7
MAY 1998

SUMMARY ADDENDUM
TO
PRELIMINARY ENGINEERING REPORT

DATED June 29, 1998

FOR

Expansion Project-subdistrict-c
(Name of Project)

APPLICANT CONTACT PERSON RICHARD HARRISON

APPLICANT PHONE NUMBER (606)578-7890

APPLICANT TAX IDENTIFICATION NUMBER (TIN) 61-1311695

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, as soon thereafter as possible.

SEE ATTACHED

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.

	LENGTH	HOUSEHOLDS
KY 17 - GLEASON RD. TO PENDELTON COUNTY LINE		
16" DUCTILE FROM GLEASON TO RT 14 AND 12" TO COUNTY LINE	5.6 mi	156
GREEN ROAD (12" DUCTILE)	5.7 mi	77
U.S. 25 (12" DUCTILE)	2.9 mi	74
STAFFORDSBURG RD. - KY 16 TO MARTIN ROAD (12" DUCTILE)	2.4 mi	66
HEMPFLING ROAD-FIRST 2.1 MILES 8" PVC	2.1 mi	59
SPILLMAN ROAD 8" PVC	1.0 mi	28
MARTIN ROAD-SUBDISTRICT B TO STAFFORD 8" PVC	.6 mi	9
RECTOR ROAD-SUBDISTRICT B TO KENTON STATION 8" PVC	.5 mi	10

SEE ATTACHED MAP 2A

II. FACILITY CHARACTERISTICS OF EXISTING SEWER SYSTEM

A. Sewage Treatment: N/A

1. Type _____

2. Method of Sludge Disposal _____

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

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 _____

DATE: 3/9/00

SUBDISTRICT - C (Proposed)
 Construction cost do not include
 low to moderate income service lines

STREET	DISTANCE MILES	TOTAL AVAIL. CUST	CUST. SIGN	CUST. PER/MI	EST. CONST.
Ph. 1 Green Road & U.S. 25	8.6	151	116	13.49	\$890,921
Cost to Upgrade to 12 in.	8.6	N/A	N/A	N/A	\$564,208
Ph. 2 Ky 17(Gleason to County Line) & Hempfling Rd (First 2.1 miles) & Spillman Rd	8.8	243	167	18.98	\$856,156
Change Order to Phase 2 for Gardnersville Rd.; (First .8 miles) & Paxton Rd.: (First .65 miles)	1.45	40	26	17.93	\$194,285
Cost to Upgrade to 16 in,	5.70	N/A	N/A	N/A	\$640,002
Ph. 3 Staffordsburg Rd.[Old Decoursey] (Ky 16 to Martin Road) Martin Road (Subdist. B to Staff. Rd) Rector Road (Subdist. B to Kent. St.)	3.50	85	57	16.29	\$401,694
Cost to Upgrade Staff. To 12 in.	2.40	N/A	N/A	N/A	\$152,738
Ph. 4 Rich Road; (First 1.9 miles) & Callant Road	2.50	57	37	14.80	\$361,575
Ph. 5 Percival Road; (First 1 mile) & Symbo & York Road; (First .4 miles) & Stephenson Road; (First .5 miles)	2.50	78	50	20.00	\$371,795
Ph. 6 Visalia Road;Staffordsburg to 2 mil	2.00	60	39	19.50	\$264,415
Cost to upgrade to 12 inch	2.00	N/A	N/A	N/A	\$147,295
Ph. 7 Ind./Maher Road to Banklick Rd. & Maher Road, Banklick to Co. Line & Banklick Road; Bristow to Maher	3.65	80	52	14.25	\$586,840
Cost to upgrade to 24 inch	2.45	N/A	N/A	N/A	\$725,925
	33.00	794	544	16.48	\$6,157,849
	33.0 Miles		69%		

+ 20 Pend. * Bullock Pen
 + 10 South Fork Development

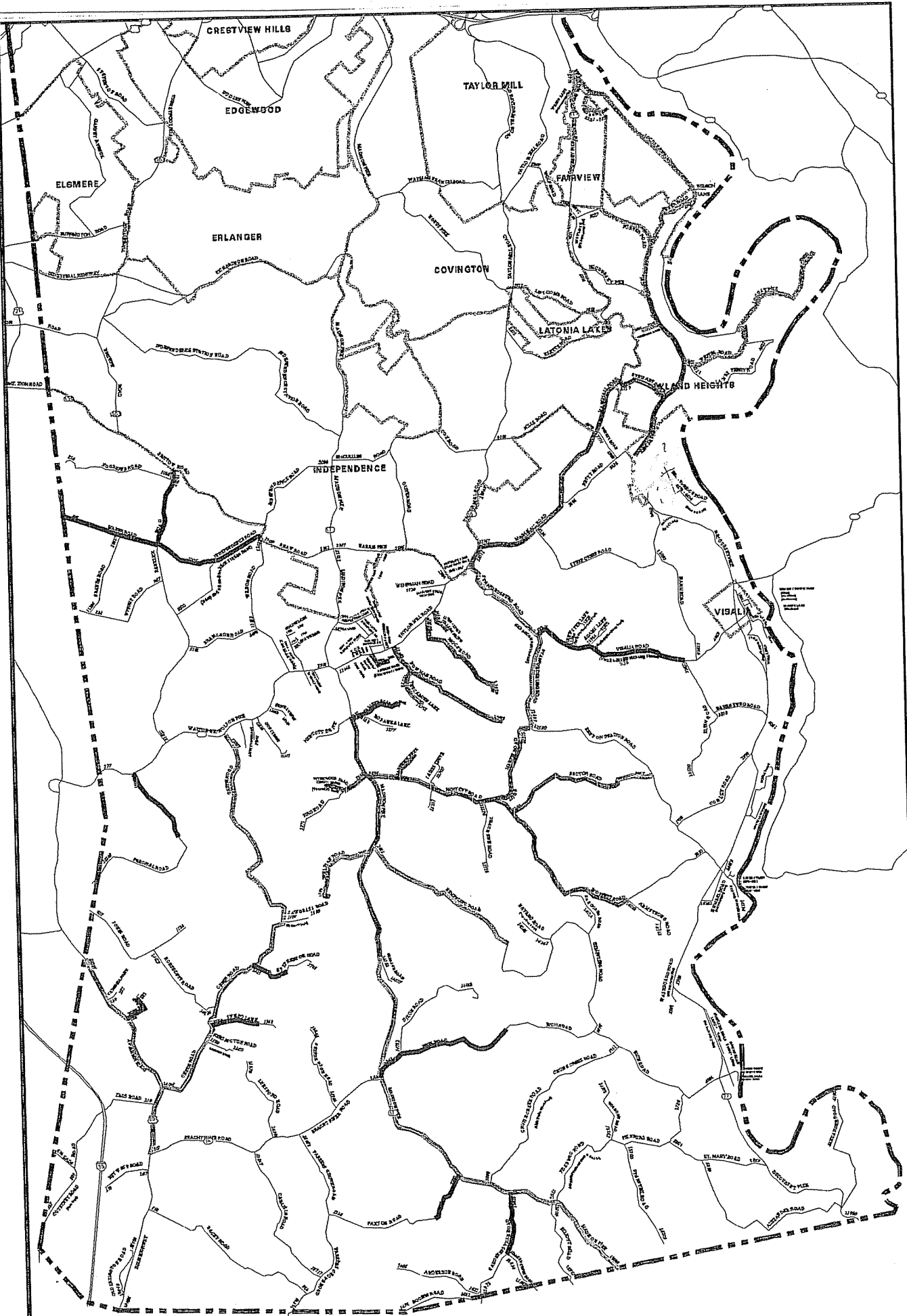
Cost Estimate:

Construction	\$6,157,849
Service Lines (LMI) (320*90FT*\$6/FT)	\$172,800
Engineering	\$431,049
Planning & Administration	\$69,500
Interim Financing	\$230,000
Legal	\$20,000
Contingencies (5%)	<u>\$307,892</u>
	\$7,389,091

Source of Funds:

Community Development Block Grant	\$886,755
Tap-on Fees (214 @\$650)	\$139,100
Community Fund Raising	\$10,000
County Contribution	\$172,800
Upgrades (NKWSD Bond Issue)	\$2,613,500
Financed thru surcharge (NKWSD Bond Issue)	\$1,279,936
Financed thru surcharge (FmHA Loan)	<u>\$2,287,000</u>
	\$7,389,091

NORTHERN KENTUCKY WATER SERVICE DISTRICT - SUBDISTRICTS



LEGEND

SUBDISTRICT A
 SUBDISTRICT R

E. Sewage Collection System: N/A

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

10" _____ 12" _____, Larger _____

Date(s) Constructed _____

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

III. FACILITY CHARACTERISTICS OF EXISTING WATER SYSTEM

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

The N.K.W.S.D.'s raw water source is the Ohio and the Licking rivers. Raw water is pumped from these two rivers utilizing a raw water intake pump station at each source. The quantity is very satisfactory since the pool level of these rivers is at a sufficient constant level to ensure a very reliable source. The quality is generally satisfactory but can occasionally necessitate short shut downs of the intakes to allow a spill to pass. We have 70 million gallons of raw water reservoir storage that provides reliability in the event of a spill. Our capacity is 54 mgd and our current level of average production is 30.3mgd.

Seller(s):

1. Newport Water; The source for the Newport Water Plant is also the Ohio River. This source is adequate to meet all reasonable demands.
2. _____
3. _____

Price/1,000 gallons:

1. .90 per 1000 gallons
2. Average purchase is 2.7 mgd
3. _____

Present Estimated Market Value of Existing System: \$ 145,000,000.00

B. Water Storage:

Type: Ground Storage Tank X Elevated Tank X
Standpipe _____ Other _____
Number of Storage Structures 26
Total Storage Volume Capacity 31,779,000
Date Storage Tank(s) Constructed See Attachment #1

C. Water Distribution System:

Pipe Material Cast Iron, Ductile Iron, Transite, P.V.C.
Lineal Feet of Pipe:
3" 108,768' 8" 1,013,760' 18" 3,345' 30" 28,563'
4" 366,410' 10" 70,259' 20" 95,040' 36" 57,100'
6" 1,895,057' 12" 480,480' 24" 77,534' 42" 4,315'
Date(s) Water Lines Constructed 1889 to present
Number and Capacity of Pump Station(s) _____
 See attachment #2

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 NKWSD system is a dynamic system that through proper planning is updated and expanded as demands change and the infrastructure ages. We are updating transmission lines in various locations as well as updating pumps and tanks.

E. Percentage of Water Loss Existing System 8.0%

**Water Storage Facilities
Northern Kentucky Water Service District
Updated: 03/16/98**

Storage Location	City Location	Type Of Storage	Year Date In Service	Structure Height (Feet)	Base Elevation (Feet)	Top Elevation (Feet)	Overflow Elevation (Feet)	Tot. Avail. Water Depth (Feet)	Largest Diameter (Feet)	Capacity (Gallons)
Aqua Drive	Cold Spring	Hydropillar					1017.0			2,000,000
Barrington Road	Ft. Wright	Hydropillar	1969	141	916.5	1057.5	1046.7	130.2	74	1,000,000
Bromley	Bromley	Ground Storage	1966	103	670.0	773.0	764.0	94.0	75	1,000,000
Dayton Avenue	Dayton	Ground Storage					829.0			500,000
Devon	Florence	Hydropillar	1991		939.5		1082.0	142.5	100	2,000,000
Devou Park	Covington	Standpipe	1973	95	869.5	964.5	959.5	90.0	30	475,000
Dudley Pike	Edgewood	Ground Storage	1964	59	831.0	889.5	876.0	45.0	140	5,000,000
Dudley Pike	Edgewood	Ground Storage	1990	59	831.0	889.5	876.0	45.0	140	5,000,000
Ft. Thomas Plant	Ft. Thomas	Clearwell	1936	31	734.0	765.3	764.5	30.5		3,000,000
Ft. Thomas Plant	Ft. Thomas	Clearwell	1990	35	730.0	778.5	764.5	34.5	130	3,500,000
Harrison Avenue	Bellevue	Ground Storage					829.0			600,000
Ida Spence	Covington	Elevated Tank	1952	175	840.0	1015.0	1005.0	165.0	57	500,000
Independence	Independence	Hydropillar	1981	137	943.5		1080.0	136.5	74	1,000,000
Industrial Park	Florence	Hydropillar	1961	146	945.5	1091.5	1083.5	138.0	50	500,000
Johns Hill Road	Highland Hts.	Elevated Tank					1017.0			500,000
Kenton Lands Rd.	Erlanger	Elevated Tank	1953	158	896.0	1054.0	1045.0	149.0	50	500,000
Lumley	Fort Thomas	Elevated Tank					1017.0			275,000
Main St.	Alexandria	Elevated Tank					1017.0			300,000
Old St. Rt. 4	Claryville	Elevated Tank					1017.0			1,000,000
Rossford	Fort Thomas	Elevated Tank					1017.0			300,000
Taylor Mill Plant	Taylor Mill	Clearwell		15	509.5	524.5	522.0	12.5		1,000,000
*Taylor Mill	Taylor Mill	Standpipe		143	870.0	1013.0	1010.0	140.0	20	329,000
**Oblique St., Flor.	Florence	Elevated Tank		154	937.5	1091.0	1084.0	146.5	50	500,000
**Florence Mall	Florence	Hydropillar		135	910.8	1045.3		134.5	74	1,000,000
***Hebron	Boone County	Elevated Tank			922.0		1045.0	123.0	30	500,000
***Frogtown Rd.	Boone County	Elevated Tank			950.0		1045.4	95.4	30	500,000
TOTAL: 31,779,000										

- * Owned by the City of Taylor Mill
- ** Owned by the City of Florence
- *** Owned by the Boone County Water District and presently out of service.

OPERATING NOTES: Pressures not to exceed:

- 135 psi in 1040 with 1 pump
- 155 psi in 1040 with 2 pumps
- 129 psi in 1080 (Never exceed!)

PUMP STATION LOCATION	CITY LOCATED	NO OF UNITS	PUMP TYPE	YEAR INSTALLED	HORSE POWER	VOLTS REQUIRED	PUMP CONTROL	RATING PER PUMP (GPM)	TDH (FEET)	SERVICE TYPE	
Ohio River Raw Water Pumping Station	Brent	1*	VT	86-87	1250	4160	AUTO	7400	435	HIGH	
		2	VT	1990	1250	4160	AUTO	7400	435	HIGH	
		3*	VT	81-82	1250	4160	AUTO	7400	435	HIGH	
		4	VT	1981	1250	4160	AUTO	10417	435	HIGH	
		5	VT	1994	1250	4160	AUTO	9000	432	HIGH	
New Ohio River Raw Water P Pumping Station (Near Completion)	Brent	1	VT	1997	1250	4160	AUTO	10,417	435	HIGH	
		2	VT	1997	1250	4160	AUTO	10,417	435	HIGH	
		3	VT	1997	1250	4160	AUTO	10,417	435	HIGH	
		4	VT	1997	1250	4160	AUTO	10,417	435	HIGH	
		5	VT	#5 from above gets moved to the new station.							
		6	VT	Future							
Latonia Ave. and 35th St.	Covington	1	HC	1953	75	440	AUTO	500	400	HIGH	
		2	HC	1953	75	440	AUTO	500	400	HIGH	
West Street & Parkway	Covington	1	HC	1956	30	440	AUTO	250	289	HIGH	
		2	HC	1956	30	440	AUTO	250	289	HIGH	
Bromley	Bromley	1	VT	1986	75	440	AUTO	700	315	HIGH	
		2	VT	1986	75	440	AUTO	700	315	HIGH	
		3	VT	1968	60	440	AUTO	500	340	HIGH	
Dixie Highway	Park Hills	1	VT	1925	125	440	AUTO	900	260	HIGH	
		2	VT	1925	125	440	AUTO	900	260	HIGH	
Locking River Raw Water Pumping Station	Taylor Mill	1	VT	1990	350	440	AUTO	8333	126	LOW	
		2	VT	1971	250	440	AUTO	6250	126	LOW	
		3	VT	1993	150	440	AUTO	4900	94	LOW	
Taylor Mill Treatment Plant	Taylor Mill	1	VT	1982	600	2300	AUTO	6945	250	HIGH	
		2	VT	1954	450	2300	AUTO	3472	385	HIGH	
		3	VT	1954	450	2300	AUTO	3472	385	HIGH	
		4	VT	1974	1250	2300	AUTO	6945	490	HIGH	
		5	VT	1974	1250	2300	AUTO	6945	490	HIGH	
		6	VT	1982	600	2300	AUTO	6945	250	HIGH	
Dudley Pike 1040 System	Edgewood	1	VT	1965	250	440	AUTO	2825	270	HIGH	
		2	VT	1965	250	440	AUTO	2825	270	HIGH	
		3	VT	1965	250	440	AUTO	2825	270	HIGH	
		4	VT	1979	250	440	AUTO	2222	375	HIGH	
Dudley Pike 1080 System	Edgewood	5	VT	1990	600	460	AUTO	6000	282	HIGH	
		6	VT	1990	600	460	AUTO	6000	282	HIGH	
		7	VT	1990	600	460	AUTO	6000	282	HIGH	
		8	VT	1994	600	460	AUTO	5000	282	HIGH	
Richardson Rd.	Independence	1	VT	1981	400	440	AUTO	2100	515	HIGH	
		2	VT	1981	400	440	AUTO	2100	515	HIGH	
		3	VT	1998	400	440	AUTO	2100	515	HIGH	
Hands Pike	Covington	1	VT	1983	75	440	AUTO	500	426	HIGH	
		2	VT	1983	75	440	AUTO	500	426	HIGH	
West Covington	Covington	1	VC	1987	40	440	AUTO	1600	60	LOW	
		2	VC	1987	40	440	AUTO	1600	60	LOW	
Bristow Rd.	Independence	1	VT	1995	20	460	AUTO	900	64	LOW	
		2	VT	1995	20	460	AUTO	900	64	LOW	
Dayton/Bellevue	Newport	1	VC	1958	100	440	AUTO	1800	216	HIGH	
		2	VC	1969	75	440	AUTO	1500	216	HIGH	
Newport PS (variable speed) 27 10 MGD Pump Station	Fort Thomas 4409 Wtrwk. Rd.	1	VC	1976	500	440	AUTO	3750	375	HIGH	
		2	VC	1982	350	440	AUTO	3000	372	HIGH	
		1	VT	1990	350	440	AUTO	3500	300	HIGH	
Ripple Creek	Cold Spring	1	VT	1990	350	440	AUTO	3500	300	HIGH	
		2	VT	1990	350	440	AUTO	3500	300	HIGH	
		3	VT	1990	350	440	AUTO	3500	300	HIGH	
Ripple Creek	Cold Spring	1	VC	1991	75	440	AUTO	2050	100	LOW	
		2	VC	1991	75	440	AUTO	2050	100	LOW	

IV. EXISTING LONG-TERM INDEBTEDNESS

A. List of Bonds and Notes:

<u>Date of Issue</u>	<u>Bond/Note Holder</u>	<u>Principal Balance</u>	<u>Payment Date</u>	<u>Bond Type Water/Sewer*</u>	<u>Amount on Deposit in Reserve Account</u>
19 <u>95</u> C Issue	<u>PRIVATE</u>	<u>\$ 1,594,000.00</u>	<u>2/1 and 8/1</u>	<u>100 % n/a %</u>	<u>102,300</u>
19 <u>97</u> Issue	<u>PRIVATE</u>	<u>\$ 10,435,000.00</u>	<u>2/1 and 8/1</u>	<u>100 % n/a %</u>	<u>1,090,850</u>
19 <u>98</u> Issue	<u>PRIVATE</u>	<u>\$ 11,105,000.00</u>		<u>% %</u>	<u>767,000</u>
19__ Issue	<u>Kenton County Fiscal Court</u>	<u>\$ 100,000</u>	<u>Deferred</u>	<u>100 % n/a %</u>	<u>-</u>
19 <u>99</u> Issue	<u>5/3rd Park</u>	<u>\$ 5,000,000.00</u>	<u>2/1</u>	<u>100 % n/a %</u>	<u>-</u>

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

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

<u>Date of Issue</u>	<u>Bond/Note Holder</u>	<u>Payment Year 2000</u>		<u>Payment Year 2000</u>		<u>Payment Year 2000</u>	
		<u>Principal Payment</u>	<u>Interest Payment</u>	<u>Principal Payment</u>	<u>Interest Payment</u>	<u>Principal Payment</u>	<u>Interest Payment</u>
19 <u>95</u> C Issue	<u>PRIVATE</u>	<u>15,000</u>	<u>87,257.</u>	<u>16,000.</u>	<u>86,405.</u>	<u>16,000.</u>	<u>85,525.</u>
19 <u>97</u> Issue	<u>PRIVATE</u>	<u>610,000.</u>	<u>478,435.</u>	<u>640,000.</u>	<u>449,060.</u>	<u>670,000.</u>	<u>418,275.</u>
19 <u>98</u> Issue	<u>PRIVATE</u>	<u>200,000.</u>	<u>532,136.</u>	<u>200,000.</u>	<u>522,636.</u>	<u>210,000.</u>	<u>512,898.</u>
19__ Issue	<u>Kenton County Fiscal Court</u>	<u>Deferred</u>		<u>Deferred</u>		<u>Deferred</u>	
19__ Issue							
19__ Issue							

V. EXISTING SHORT-TERM INDEBTEDNESS

A. List of All Short Term Debts: (Do Not Show Any Debt Listed in Paragraph IV Above)
 N/A - No Short Term Debt

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

VI. LAND AND RIGHTS - EXISTING SYSTEM(S)

Number of Treatment Plant Sites:	Water	<u>2</u>	Sewer	<u>N/A</u>
Number of Storage Tank Sites	Water	<u>26</u>	Sewer	<u>N/A</u>
Number of Pump Stations:	Water	<u>18</u>	Sewer	<u>N/A</u>
Total Acreage:	Water	<u>110 Acres</u>	Sewer	<u>N/A Acres</u>
Purchase Price:	Water	<u>\$ Unknown</u>	Sewer	<u>\$</u>

VII. NUMBER OF EXISTING USERS - Through 1997

	<u>Water</u>	<u>Sewer</u>
Residential (In Town) *	<u>N/A</u>	_____
Residential (Out of Town) *	<u>53,995</u>	_____
Non-Residential (In Town)	<u>N/A</u>	_____
Non-Residential (Out of Town)	<u>4,978</u>	_____
Total	<u>58,973</u>	_____
Number to Total Potential Users Living in the Service Area	<u>Unknown</u>	_____

*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

<u>Meter Size</u>	<u>Water Connection Fee</u>	<u>Sewer Connection Fee</u>
<u>5/8" x 3/4"</u>	<u>\$ 750</u>	<u>\$ N/A</u>
<u>1 - Inch</u>	<u>\$ 1,100</u>	<u>\$ N/A</u>

IX. SEWER RATES - EXISTING SYSTEM N/A

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

Date This Rate Went Into Effect _____

WATER RATES - EXISTING SYSTEM

Existing Rate Schedule:

First	<u>4,488</u>	Gallons @ \$ <u>16.42</u>	Minimum.
Next	<u>29,172</u>	Gallons @ \$ <u>2.31</u>	per 1,000 Gallons.
Next	<u>3,668,940</u>	Gallons @ \$ <u>1.99</u>	per 1,000 Gallons.
Next	<u>N/A</u>	Gallons @ \$ <u>N/A</u>	per 1,000 Gallons.
Next	<u>N/A</u>	Gallons @ \$ <u>N/A</u>	per 1,000 Gallons.
Next	<u>N/A</u>	Gallons @ \$ <u>N/A</u>	per 1,000 Gallons.
All Over	<u>3,668,940</u>	Gallons @ \$ <u>1.20</u>	per 1,000 Gallons.

Date This Rate Went Into Effect 7/1/97

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

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

For Period _____ to _____

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

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

For Period _____ to _____

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

SEE ATTACHED

Total Water Purchased and/or Produced _____
 Total Water Sold _____

**BILLING BREAKDOWN
1999**

<i>Campbell</i>			<i>Kenton</i>		
	Gallons	Revenue		Gallons	Revenue
January					
Residential	99,143,586	\$360,460.28		181,805,888	\$491,455.99
Comm	40,476,743	\$136,499.68		74,998,968	\$175,020.63
Ind	12,413,434	\$39,478.64		18,195,100	\$32,057.55
Government	6,579,587	\$20,193.47		22,383,152	\$42,466.35
Multiple				39,295,432	\$91,047.91
Water Hauler				76,296	\$275.50
Firelines				116,688	\$2,614.09
Resale	4,136,100	\$7,982.67		266,254,340	\$389,460.00
Misc FH				106,964	\$255.42
			19464		
February					
Residential	81,725,553	\$304,056.13		157,688,124	\$429,984.42
Comm	36,181,853	\$123,398.47		43,063,856	\$105,838.23
Ind	11,960,969	\$38,047.26		12,468,412	\$17,205.30
Government	7,513,339	\$24,196.52		13,051,104	\$21,149.86
Multiple				40,528,136	\$89,641.84
Water Hauler				80,784	\$292.25
Firelines				151,096	\$1,357.54
Resale	3,875,500	\$7,479.72		225,777,816	\$331,067.71
Misc FH					
			16951		
March					
Residential	110,981,943	\$412,775.47		233,348,324	\$635,940.32
Comm	24,640,635	\$101,502.79		136,941,596	\$295,328.87
Ind	10,296,865	\$33,275.91		68,735,964	\$126,194.31
Government	6,530,151	\$25,426.26		16,931,728	\$31,915.99
Multiple				68,858,636	\$143,984.73
Water Hauler				103,224	\$372.25
Firelines				1,225,972	\$6,691.26
Resale	3,317,800	\$6,403.35		250,387,016	\$366,503.54
Misc FH				269,300	\$590.26
1st Qtr Count			23512		
April			59,927		
Residential	89,936,338	\$334,402.84		172,034,764	\$468,446.19
Comm	40,515,662	\$139,000.53		68,162,248	\$163,934.58
Ind	11,665,434	\$37,100.00		22,761,640	\$36,007.53
Government	7,439,593	\$23,235.42		21,233,476	\$40,086.00
Multiple				38,016,352	\$88,378.94
Water Hauler				123,420	\$359.00
Firelines				163,064	\$2,711.56
Resale	4,089,000	\$7,891.77		245,525,016	\$359,505.59

**BILLING BREAKDOWN
1999**

May

Residential	83,362,348	\$309,992.37	145,892,164	\$404,557.07
Comm	82,924,617	\$170,978.77	42,011,420	\$104,238.09
Ind	12,773,596	\$40,631.42	15,819,452	\$21,066.16
Government	8,906,433	\$30,133.27	26,284,720	\$41,667.08
Multiple			31,700,988	\$73,712.74
Water Hauler				
Firelines			29,920	\$1,149.56
Resale	4,691,600	\$9,054.79	319,639,100	\$466,228.43
Misc FH			58,300	\$1,412.64
			16927	

June

Residential	160,749,000	\$570,412.37	247,071,880	\$666,454.31
Comm	35,748,781	\$125,068.64	154,854,700	\$324,395.01
Ind	13,054,106	\$41,647.56	72,498,404	\$131,866.11
Government	10,148,534	\$34,135.39	38,571,368	\$68,638.64
Multiple			47,382,060	\$112,959.40
Water Hauler			86,768	\$311.50
Firelines			1,305,260	\$6,924.75
Resale	4,858,000	\$9,375.94	350,518,036	\$510,689.14
Misc FH			1,723,400	\$3,853.72
2nd Qtr Count			23475	
July			59,802	

Residential	103,034,108	\$376,760.57	213,913,788	\$564,214.11
Comm	57,689,613	\$190,018.01	93,084,112	\$209,447.99
Ind	13,775,542	\$43,810.14	28,498,052	\$45,565.09
Government	10,568,741	\$35,450.61	40,629,116	\$71,515.38
Multiple			35,158,992	\$82,124.91
Water Hauler			195,976	\$691.75
Firelines			140,624	\$2,732.19
Resale	4,691,100	\$9,053.82	380,070,020	\$553,243.30
Misc FH			938,700	\$2,211.39
			19469	

August

Residential	94,169,000	\$346,548.84	185,335,700	\$491,908.81
Comm	46,966,689	\$156,726.41	55,650,452	\$130,315.74
Ind	14,450,492	\$45,964.32	18,661,104	\$24,717.48
Government	11,479,803	\$37,921.53	41,879,772	\$65,024.57
Multiple			33,377,256	\$77,263.09
Water Hauler			103,972	\$355.75
Firelines			53,108	\$1,188.25
Resale	4,533,600	\$8,749.85	348,215,692	\$507,504.60
Misc FH			725,600	\$1,592.18
			16918	

**BILLING BREAKDOWN
1999**

September

Residential	155,371,000	\$552,504.38	370,565,932	\$931,605.00
Comm	49,054,186	\$165,229.06	240,831,316	\$469,473.48
Ind	16,037,572	\$51,131.97	84,552,424	\$154,562.70
Government	13,573,066	\$44,563.95	63,559,804	\$103,758.31
Multiple			57,139,720	\$132,012.37
Water Hauler			181,764	\$646.50
Firelines			1,824,372	\$7,910.44
Resale	4,296,500	\$8,292.25	377,408,636	\$549,410.74
Misc FH			23571	
3rd Qtr Count			59,958	
October				

Residential	118,115,000	\$425,156.47	220,979,396	\$577,224.37
Comm	63,829,061	\$209,877.43	107,855,616	\$233,293.38
Ind	13,747,866	\$43,722.13	26,576,440	\$45,402.70
Government	13,281,462	\$43,993.78	33,698,896	\$64,776.61
Multiple			36,007,224	\$83,133.46
Water Hauler			1,229,712	\$577.25
Firelines			44,880	\$2,621.68
Resale	3,740,500	\$7,219.17	287,789,260	\$420,359.25
Misc FH			1,395,768	\$3,084.85
			19591	

November

Residential	85,965,000	\$320,410.18	180,370,476	\$480,793.25
Comm	41,333,662	\$137,744.43	55,478,412	\$129,709.63
Ind	14,296,880	\$45,481.79	12,901,504	\$17,883.91
Government	8,777,091	\$29,545.56	30,952,988	\$50,451.08
Multiple			35,556,180	\$82,464.79
Water Hauler			148,852	\$534.75
Firelines			16,456	\$1,130.09
Resale	3,744,200	\$7,226.31	259,566,472	\$379,718.99
Misc FH			955,196	\$3,147.11
			16882	

December

Residential	124,836,000	\$456,546.09	308,076,516	\$798,847.39
Comm	34,574,941	\$120,383.27	208,766,800	\$418,483.16
Ind	13,635,560	\$43,543.87	78,549,724	\$146,586.84
Government	8,509,624	\$29,160.56	36,622,080	\$67,258.41
Multiple			53,635,340	\$117,045.04
Water Hauler			159,324	\$545.50
Firelines			1,611,192	\$7,544.92
Resale	3,714,900	\$7,169.76	255,185,436	\$373,124.09
Misc FH			605,900	\$1,912.43

4th Qtr Count

23752
60225

Avg Ct/Year

59978

XIII. FACILITY CHARACTERISTICS OF PROPOSED SEWER SYSTEM

A. Sewage Treatment: N/A

1. Type _____

2. Method of Sludge Disposal _____

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

\$ _____

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 N/A

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.

The N.K.W.S.D.'s raw water source is the Ohio and Licking Rivers. Water is pumped from these two rivers utilizing a raw water intake pump station at each source. The quantity is very satisfactory since the pool level at these rivers is at a sufficient constant level to ensure a very reliable source. The quality is generally satisfactory but can occasionally necessitate short shut downs of the intakes to allow for a spill to pass. We have 70 million gallons in raw water reservoir storage that provides reliability in the event of a spill. Our capacity is 54 mgd and our current level of average production is .30, 3 mgd.

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 & Ductile

Lineal Feet of Pipe: 3" Diameter N/A 24" 12,936'

6" N/A 8" 68,640'

16" 29,568' 10" N/A 12" 68,640'

Number and Capacity of Pump Station(s) N/A

XVI. LAND AND RIGHTS - PROPOSED WATER SYSTEM

Number of Treatment Plant Sites N/A

Number of Pump Sites N/A

Number of Other Sites N/A

Total Acreage N/A Acres

Purchase Price \$ N/A

XVII. NUMBER OF NEW SEWER USERS N/A

Residential (In Town) *

Residential (Out of Town) *

Non-Residential (In Town)

Non-Residential (Out of Town)

Total

Number to Total Potential Users Living in the Service Area

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

XVIII. PROPOSED SEWER CONNECTION FEES FOR EACH SIZE WATER METER CONNECTION

<u>Meter Size</u>	<u>N/A</u> <u>Connection Fee</u>
5/8" x 3/4"	\$ _____
1 - Inch	\$ _____
1-1/2 Inch	\$ _____
2 - Inch	\$ _____
3 - Inch	\$ _____
4 - Inch	\$ _____
5 - Inch	\$ _____
6 - Inch	\$ _____

XIX. NUMBER OF NEW WATER USERS

Residential (In Town) *	<u>0</u>
Residential (Out of Town) *	<u>574</u>
Non-Residential (In Town)	<u>0</u>
Non-Residential (Out of Town)	<u>0</u>
Total	<u>574</u>
Number to Total Potential Users Living in the Service Area	<u>unknown</u>

*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:

<u>Meter Size</u>	<u>Connection Fee</u>
<u>5/8" x 3/4"</u>	<u>\$ 750.00</u>
<u>1 - Inch</u>	<u>\$ 1.100.00</u>
<u>1-1/2 Inch</u>	<u>\$ actual cost + 10%</u>
<u>2 - Inch</u>	<u>\$ _____</u>
<u>3 - Inch</u>	<u>\$ _____</u>
<u>4 - Inch</u>	<u>\$ _____</u>
<u>5 - Inch</u>	<u>\$ _____</u>
<u>6 - Inch</u>	<u>\$ _____</u>

XXI. SEWER RATES - PROPOSED

N/A

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) _____

Recommended Rate Schedule: (With RUS Grant)

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

If more than one rate, use additional sheets.

XXII. WATER RATES - PROPOSED N/A LOAN ONLY PROJECT

A. Proposed Rate Schedule without RUS Grant:

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

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

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

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.

N/A

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

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

	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
1-	-	Gallons	_____	_____	_____	_____	_____	_____
Inch	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Sub-Total		() () ()	() () ()	() () ()	() () ()	() () ()

	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
1-1/2	-	Gallons	_____	_____	_____	_____	_____	_____
Inch	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Sub-Total		() () ()	() () ()	() () ()	() () ()	() () ()

	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
2-	-	Gallons	_____	_____	_____	_____	_____	_____
Inch	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Sub-Total		() () ()	() () ()	() () ()	() () ()	() () ()

	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
3-	-	Gallons	_____	_____	_____	_____	_____	_____
Inch	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Sub-Total		() () ()	() () ()	() () ()	() () ()	() () ()

	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
4-	-	Gallons	_____	_____	_____	_____	_____	_____
Inch	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Gallons	_____	_____	_____	_____	_____	_____
	-	Sub-Total		() () ()	() () ()	() () ()	() () ()	() () ()

* 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".

	-	Gallons						
	-	Gallons						
5-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()
	-	Gallons						
	-	Gallons						
6-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()
		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.

<u>Name of Unit</u>	<u>Number of Units</u>	<u>Number of Meters</u>	<u>Revenue Calculations</u>

* 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".

N/A

XXIV. FORECAST OF SEWER USAGE - INCOME - NEW USERS - EXTENSION ONLY

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

	-	Gallons						
	-	Gallons						
1-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

	-	Gallons						
	-	Gallons						
1-1/2	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

	-	Gallons						
	-	Gallons						
2-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

	-	Gallons						
	-	Gallons						
3-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

	-	Gallons						
	-	Gallons						
4-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()

* 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".

	-	Gallons						
	-	Gallons						
5-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Sub-Total		()	()	()	()	()
	-	Gallons						
	-	Gallons						
6-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Sub-Total		()	()	()	()	()
		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.

<u>Name of Unit</u>	<u>Number of Units</u>	<u>Number of Meters</u>	<u>Revenue Calculations</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* 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".

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

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

* 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".

_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
1-	-	_____	Gallons	_____	_____	_____	_____	_____
Inch	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
		Sub-Total		()	()	()	()	()

_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
1-1/2	-	_____	Gallons	_____	_____	_____	_____	_____
Inch	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
		Sub-Total		()	()	()	()	()

_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
2-	-	_____	Gallons	_____	_____	_____	_____	_____
Inch	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
		Sub-Total		()	()	()	()	()

_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
3-	-	_____	Gallons	_____	_____	_____	_____	_____
Inch	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
		Sub-Total		()	()	()	()	()

_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
4-	-	_____	Gallons	_____	_____	_____	_____	_____
Inch	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
_____	-	_____	Gallons	_____	_____	_____	_____	_____
		Sub-Total		()	()	()	()	()

* 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".

	-	Gallons						
	-	Gallons						
5-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()
	-	Gallons						
	-	Gallons						
6-	-	Gallons						
Inch	-	Gallons						
	-	Gallons						
	-	Gallons						
		Sub-Total		()	()	()	()	()
		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.

<u>Name of Unit</u>	<u>Number of Units</u>	<u>Number of Meters</u>	<u>Revenue Calculations</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

* 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".

**BILLING BREAKDOWN
1999**

	<i>Campbell</i>		<i>Kenton</i>	
	Gallons	Revenue	Gallons	Revenue
January				
Residential	99,143,586	\$360,460.28	181,805,888	\$491,455.99
Comm	40,476,743	\$136,499.68	74,998,968	\$175,020.63
Ind	12,413,434	\$39,478.64	18,195,100	\$32,057.55
Government	6,579,587	\$20,193.47	22,383,152	\$42,466.35
Multiple			39,295,432	\$91,047.91
Water Hauler			76,296	\$275.50
Firelines			116,688	\$2,614.09
Resale	4,136,100	\$7,982.67	266,254,340	\$389,460.00
Misc FH			106,964	\$255.42
			19464	
February				
Residential	81,725,553	\$304,056.13	157,688,124	\$429,984.42
Comm	36,181,853	\$123,398.47	43,063,856	\$105,838.23
Ind	11,960,969	\$38,047.26	12,468,412	\$17,205.30
Government	7,513,339	\$24,196.52	13,051,104	\$21,149.86
Multiple			40,528,136	\$89,641.84
Water Hauler			80,784	\$292.25
Firelines			151,096	\$1,357.54
Resale	3,875,500	\$7,479.72	225,777,816	\$331,067.71
Misc FH				
			16951	
March				
Residential	110,981,943	\$412,775.47	233,348,324	\$635,940.32
Comm	24,640,635	\$101,502.79	136,941,596	\$295,328.87
Ind	10,296,865	\$33,275.91	68,735,964	\$126,194.31
Government	6,530,151	\$25,426.26	16,931,728	\$31,915.99
Multiple			68,858,636	\$143,984.73
Water Hauler			103,224	\$372.25
Firelines			1,225,972	\$6,691.26
Resale	3,317,800	\$6,403.35	250,387,016	\$366,503.54
Misc FH			269,300	\$590.26
1st Qtr Count			23512	
April			59,927	
Residential	89,936,338	\$334,402.84	172,034,764	\$468,446.19
Comm	40,515,662	\$139,000.53	68,162,248	\$163,934.58
Ind	11,665,434	\$37,100.00	22,761,640	\$36,007.53
Government	7,439,593	\$23,235.42	21,233,476	\$40,086.00
Multiple			38,016,352	\$88,378.94
Water Hauler			123,420	\$359.00
Firelines			163,064	\$2,711.56
Resale	4,089,000	\$7,891.77	245,525,016	\$359,505.59
			694 100	\$1,490.41

**BILLING BREAKDOWN
1999**

May

Residential	83,362,348	\$309,992.37	145,892,164	\$404,557.07
Comm	82,924,617	\$170,978.77	42,011,420	\$104,238.09
Ind	12,773,596	\$40,631.42	15,819,452	\$21,066.16
Government	8,906,433	\$30,133.27	26,284,720	\$41,667.08
Multiple			31,700,988	\$73,712.74
Water Hauler				
Firelines			29,920	\$1,149.56
Resale	4,691,600	\$9,054.79	319,639,100	\$466,228.43
Misc FH			58,300	\$1,412.64

16927

June

Residential	160,749,000	\$570,412.37	247,071,880	\$666,454.31
Comm	35,748,781	\$125,068.64	154,854,700	\$324,395.01
Ind	13,054,106	\$41,647.56	72,498,404	\$131,866.11
Government	10,148,534	\$34,135.39	38,571,368	\$68,638.64
Multiple			47,382,060	\$112,959.40
Water Hauler			86,768	\$311.50
Firelines			1,305,260	\$6,924.75
Resale	4,858,000	\$9,375.94	350,518,036	\$510,689.14
Misc FH			1,723,400	\$3,853.72
2nd Qtr Count			23475	
July			59,802	

Residential	103,034,108	\$376,760.57	213,913,788	\$564,214.11
Comm	57,689,613	\$190,018.01	93,084,112	\$209,447.99
Ind	13,775,542	\$43,810.14	28,498,052	\$45,565.09
Government	10,568,741	\$35,450.61	40,629,116	\$71,515.38
Multiple			35,158,992	\$82,124.91
Water Hauler			195,976	\$691.75
Firelines			140,624	\$2,732.19
Resale	4,691,100	\$9,053.82	380,070,020	\$553,243.30
Misc FH			938,700	\$2,211.39

19469

August

Residential	94,169,000	\$346,548.84	185,335,700	\$491,908.81
Comm	46,966,689	\$156,726.41	55,650,452	\$130,315.74
Ind	14,450,492	\$45,964.32	18,661,104	\$24,717.48
Government	11,479,803	\$37,921.53	41,879,772	\$65,024.57
Multiple			33,377,256	\$77,263.09
Water Hauler			103,972	\$355.75
Firelines			53,108	\$1,188.25
Resale	4,533,600	\$8,749.85	348,215,692	\$507,504.60
Misc FH			725,600	\$1,592.18

16918

**BILLING BREAKDOWN
1999**

September

Residential	155,371,000	\$552,504.38	370,565,932	\$931,605.00
Comm	49,054,186	\$165,229.06	240,831,316	\$469,473.48
Ind	16,037,572	\$51,131.97	84,552,424	\$154,562.70
Government	13,573,066	\$44,563.95	63,559,804	\$103,758.31
Multiple			57,139,720	\$132,012.37
Water Hauler			181,764	\$646.50
Firelines			1,824,372	\$7,910.44
Resale	4,296,500	\$8,292.25	377,408,636	\$549,410.74
Misc FH				
3rd Qtr Count			23571	
October			59,958	

Residential	118,115,000	\$425,156.47	220,979,396	\$577,224.37
Comm	63,829,061	\$209,877.43	107,855,616	\$233,293.38
Ind	13,747,866	\$43,722.13	26,576,440	\$45,402.70
Government	13,281,462	\$43,993.78	33,698,896	\$64,776.61
Multiple			36,007,224	\$83,133.46
Water Hauler			1,229,712	\$577.25
Firelines			44,880	\$2,621.68
Resale	3,740,500	\$7,219.17	287,789,260	\$420,359.25
Misc FH			1,395,768	\$3,084.85
			19591	

November

Residential	85,965,000	\$320,410.18	180,370,476	\$480,793.25
Comm	41,333,662	\$137,744.43	55,478,412	\$129,709.63
Ind	14,296,880	\$45,481.79	12,901,504	\$17,883.91
Government	8,777,091	\$29,545.56	30,952,988	\$50,451.08
Multiple			35,556,180	\$82,464.79
Water Hauler			148,852	\$534.75
Firelines			16,456	\$1,130.09
Resale	3,744,200	\$7,226.31	259,566,472	\$379,718.99
Misc FH			955,196	\$3,147.11
			16882	

December

Residential	124,836,000	\$456,546.09	308,076,516	\$798,847.39
Comm	34,574,941	\$120,383.27	208,766,800	\$418,483.16
Ind	13,635,560	\$43,543.87	78,549,724	\$146,586.84
Government	8,509,624	\$29,160.56	36,622,080	\$67,258.41
Multiple			53,635,340	\$117,045.04
Water Hauler			159,324	\$545.50
Firelines			1,611,192	\$7,544.92
Resale	3,714,900	\$7,169.76	255,185,436	\$373,124.09
Misc FH			605,900	\$1,912.43
			23752	

4th Qtr Count

60225

Avg Ct/Year

59978

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

Meter Size*	Monthly Sewer Usage	Average Rate	Residential			Non-Residential		
			No. of Users** (1000)	Usage (1000)	Income	No. of Users (1000)	Usage (1000)	Income
	0 - 2,000 Gallons	1,000						
	2,000 - 3,000 Gallons	2,500						
	3,000 - 4,000 Gallons	3,500						
	4,000 - 5,000 Gallons	4,500						
	5,000 - 6,000 Gallons	5,500						
	6,000 - 7,000 Gallons	6,500	2.643	574	6.046	9172.28		
	7,000 - 8,000 Gallons	7,500						
	8,000 - 9,000 Gallons	8,500						
	9,000 - 10,000 Gallons	9,500						
5/8	10,000 - 11,000 Gallons	10,500						
x	11,000 - 12,000 Gallons	11,500						
3/4	12,000 - 13,000 Gallons	12,500						
Inch	13,000 - 14,000 Gallons	13,500						
	14,000 - 15,000 Gallons	14,500						
	15,000 - 16,000 Gallons	15,500						
	16,000 - 17,000 Gallons	16,500						
	17,000 - 18,000 Gallons	17,500						
	18,000 - 19,000 Gallons	18,500						
	19,000 - 20,000 Gallons	19,500						
	- Gallons							
	- Gallons							
	- Gallons							
	Sub-Total		(574)	(6.046)	(9172.28)	()	()	()
	Average Monthly Rate	(2.643)						
	Average Monthly Usage			(6.046)		()		

* 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".

	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
1-	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
Inch	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
				Sub-Total		()	()	()	()	()

	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
1-1/2	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
Inch	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
				Sub-Total		()	()	()	()	()

	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
2-	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
Inch	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
				Sub-Total		()	()	()	()	()

	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
3-	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
Inch	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
				Sub-Total		()	()	()	()	()

	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
4-	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
Inch	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
				Sub-Total		()	()	()	()	()

* 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".

	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
5-	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
Inch	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
				Sub-Total	()	()	()	()	()	()
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
6-	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
Inch	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
	_____	-	_____	Gallons	_____	_____	_____	_____	_____	_____
				Sub-Total	()	()	()	()	()	()
				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.

<u>Name of Unit</u>	<u>Number of Units</u>	<u>Number of Meters</u>	<u>Revenue Calculations</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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

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

XXVII. CURRENT OPERATING BUDGET - (SEWER SYSTEM)

N/A

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 \$ _____

XXVIII. PROPOSED OPERATING BUDGET - (SEWER SYSTEM) - EXISTING SYSTEM N/A
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 \$ _____

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

A. *Operating Income:*

<i>Sewer Revenue</i>	\$	_____
<i>Late Charge Fees</i>		_____
<i>Other (Describe)</i>		_____
<i>Less Allowances and Deductions</i>		(_____)
<i>Total Operating Income</i>	\$	_____

B. *Operation and Maintenance Expenses:*

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

<i>Operation Expense</i>	\$	_____
<i>Maintenance Expense</i>		_____
<i>Customer Accounts Expense</i>		_____
<i>Administrative and General Expense</i>		_____
<i>Total Operating and Maintenance Expenses</i>	\$	_____
<i>Net Operating Income</i>	\$	_____

C. *Non-Operating Income:*

<i>Interest on Deposits</i>	\$	_____
<i>Other (Identify)</i>		_____
<i>Total Non-Operating Income</i>	\$	_____

D. *Net Income*

\$ _____

E. *Debt Repayment:*

<i>RUS Interest</i>	\$	_____
<i>RUS Principal</i>		_____
<i>Non-RUS Interest</i>		_____
<i>Non-RUS Principal</i>		_____
<i>Total Debt Repayment</i>	\$	_____

F. *Balance Available for Coverage*

\$ _____

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

A. Operating Income:

Water Sales	\$ 24,646,341.00
Disconnect/Reconnect/Late Charge Fees	<u>312,118.00</u>
Other (Describe) Rent from water pp TY/other	<u>352,492.00</u>
Less Allowances and Deductions	<u>()</u>
Total Operating Income	\$ <u>25,310,951.00</u>

B. Operation and Maintenance Expenses:

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

Source of Supply Expense	\$ <u>1,432,096.00</u>
Pumping Expense	<u>1,671,227.00</u>
Water Treatment Expense	<u>3,110,271.00</u>
Transmission and Distribution Expense	<u>3,820,007.00</u>
Customer Accounts Expense	<u>1,918,810.00</u>
Administrative and General Expense	<u>1,980,395.00</u>
Total Operating Expenses	\$ <u>13,932,806.00</u>
Net Operating Income	\$ <u>11,378,145.00</u>

C. Non-Operating Income:

Interest on Deposits	\$ <u>994,931.00</u>
Other (Identify)	<u>132,685.00</u>
Total Non-Operating Income	\$ <u>1,127,616.00</u>

D. Net Income \$ 12,505,761.00

E. Debt Repayment:

RUS Interest	\$ <u>88,055.00</u>
RUS Principal	<u>14,000.00</u>
Non-RUS Interest	<u>4,355,256.00</u>
Non-RUS Principal	<u>2,635,000.00</u>
Total Debt Repayment	\$ <u>7,092,311.00</u>

XXXI. PROPOSED OPERATING BUDGET - (WATER SYSTEM) - EXISTING SYSTEM
AND NEW USERS (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	\$ _____

XXXII. PROPOSED OPERATING BUDGET - (WATER SYSTEM) - NEW USERS -
EXTENSION ONLY (1st Full Year of Operation) Year Ending 1/1/2002

A. Operating Income:	
Water Sales	\$ <u>110,067</u>
Disconnect/Reconnect/Late Charge Fees	<u>2,800</u>
Other (Describe) Anticipated wholesale customer	<u>50,000</u>
Less Allowances and Deductions	()
Total Operating Income	\$ <u>162,867</u>
B. Operation and Maintenance Expenses:	
(Based on Uniform System of Accounts prescribed by National Association of Regulatory Utility Commissioners)	
Source of Supply Expense	\$ <u>10,000</u>
Pumping Expense	<u>24,900</u>
Water Treatment Expense	<u>33,600</u>
Transmission and Distribution Expense	<u>1,600</u>
Customer Accounts Expense	<u>6,400</u>
Administrative and General Expense	<u>1,600</u>
Total Operating Expenses	\$ <u>78,100</u>
Net Operating Income	\$ <u>84,767</u>
C. Non-Operating Income:	
Interest on Deposits	\$ _____
Other (Identify) Surcharge & General Rate Contribution	<u>324,923</u>
Total Non-Operating Income	\$ <u>324,923</u>
D. Net Income	\$ <u>409,690</u>
E. Debt Repayment: See page (33A,B)	
RUS Interest (2,287,000 Loan, 5%, 40yr)	\$ <u>85,313</u>
RUS Principal (2,287,000 Loan, 5%, 40yr)	<u>18,000</u>
Non-RUS Interest (3,890,680 NKWSD Bond, 6%, 30yr)	<u>173,610</u>
Non-RUS Principal (3,890,680 NKWSD Bond, 6%, 30yr)	<u>48,000</u>
Total Debt Repayment	\$ <u>324,923</u>

2000 has been done
2001 FIRST FULL YEAR
PROJECTED - TOTAL DEBT OF USDA AND OTHER BONDS (SUSD) DISTRICT C - N. KENTUCKY WATER SERVICE DISTRICT

Payment Date	USDA Portion of Long Term Debt				District's Other Bonds Portion of Long Term Debt				Total FY Payment
	Interest Rate	Principal Payment	Interest Payment	Total Payment	Interest Rate	Principal Payment	Interest Payment	Total Payment	
1-Feb-2001	5.000	18,000	20,588	48,588	8.000	23,000	18,155	42,155	183,088
1-Aug-2001	5.000	19,000	56,725	56,725	8.000	24,000	37,820	37,820	230,495
1-Feb-2002	5.000	20,000	56,250	56,250	6.000	26,000	36,900	62,900	231,020
1-Aug-2002	5.000	21,000	55,750	55,750	6.000	27,000	36,120	63,120	230,405
1-Feb-2003	5.000	22,000	55,225	55,225	6.000	29,000	35,310	64,310	230,650
1-Aug-2003	5.000	24,000	54,675	54,675	6.000	31,000	34,440	65,440	231,700
1-Feb-2004	5.000	25,000	54,075	54,075	6.000	32,000	33,510	65,510	230,585
1-Aug-2004	5.000	26,000	53,450	53,450	6.000	34,000	32,550	66,550	230,330
1-Feb-2005	5.000	27,000	52,800	52,800	6.000	37,000	31,530	68,530	230,875
1-Aug-2005	5.000	29,000	52,125	52,125	8.000	39,000	29,250	69,420	231,195
1-Feb-2006	5.000	30,000	51,400	51,400	8.000	41,000	28,020	70,250	230,320
1-Aug-2006	5.000	32,000	50,650	50,650	6.000	44,000	26,700	72,020	231,220
1-Feb-2007	5.000	33,000	49,850	49,850	6.000	47,000	25,290	73,700	230,865
1-Aug-2007	5.000	35,000	49,025	49,025	6.000	49,000	23,820	74,290	230,285
1-Feb-2008	5.000	37,000	48,150	48,150	6.000	52,000	22,260	75,820	230,455
1-Aug-2008	5.000	39,000	47,225	47,225	6.000	56,000	20,580	78,260	231,315
1-Feb-2009	5.000	41,000	46,250	46,250	6.000	59,000	18,810	79,580	230,865
1-Aug-2009	5.000	43,000	45,225	45,225	6.000	63,000	16,920	81,810	231,105
1-Feb-2010	5.000	45,000	44,150	44,150	6.000	67,000	14,910	83,920	231,005
1-Aug-2010	5.000	48,000	43,025	43,025	6.000	71,000	12,780	86,910	231,540
1-Feb-2011	5.000	50,000	41,825	41,825	6.000	75,000	10,680	89,680	
1-Aug-2011			41,825	41,825			12,780	87,780	

(00 00)

2001 F Y L YEAR

Northern Kentucky Water Service District
Projected Debt Schedule

Debt Service Schedule

Date	Principal	Coupon	Interest	Period Total	Fiscal Total
2/1/1	48,000.00	6,000.00	58,350.00	106,350.00	311,610.00
8/1/1			115,260.00	115,260.00	
2/1/2	51,000.00	6,000.00	115,260.00	166,260.00	273,990.00
8/1/2			113,730.00	113,730.00	
2/1/3	54,000.00	6,000.00	113,730.00	167,730.00	273,840.00
8/1/3			112,110.00	112,110.00	
2/1/4	57,000.00	6,000.00	112,110.00	169,110.00	273,510.00
8/1/4			110,400.00	110,400.00	
2/1/5	61,000.00	6,000.00	110,400.00	173,400.00	273,970.00
8/1/5			108,570.00	108,570.00	
2/1/6	64,000.00	6,000.00	108,570.00	172,570.00	273,220.00
8/1/6			106,650.00	106,650.00	
2/1/7	68,000.00	6,000.00	106,650.00	174,650.00	273,260.00
8/1/7			104,610.00	104,610.00	
2/1/8	72,000.00	6,000.00	104,610.00	176,610.00	273,050.00
8/1/8			102,450.00	102,450.00	
2/1/9	77,000.00	6,000.00	102,450.00	179,450.00	273,630.00
8/1/9			100,140.00	100,140.00	
2/1/10	82,000.00	6,000.00	100,140.00	182,140.00	273,820.00
8/1/10			97,680.00	97,680.00	
2/1/11	87,000.00	6,000.00	97,680.00	184,680.00	273,750.00
8/1/11			95,070.00	95,070.00	
2/1/12	92,000.00	6,000.00	95,070.00	187,070.00	273,330.00
8/1/12			92,310.00	92,310.00	
2/1/13	98,000.00	6,000.00	92,310.00	190,310.00	273,630.00
8/1/13			89,370.00	89,370.00	
2/1/14	104,000.00	6,000.00	89,370.00	193,370.00	273,620.00
8/1/14			86,250.00	86,250.00	
2/1/15	110,000.00	6,000.00	86,250.00	196,250.00	273,230.00
8/1/15			82,950.00	82,950.00	
2/1/16	117,000.00	6,000.00	82,950.00	199,950.00	273,330.00
8/1/16			79,440.00	79,440.00	
2/1/17	124,000.00	6,000.00	79,440.00	203,440.00	273,150.00
8/1/17			75,720.00	75,720.00	
2/1/18	132,000.00	6,000.00	75,720.00	207,720.00	273,440.00
8/1/18			71,760.00	71,760.00	
2/1/19	140,000.00	6,000.00	71,760.00	211,760.00	273,310.00
8/1/19			67,560.00	67,560.00	

Ross, Sinclair & Associates, Lexington, KY - Tross

MicroPrint Debt Data: 04-11-2000 @ 15:54:46

File Name: HK

Key:

XXXIII. ESTIMATED PROJECT COST - SEWER
(Round to nearest \$100)

N/A

	<u>Collection</u>	<u>Treatment</u>	<u>Total</u>
<i>Development</i>	_____	_____	_____
<i>Land and Rights</i>	_____	_____	_____
<i>Legal</i>	_____	_____	_____
<i>Engineering</i>	_____	_____	_____
<i>Interest</i>	_____	_____	_____
<i>Contingencies</i>	_____	_____	_____
<i>Initial Operating and Maintenance</i>	_____	_____	_____
<i>Other</i>	_____	_____	_____
TOTAL	_____	_____	_____

XXIV. PROPOSED PROJECT FUNDING - SEWER

N/A

	<u>Collection</u>	<u>Treatment</u>	<u>Total</u>
<i>Applicant - User Contribution Fees</i>	_____	_____	_____
<i>Other - Applicant Contribution</i>	_____	_____	_____
<i>RUS Loan</i>	_____	_____	_____
<i>RUS Grant</i>	_____	_____	_____
<i>ARC Grant (If applicable)</i>	_____	_____	_____
<i>CDBG (If applicable)</i>	_____	_____	_____
<i>Other (Specify)</i>	_____	_____	_____
<i>Other (Specify)</i>	_____	_____	_____

XXXV. ESTIMATED PROJECT COST - WATER

Development	\$ 6,155,388.00
Land and Rights	-
Legal & Administration	89,500.00
Engineering	430,878.00
Interest	230,000.00
Contingencies	307,769.00
Initial Operating and Maintenance	-
Other Service Lines	172,800.00
TOTAL	\$ 7,386,335.00

XXXVI. PROPOSED PROJECT FUNDING

Applicant - User Connection Fees	\$ 139,100.00
Other Applicant Contribution	3,890,680.00
RUS Loan	2,287,000.00
RUS Grant	-
ARC Grant (If applicable)	-
CDBG (If applicable)	886,755.00
Other (Specify) County Contribution	172,800.00
Other (Specify) Community Fund Raising	10,000.00
TOTAL	\$ 7,386,335.00

**ENGINEER'S ESTIMATE
RICH ROAD AND CALLANT ROAD
PHASE IV
FOR NKWSD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/ Polywrap and Fitting	1,566	LF	\$18.00	\$28,188.00
8" PVC (C-900 or C-909) Water Main & Fittings	12,020	LF	\$18.00	\$216,360.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	26	EA	\$125.00	\$3,250.00
8" X 8" X 8" Ductile-Iron Tee & Block	2	EA	\$135.00	\$270.00
Air Release Valve	13	EA	\$700.00	\$9,100.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	24	EA	\$1,800.00	\$43,200.00
Fire Hydrant Assembly (HIGH PRESSURE), Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	2	EA	\$2,000.00	\$4,000.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	9	EA	\$700.00	\$6,300.00
8" Cast-Iron Plug & Block	4	EA	\$200.00	\$800.00
Remove 8" Pipe Plug & Block	2	EA	\$100.00	\$200.00
Water Services Short	19	EA	\$350.00	\$6,650.00
Water Services Long	18	EA	\$450.00	\$8,100.00
3/4" Service from Meter within (2) feet of House	1,600	LF	\$10.00	\$16,000.00
Bituminous Street Restoration Conforming to Existing Materials and Thickness	1,311	SY	\$40.00	\$52,440.00
Bituminous Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	170	SY	\$35.00	\$5,950.00
Concrete Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	37	SY	\$40.00	\$1,480.00
Gravel Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	920	SY	\$15.00	\$13,800.00
TOTAL CONTRACTOR				\$416,088.00
Engineering @ 8%				\$33,287.04
Cost Technical				\$15,000.00

ENGINEER'S ESTIMATE
PERCIVAL, YORK, STEPHENSON, AND SYMBO
PHASE V
FOR NKWSD

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" PVC (C-900 or C-909) Water Main & Fittings	14,173	LF	\$18.00	\$255,114.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	32	EA	\$125.00	\$4,000.00
12" X 12" X 8" Ductile-Iron Anchoring Tee & Block	1	EA	\$275.00	\$275.00
Air Release Valve	8	EA	\$700.00	\$5,600.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	32	EA	\$1,800.00	\$57,600.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	6	EA	\$700.00	\$4,200.00
12" Ductile-Iron Resilient Seated Gate Valve & Box	1	EA	\$1,200.00	\$1,200.00
8" Cast-Iron Plug & Block	4	EA	\$200.00	\$800.00
Remove 8" Pipe Plug & Block	3	EA	\$100.00	\$300.00
Water Services Short	25	EA	\$350.00	\$8,750.00
Water Services Long	25	EA	\$450.00	\$11,250.00
3/4" Service from Meter within (2) feet of House	1,360	LF	\$10.00	\$13,600.00
Bituminous Highway Restoration (K.D.O.T.)	85	SY	\$50.00	\$4,250.00
Bituminous Street Restoration Conforming to Existing Materials and Thickness	1,305	SY	\$40.00	\$52,200.00
Bituminous Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	241	SY	\$35.00	\$8,435.00
Concrete Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	177	SY	\$40.00	\$7,080.00
Gravel Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	812	SY	\$15.00	\$12,180.00
TOTAL CONTRACTOR				\$446,834.00
Engineering @ 8%				\$35,746.72
Geotechnical				\$14,000.00
				\$496,580.72

**ENGINEER'S ESTIMATE
VISALIA ROAD
PHASE VI
FOR NKWSD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
12" DIP Class 50 w/ Polywrap and Fittings	10,840	LF	\$28.00	\$303,520.00
12" X 12" X 6" Ductile-Iron Anchoring Tees & Blocks	23	EA	\$250.00	\$5,750.00
12" X 12" X 8" Ductile-Iron Anchoring Tee & Block	1	EA	\$275.00	\$275.00
8" Pipe Plug & Block	1	EA	\$200.00	\$200.00
12" Pipe Plug & Block	1	EA	\$400.00	\$400.00
8" Resilient Seated Gate Valves & Boxes	1	EA	\$700.00	\$700.00
12" Resilient Seated Gate Valves & Boxes	6	EA	\$1,200.00	\$7,200.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, 6" Duct.-Iron and Anchor Elbow, Fire Hydrant, Blocking & Necessary Extensions	23	EA	\$1,800.00	\$41,400.00
Air Relief Valve	3	EA	\$700.00	\$2,100.00
Water Services Short	20	EA	\$350.00	\$7,000.00
Water Services Long	19	EA	\$450.00	\$8,550.00
3/4" Service from Meter within (2) feet of House	1,680	LF	\$10.00	\$16,800.00
Bituminous Highway Restoration (K.D.O.T.)	895	SY	\$45.00	\$40,275.00
Bituminous Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	65	SY	\$35.00	\$2,275.00
Concrete Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	88	SY	\$40.00	\$3,520.00
Gravel Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	616	SY	\$15.00	\$9,240.00
				\$449,205.00
TOTAL CONTRACTOR				\$35,936.40
Engineering @ 8%				\$11,000.00
Geotechnical				
				\$496,141.40

**ENGINEER'S ESTIMATE
MAHER ROAD AND BRISTOW ROAD
PHASE VII
FOR NKWSD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" PVC (C-900 or C-909) Water Main & Fittings	5,661	LF	\$18.00	\$101,898.00
8" Ductile-Iron Water Main Class 50 w/ Polywrap & Fittings	938	LF	\$18.00	\$16,884.00
12" Ductile-Iron Water Main Class 50 w/ Polywrap & Fittings	510	LF	\$28.00	\$14,280.00
24" Ductile-iron Water Main Class 52 w/ Polywrap & Fittings	12,435	LF	\$85.00	\$1,056,975.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	14	EA	\$125.00	\$1,750.00
12" X 12" X 6" Ductile-Iron Anchoring Tee & Block	1	EA	\$250.00	\$250.00
24" X 24" X 6" Ductile-Iron Anchoring Tee & Block	25	EA	\$900.00	\$22,500.00
8" X 8" X 8" Ductile-Iron Tee & Block	3	EA	\$135.00	\$405.00
12" X 12" X 12" Ductile-Iron Tee & Block	1	EA	\$325.00	\$325.00
24" X 24" X 8" Ductile-Iron Tee & Block	1	EA	\$925.00	\$925.00
24" X 24" X 12" Ductile-Iron Tee & Block	3	EA	\$1,000.00	\$3,000.00
24" X 24" X 24" Ductile-Iron Tee & Block	2	EA	\$1,300.00	\$2,600.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	26	EA	\$1,800.00	\$46,800.00
Fire Hydrant Assembly (HIGH PRESSURE), Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	14	EA	\$2,000.00	\$28,000.00
12" - 8" Reducer	2	EA	\$150.00	\$300.00
Air Relief Valve	3	EA	\$700.00	\$2,100.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	11	EA	\$700.00	\$7,700.00
8" Ductile-Iron Resilient Seated Gate Valves w/ Test Tap & Boxes	2	EA	\$900.00	\$1,800.00
12" Ductile-Iron Resilient Seated Gate Valves &	5	EA	\$1,200.00	\$6,000.00

**ENGINEER'S ESTIMATE
MAHER ROAD AND BRISTOW ROAD
PHASE VII
FOR NKWSD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
24" Ductile-Iron Butterfly Valve w/ Test Tap & Box	1	EA	\$4,200.00	\$4,200.00
Water Services Short	26	EA	\$350.00	\$9,100.00
Water Services Long	26	EA	\$450.00	\$11,700.00
3/4" Service from Meter within (2) feet of House	1,280	LF	\$10.00	\$12,800.00
8" Pipe Plug & Block	5	EA	\$200.00	\$1,000.00
12" Pipe Plug & Block	1	EA	\$400.00	\$400.00
24" Pipe Plug & Block	4	EA	\$1,000.00	\$4,000.00
Remove 8" Pipe Plug & Block	1	EA	\$100.00	\$100.00
Remove 12" Pipe Plug & Block	1	EA	\$200.00	\$200.00
Concrete Encasement	210	LF	\$50.00	\$10,500.00
15" Steel Casing Pipe. by Boring & Jacking	80	LF	\$130.00	\$10,400.00
42" Steel Casing Pipe. by Boring & Jacking	110	LF	\$400.00	\$44,000.00
Highway Restoration (K.D.O.T.)	1,620	SY	\$50.00	\$81,000.00
Bituminous Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	294	SY	\$35.00	\$10,290.00
Concrete Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	313	SY	\$40.00	\$12,520.00
Gravel Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	349	SY	\$15.00	\$5,235.00
TOTAL CONTRACTOR				\$1,575,937.00
Engineering @ 8%				\$126,074.96
Geotechnical				\$20,000.00
TOTAL ESTIMATED COST				\$1,722,011.96



VIOX & VIOX, INC.

Consulting Engineers & Surveyors

CHANGE ORDER NO. 2 -SUBDISTRICT C, PHASE II

10) GARDNERSVILLE ROAD (FIRST 0.8 MILES)			R.E. HUBER CONSTRUCTION	
ITEM	QUANTITY	UNIT	UNIT COST	COST
8" PVC (C-900 OR C-909) and Pipe Fittings	4,080	LF	\$13.92	\$56,793.60
8" X 8" X 6" Ductile-Iron Anchoring Tee & Blocks	9	EA	\$250.00	\$2,250.00
8" X 8" X 8" Ductile-Iron Tee & Blocks	1	EA	\$275.00	\$275.00
8" Ductile-Iron Resilient Seated Gate Valve	3	EA	\$650.00	\$1,950.00
Air Relief Valve	3	EA	\$250.00	\$750.00
Remove 8" Pipe Plug & Block	1	EA	\$200.00	\$200.00
8" Cast-Iron Pipe Plug & Block	2	EA	\$200.00	\$400.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking and Necessary Extensions	9	EA	\$1,500.00	\$13,500.00
Water Services Short	7	EA	\$200.00	\$1,400.00
Water Services Long	7	EA	\$325.00	\$2,275.00
3/4" Service from Meter to within (2) Feet of House (8 Services)	640	LF	\$6.00	\$6,480.00
Gravel Drive & Shoulder Restoration	365	SY	\$26.00	\$9,490.00
Asphaltic Street Restoration Conforming to Exist. Materials & Thickness	225	SY	\$35.00	\$7,875.00
Concrete Highway Restoration Including Asphaltic Overlay where Existing	23	SY	\$40.00	\$920.00
Subtotal Gardnersville Road				\$104,558.60



VIOX & VIOX, INC.
Consulting Engineers & Surveyors

CHANGE ORDER NO. 2 -SUBDISTRICT C, PHASE II

6) PAXTON ROAD (FIRST 0.65 MILES)			R.E. HUBER CONSTRUCTION	
ITEM	QUANTITY	UNIT	UNIT COST	COST
8" PVC (C-900 OR C-909) and Pipe Fittings	3,350	LF	\$13.92	\$46,632.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Blocks	7	EA	\$250.00	\$1,750.00
8" Ductile-Iron Resilient Seated Gate Valve	1	EA	\$650.00	\$650.00
Air Relief Valve	3	EA	\$250.00	\$750.00
Remove 8" Pipe Plug & Block	1	EA	\$200.00	\$200.00
8" Cast-Iron Pipe Plug & Block	1	EA	\$200.00	\$200.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking and Necessary Extensions	7	EA	\$1,500.00	\$10,500.00
Water Services Short	6	EA	\$200.00	\$1,200.00
Water Services Long	6	EA	\$325.00	\$1,950.00
3/4" Service from Meter to within (2) Feet of House (8 Services)	640	LF	\$6.00	\$3,840.00
Gravel Drive & Shoulder Restoration	258	SY	\$26.00	\$6,708.00
Asphaltic Drive Restoration Conforming to Exist. Materials & Thickness	38	SY	\$35.00	\$1,330.00
Concrete Drive Restoration Conforming to Exist. Thickness	37	SY	\$35.00	\$1,295.00
Asphaltic Street Restoration Conforming to Exist. Materials & Thickness	588	SY	\$35.00	\$20,580.00
Subtotal Paxton Road				\$97,585.00

**ENGINEER'S ESTIMATE
RICH ROAD AND CALLANT ROAD
PHASE IV
FOR NKWSD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/ Polywrap and Fitting	1,566	LF	\$18.00	\$28,188.00
8" Water Main & Fittings	12,359	LF	\$18.00	\$222,462.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	29	EA	\$125.00	\$3,625.00
8" X 8" X 8" Ductile-Iron Tee & Block	2	EA	\$135.00	\$270.00
Air Release Valve	14	EA	\$700.00	\$9,800.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	27	EA	\$1,800.00	\$48,600.00
Fire Hydrant Assembly (HIGH PRESSURE), Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	2	EA	\$2,000.00	\$4,000.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	9	EA	\$700.00	\$6,300.00
8" Cast-Iron Plug & Block	4	EA	\$200.00	\$800.00
Remove 8" Pipe Plug & Block	2	EA	\$100.00	\$200.00
Water Services Short	19	EA	\$350.00	\$6,650.00
Water Services Long	18	EA	\$450.00	\$8,100.00
3/4" Service from Meter within (2) feet of House	1,600	LF	\$10.00	\$16,000.00
Bituminous Street Restoration Conforming to Existing Materials and Thickness	1,311	SY	\$40.00	\$52,440.00
Bituminous Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	206	SY	\$35.00	\$7,210.00
Concrete Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	37	SY	\$40.00	\$1,480.00
Gravel Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	920	SY	\$15.00	\$13,800.00
TOTAL CONTRACTOR				\$429,925.00
Engineering @ 8%				\$34,394.00
Geotechnical				\$15,000.00

**ENGINEER'S ESTIMATE
PERCIVAL, YORK, STEPHENSON, AND SYMBO
PHASE V
FOR NKWSD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" Water Main & Fittings	14,173	LF	\$18.00	\$255,114.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	32	EA	\$125.00	\$4,000.00
12" X 12" X 8" Ductile-Iron Anchoring Tee & Block	1	EA	\$275.00	\$275.00
Air Release Valve	8	EA	\$700.00	\$5,600.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	32	EA	\$1,800.00	\$57,600.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	6	EA	\$700.00	\$4,200.00
12" Ductile-Iron Resilient Seated Gate Valve & Box	1	EA	\$1,200.00	\$1,200.00
8" Cast-Iron Plug & Block	4	EA	\$200.00	\$800.00
Remove 8" Pipe Plug & Block	3	EA	\$100.00	\$300.00
Water Services Short	25	EA	\$350.00	\$8,750.00
Water Services Long	25	EA	\$450.00	\$11,250.00
3/4" Service from Meter within (2) feet of House	1,360	LF	\$10.00	\$13,600.00
Bituminous Highway Restoration (K.D.O.T.)	85	SY	\$50.00	\$4,250.00
Bituminous Street Restoration Conforming to Existing Materials and Thickness	1,305	SY	\$40.00	\$52,200.00
Bituminous Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	241	SY	\$35.00	\$8,435.00
Concrete Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	177	SY	\$40.00	\$7,080.00
Gravel Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	812	SY	\$15.00	\$12,180.00
TOTAL CONTRACTOR				\$446,834.00
Engineering @ 8%				\$35,746.72
Geotechnical				\$14,000.00
				\$496,580.72

**ENGINEER'S ESTIMATE
VISALIA ROAD
PHASE VI
FOR NKWSD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
12" DIP Class 50 w/ Polywrap and Fittings	10,840	LF	\$28.00	\$303,520.00
12" X 12" X 6" Ductile-Iron Anchoring Tees & Blocks	23	EA	\$250.00	\$5,750.00
12" X 12" X 8" Ductile-Iron Anchoring Tee & Block	1	EA	\$275.00	\$275.00
8" Pipe Plug & Block	1	EA	\$200.00	\$200.00
12" Pipe Plug & Block	1	EA	\$400.00	\$400.00
8" Resilient Seated Gate Valves & Boxes	1	EA	\$700.00	\$700.00
12" Resilient Seated Gate Valves & Boxes	6	EA	\$1,200.00	\$7,200.00
Remove 12" Pipe Plug & Block	1	EA	\$200.00	\$200.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor: Coupling, 6" Duct.-Iron and Anchor Elbow, Fire Hydrant, Blocking & Necessary Extensions	23	EA	\$1,800.00	\$41,400.00
Air Relief Valve	3	EA	\$700.00	\$2,100.00
Water Services Short	20	EA	\$350.00	\$7,000.00
Water Services Long	19	EA	\$450.00	\$8,550.00
3/4" Service from Meter within (2) feet of House	1,680	LF	\$10.00	\$16,800.00
Bituminous Highway Restoration (K.D.O.T.)	956	SY	\$45.00	\$43,020.00
Bituminous Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	96	SY	\$35.00	\$3,360.00
Concrete Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	88	SY	\$40.00	\$3,520.00
Gravel Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	616	SY	\$15.00	\$9,240.00
TOTAL CONTRACTOR				\$453,235.00
Engineering @ 8%				\$36,258.80
Geotechnical				\$11,000.00
				\$500,493.80

**ENGINEER'S ESTIMATE
MAHER ROAD AND BRISTOW ROAD
PHASE VII
FOR NKWSD**

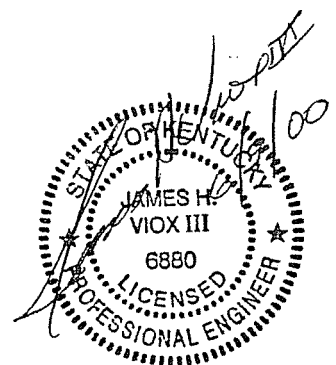
ITEM	QUANTITY	UNIT	UNIT COST	COST
8" Water Main & Fittings	5,661	LF	\$18.00	\$101,898.00
8" Ductile-Iron Water Main Class 50 w/ Polywrap & Fittings	938	LF	\$18.00	\$16,884.00
12" Ductile-Iron Water Main Class 50 w/ Polywrap & Fittings	510	LF	\$28.00	\$14,280.00
24" Ductile-iron Water Main Class 52 w/ Polywrap & Fittings	12,435	LF	\$85.00	\$1,056,975.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	14	EA	\$125.00	\$1,750.00
12" X 12" X 6" Ductile-Iron Anchoring Tee & Block	1	EA	\$250.00	\$250.00
24" X 24" X 6" Ductile-Iron Anchoring Tee & Block	25	EA	\$900.00	\$22,500.00
8" X 8" X 8" Ductile-Iron Tee & Block	3	EA	\$135.00	\$405.00
12" X 12" X 12" Ductile-Iron Tee & Block	1	EA	\$325.00	\$325.00
24" X 24" X 8" Ductile-Iron Tee & Block	1	EA	\$925.00	\$925.00
24" X 24" X 12" Ductile-Iron Tee & Block	3	EA	\$1,000.00	\$3,000.00
24" X 24" X 24" Ductile-Iron Tee & Block	2	EA	\$1,300.00	\$2,600.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	26	EA	\$1,800.00	\$46,800.00
Fire Hydrant Assembly (HIGH PRESSURE), Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	14	EA	\$2,000.00	\$28,000.00
12" - 8" Reducer	2	EA	\$150.00	\$300.00
Air Relief Valve	3	EA	\$700.00	\$2,100.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	11	EA	\$700.00	\$7,700.00
8" Ductile-Iron Resilient Seated Gate Valves w/ Test Tap & Boxes	2	EA	\$900.00	\$1,800.00
12" Ductile-Iron Resilient Seated Gate Valves & Boxes	5	EA	\$1,200.00	\$6,000.00

**ENGINEER'S ESTIMATE
MAHER ROAD AND BRISTOW ROAD
PHASE VII
FOR NKWSD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
24" Ductile-Iron Butterfly Valve w/ Test Tap & Box	1	EA	\$4,200.00	\$4,200.00
Water Services Short	26	EA	\$350.00	\$9,100.00
Water Services Long	26	EA	\$450.00	\$11,700.00
3/4" Service from Meter within (2) feet of House	1,280	LF	\$10.00	\$12,800.00
8" Pipe Plug & Block	5	EA	\$200.00	\$1,000.00
12" Pipe Plug & Block	1	EA	\$400.00	\$400.00
24" Pipe Plug & Block	4	EA	\$1,000.00	\$4,000.00
Remove 8" Pipe Plug & Block	1	EA	\$100.00	\$100.00
Remove 12" Pipe Plug & Block	1	EA	\$200.00	\$200.00
Concrete Encasement	210	LF	\$50.00	\$10,500.00
15" Steel Casing Pipe by Boring & Jacking	80	LF	\$130.00	\$10,400.00
42" Steel Casing Pipe by Boring & Jacking	110	LF	\$400.00	\$44,000.00
Highway Restoration (K.D.O.T.)	1,620	SY	\$50.00	\$81,000.00
Bituminous Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	294	SY	\$35.00	\$10,290.00
Concrete Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	313	SY	\$40.00	\$12,520.00
Gravel Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	349	SY	\$15.00	\$5,235.00
TOTAL CONTRACTOR				\$1,575,937.00
Engineering @ 8%				\$126,074.96
Geotechnical				\$20,000.00
TOTAL ESTIMATED COST				\$1,722,011.96

N.K.W.S.D.
EXHIBIT-C2

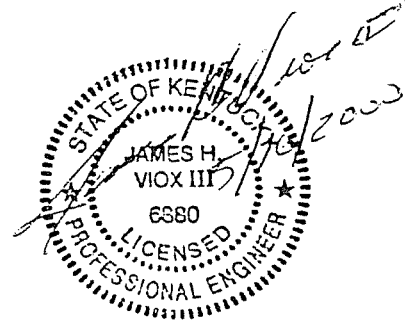
FINAL ENGINEERING REPORT





VIOX & VIOX, INC.

Consulting Engineers & Surveyors



Final Engineering Report NKWSD Sub-District C Water Main Extensions

• Planning

The bids received on May 10, 2000 included four projects that represent Sub-District C Water Main Extensions on Rich Road, Callant Road, Percival Road, York Road, Stephenson Road, Symbo Lane, Visalia Road, Maher Road and Bristow Road. Estimates were prepared on March 17, 2000 for these projects. The following is a comparison of the construction cost portions estimated as compared to the bids received.

• Design

<u>PROJECT</u>	<u>CONSTRUCTION COST 3/17/00</u>	<u>CONSTRUCTION COST BID</u>
Phase IV (Rich Road & Callant Road)	\$ 429,925.00	\$ 383,515.97
Phase V (Percival Road, York Road, Stephenson Rd, & Symbo Lane)	\$ 446,834.00	\$ 391,639.80
Phase VI (Visalia Road)	\$ 453,235.00	\$ 363,279.00
Phase VII (Maher Road & Bristow Road)	\$1,575,937.00	\$1,162,317.00
<u>TOTAL PROJECT</u>		
Construction Cost w/o Engineering, Geotech, or Misc.	\$2,905,931.00	\$2,300,751.77

• Surveying

The total of the four bids (\$ 2,300,751.77) is less than the totals of the previous estimates prepared by our office.

DATE: 5/18/00

SUBDISTRICT - C (Proposed)
 Construction cost do not include
 low to moderate income service lines

STREET	DISTANCE MILES	TOTAL AVAIL. CUST	CUST. SIGN	CUST. PER/MI	EST. CONST.
Ph. 1 Green Road & U.S. 25	8.6	151	116	13.49	\$890,921
Cost to Upgrade to 12 in.	8.6	N/A	N/A	N/A	\$564,208
Ph. 2 Ky 17(Gleason to County Line) & Hempfling Rd (First 2.1 miles) & Spillman Rd	8.8	243	167	18.98	\$856,156
Change Order to Phase 2 for Gardnersville Rd.; (First .8 miles) & Paxton Rd.: (First .65 miles)	1.45	40	26	17.93	\$191,824
Cost to Upgrade to 16 in,	5.70	N/A	N/A	N/A	\$640,002
Ph. 3 Staffordsburg Rd.[Old Decoursey] (Ky 16 to Martin Road) Martin Road (Subdist. B to Staff. Rd) Rector Road (Subdist. B to Kent. St.)	3.50	85	57	16.29	\$401,694
Cost to Upgrade Staff. To 12 in.	2.40	N/A	N/A	N/A	\$152,738
Ph. 4 Rich Road; (First 1.9 miles) & Callant Road	2.50	57	37	14.80	\$379,660
Ph. 5 Percival Road; (First 1 mile) & Symbo & York Road; (First .4 miles) & Stephenson Road; (First .5 miles)	2.50	78	50	20.00	\$386,540
Ph. 6 Visalia Road;Staffordsburg to 2 mil	2.00	60	39	19.50	\$225,746
Cost to upgrade to 12 inch	2.00	N/A	N/A	N/A	\$125,773
Ph. 7 Ind./Maher Road to Banklick Rd. & Maher Road, Banklick to Co. Line & Banklick Road; Bristow to Maher	3.65	80	52	14.25	\$515,551
Cost to upgrade to 24 inch	2.45	N/A	N/A	N/A	\$637,806
	33.00	794	544	16.48	\$5,968,618
33.0 Miles			69%		

+ 20 Pend. * Bullock Pen
 + 10 South Fork Development

Cost Estimate:

Construction	\$5,968,618
Service Lines (LMI) (320*90FT*\$6/FT)	\$172,800
Engineering	\$417,803
Planning & Administration	\$58,500
Interim Financing	\$230,000
Legal	\$20,000
Contingencies (10%)	\$596,862
	<u>\$7,464,583</u>

Source of Funds:

Community Development Block Grant	\$886,755
Tap-on Fees (214 @\$650)	\$139,100
Community Fund Raising	\$10,000
County Contribution	\$172,800
Upgrades (NKWSD Bond Issue)	\$2,590,611
Financed thru surcharge (NKWSD Bond Issue)	\$1,378,317
Financed thru surcharge (FmHA Loan)	\$2,287,000
	<u>\$7,464,583</u>

**PRELIMINARY ENGINEERING REPORT
WATER FACILITY**

APPLICATION FOR FEDERAL ASSISTANCE

1 TYPE OF SUBMISSION: <i>Application</i> <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction <i>Preapplication</i> <input checked="" type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	2. DATE SUBMITTED REV: 9-15-97	Applicant Identifier
	3. DATE RECEIVED BY STATE	State Application Identifier
	4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

5. APPLICANT INFORMATION

Legal Name Northern Kentucky Water Service District	Organizational Unit Special District
Address (give City, County, state and zip code) P.O. Box 17010 Covington, Kenton County, Kentucky 41017	Name and telephone number of the person to be contacted on matters involving this application (give area code) Richard Harrison, NKWSD OR Will Linder & Assoc., Consultants 606/578-7890 606/986-8406 FAX Number: 606/578-5456 606/986-4886
6. EMPLOYER IDENTIFICATION NUMBER (EIN):	7. TYPE OF APPLICANT: (enter appropriate letter in box) G A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District Other (Specify):
8. TYPE OF APPLICATION: <input type="checkbox"/> New <input type="checkbox"/> Continuation <input checked="" type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es): A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration Other (specify): Modification In Budget <input checked="" type="checkbox"/> Other	9. NAME OF FEDERAL AGENCY: USDA Rural Development Administration
10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 1 0 - 7 6 0 Title: Water Systems for Rural Communities AREAS AFFECTED BY PROJECT (cities, counties, states, etc.): Southern Kenton County, Kentucky	11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: The project will provide water to seven areas in southwestern kenton County. The system will utilize a combination of PVC and ductile iron to accommodate various pressures. An expanded Description of the Project and Needs and a detailed budget breakdown is attached.

13. PROPOSED PROJECT:	14. CONGRESSIONAL DISTRICTS OF: Kentucky				
<table border="1"> <tr> <td>Start Date 1-98</td> <td>Ending Date 1-99</td> </tr> </table>	Start Date 1-98	Ending Date 1-99	<table border="1"> <tr> <td>a. Applicant 4th District - Jim Bunning, Representative</td> <td>b. Project 4th District, Jim Bunning, Representative</td> </tr> </table>	a. Applicant 4th District - Jim Bunning, Representative	b. Project 4th District, Jim Bunning, Representative
Start Date 1-98	Ending Date 1-99				
a. Applicant 4th District - Jim Bunning, Representative	b. Project 4th District, Jim Bunning, Representative				

15. ESTIMATED FUNDING:	16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?														
<table border="1"> <tr> <td>a. Federal (RD)</td> <td>\$ 2,130,059.00</td> </tr> <tr> <td>b. Applicant</td> <td>\$ 166,500.00</td> </tr> <tr> <td>c. State (CDBG)</td> <td>\$ 1,000,000.00</td> </tr> <tr> <td>d. Local Kenton Co.</td> <td>\$ 50,000.00</td> </tr> <tr> <td>e. Other -Community</td> <td>\$ 10,000.00</td> </tr> <tr> <td>f. Other-NKWSD Bond Issue</td> <td>\$ 1,821,012.00</td> </tr> <tr> <td>g. TOTAL</td> <td>\$ 5,262,675.00</td> </tr> </table>	a. Federal (RD)	\$ 2,130,059.00	b. Applicant	\$ 166,500.00	c. State (CDBG)	\$ 1,000,000.00	d. Local Kenton Co.	\$ 50,000.00	e. Other -Community	\$ 10,000.00	f. Other-NKWSD Bond Issue	\$ 1,821,012.00	g. TOTAL	\$ 5,262,675.00	a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE <u>Sept. 4, 1996</u> Submitted with Ky. CDBG Application Copy of A-95 Comments are attached b. NO. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW
a. Federal (RD)	\$ 2,130,059.00														
b. Applicant	\$ 166,500.00														
c. State (CDBG)	\$ 1,000,000.00														
d. Local Kenton Co.	\$ 50,000.00														
e. Other -Community	\$ 10,000.00														
f. Other-NKWSD Bond Issue	\$ 1,821,012.00														
g. TOTAL	\$ 5,262,675.00														
	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? <input type="checkbox"/> Yes If "Yes", attach an explanation. <input checked="" type="checkbox"/> No														

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AD THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

a. Typed Name of Authorized Representative Dennis L. Willaman	b. Title General Manager Northern Kentucky Water Service District	c. Telephone number 606 / 578-7890
d. Signature of Authorized Representative <i>Dennis L. Willaman</i>		e. Date Signed

BUDGET INFORMATION - Construction Programs

NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case you will be notified.

COST CLASSIFICATION	a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Column a-b)
1. Administrative and legal expenses (admin/planning/legal/bond con.)	\$20,000.00	\$49,500.00	\$69,500.00
2. Land, structures, rights-of-way, appraisals, etc.	\$0.00	\$0.00	\$0.00
3. Relocation expenses and payments	\$0.00	\$0.00	\$0.00
4. Architectural and engineering fees (Eng. Design and 201 Plan)	\$191,077.00	\$110,811.00	\$301,888.00
5. Other architectural and engineering fees	\$0.00	\$0.00	\$0.00
6. Project inspection fees (Eng. Insp.)	\$111,461.00	\$64,641.00	\$176,102.00
7. Site work	\$0.00	\$0.00	\$0.00
8. Demolition and removal	\$0.00	\$0.00	\$0.00
9. Construction (Water lines)	\$1,578,740.00	\$2,614,155.00	\$4,192,895.00
10. Equipment	\$0.00	\$0.00	\$0.00
11. Miscellaneous	\$0.00	\$0.00	\$0.00
12. SUBTOTAL (sum of lines 1-11)	\$0.00	\$0.00	\$0.00
13. Contingencies	\$185,176.00	\$217,114.00	\$402,290.00
14. SUBTOTAL	\$2,130,059.00	\$3,132,616.00	\$5,262,675.00
15. Project (program) income	\$0.00	\$0.00	\$0.00
16. TOTAL PROJECT COSTS (subtract #15 from #14)	\$2,130,059.00	\$3,132,616.00	\$5,262,675.00
FEDERAL FUNDING			
17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share). Enter the resulting federal share.	Enter eligible costs from line 16c. Multiply x _____%		\$2,130,059.00

**RURAL DEVELOPMENT REVISED 424 FORM
ATTACHMENTS**

CDBG PROJECT DESCRIPTION

PROJECT MAPS

**PROJECT BUDGET
AND ENGINEER'S ESTIMATES**

CDBG 1997 NEEDS SECTION

KENTUCKY A-95 CLEARINGHOUSE COMMENTS

BRIEF DESCRIPTION OF CDBG PROJECT (Maps included showing project location):

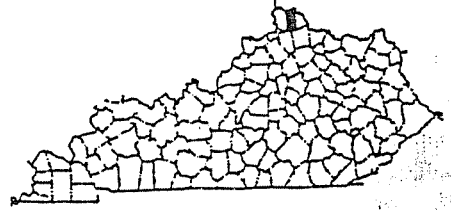
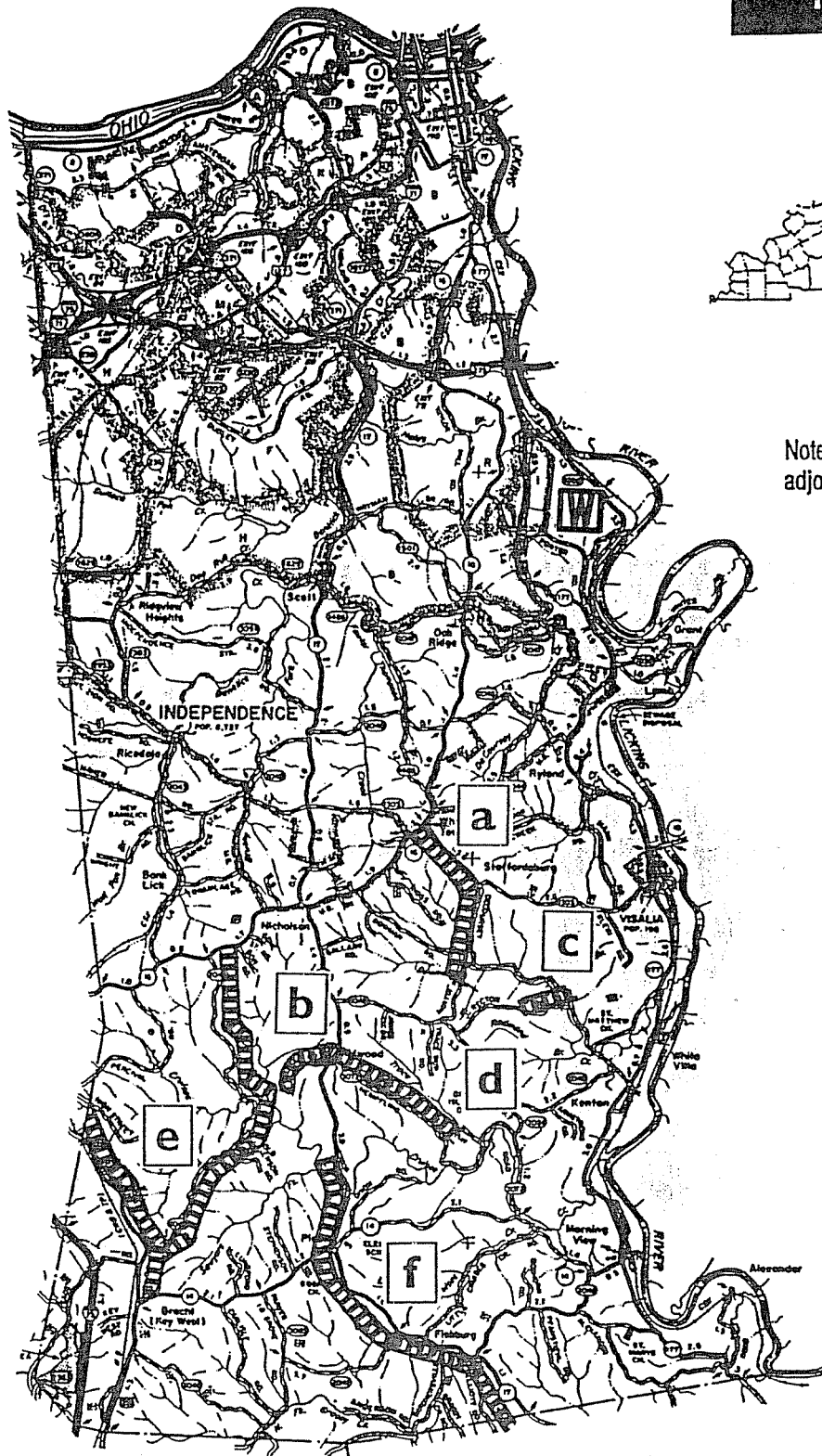
The Northern Kentucky Water Service District (formerly the Kenton County Water District #1) has planned for several years to expand service into the southern portion of Kenton County to serve a potential total of 436 new residential customers currently without potable water service; 258 or 59% of the new residential customers are low- and moderate-income households. The NKWSD will extend 20.3 miles of 8" water lines, with all appurtenances, and 75 fire hydrants to service the 436 new residential customers along six roads/areas: Staffordsburg Road, Spillman Road, Rector Road, Hempfling road, US 25/ Green Road, and Madison Pike (KY 17) with all appurtenances. Funding for the project is from the proposed Community Development Block Grant program in conjunction with Rural Development (RD) funds and local contributions.

In July 1996, the Public Service Commission approved Kenton & Campbell Counties' water districts to combine as the Northern Kentucky Water Service District, effective January 1, 1997. The Northern Kentucky Water Service District is a rural water district, governed by the Public Service Commission, coping with rapid population growth within Northern Kentucky and has constructed its water systems to handle the present and anticipated demands. The proposed project is located in the southwest portion of Kenton County and is classified as semi-urban. Construction standards and user fees differing from those of rural areas are applied in order to allow the Water Service District to undertake construction economically; reducing the need for upgrades on line size, reducing the cost of maintenance and significantly improving reliability. Presently, there are cast iron water lines in place that have served the district for over 100 years.

The six roads/areas to be served rely on cisterns for their water supply and hauled water costs them about \$80 a month for approximately 4,000 gallons (\$40 per load, with an average of 2 loads per month); each load is approximately 2,000 gallons. Within the past year, the rates have increased with only 2 major haulers supplying water to the area. Groundwater is not used to any significant degree in this area due to the poor characteristics of the area soils in treating septic discharges. Although people consider cisterns safer than using wells, where septic systems could contaminate groundwater, information from the Northern Kentucky District Health Department indicates that water samples collected from cisterns in their service area have had a standard contamination rate of 50%.




To provide potable water to these six areas, the project will install 20.3 miles of 8" waterline into Staffordsburg Road, Spillman Road, Rector Road, Hempfling Road, US 25/Green Road, and Madison Pike with CDBG/RD funds. Additional Rural Development funds will be used to provide potable water to an over-income area (Martin Road); this is not part of the CDBG project. The project has been restructured, using the minimum requirements for fire hydrants and the estimate for the CDBG/RD project using cost estimates based on 8" waterline. The Water Service District will utilize conventional financing to fund the "upgrade" to 12" or 16" ductile iron piping or C-900 PVC which is more expensive "front-end" than other systems but reduces future maintenance and improves reliability.

Project Area



Note: Sewer plants located in adjoining counties.

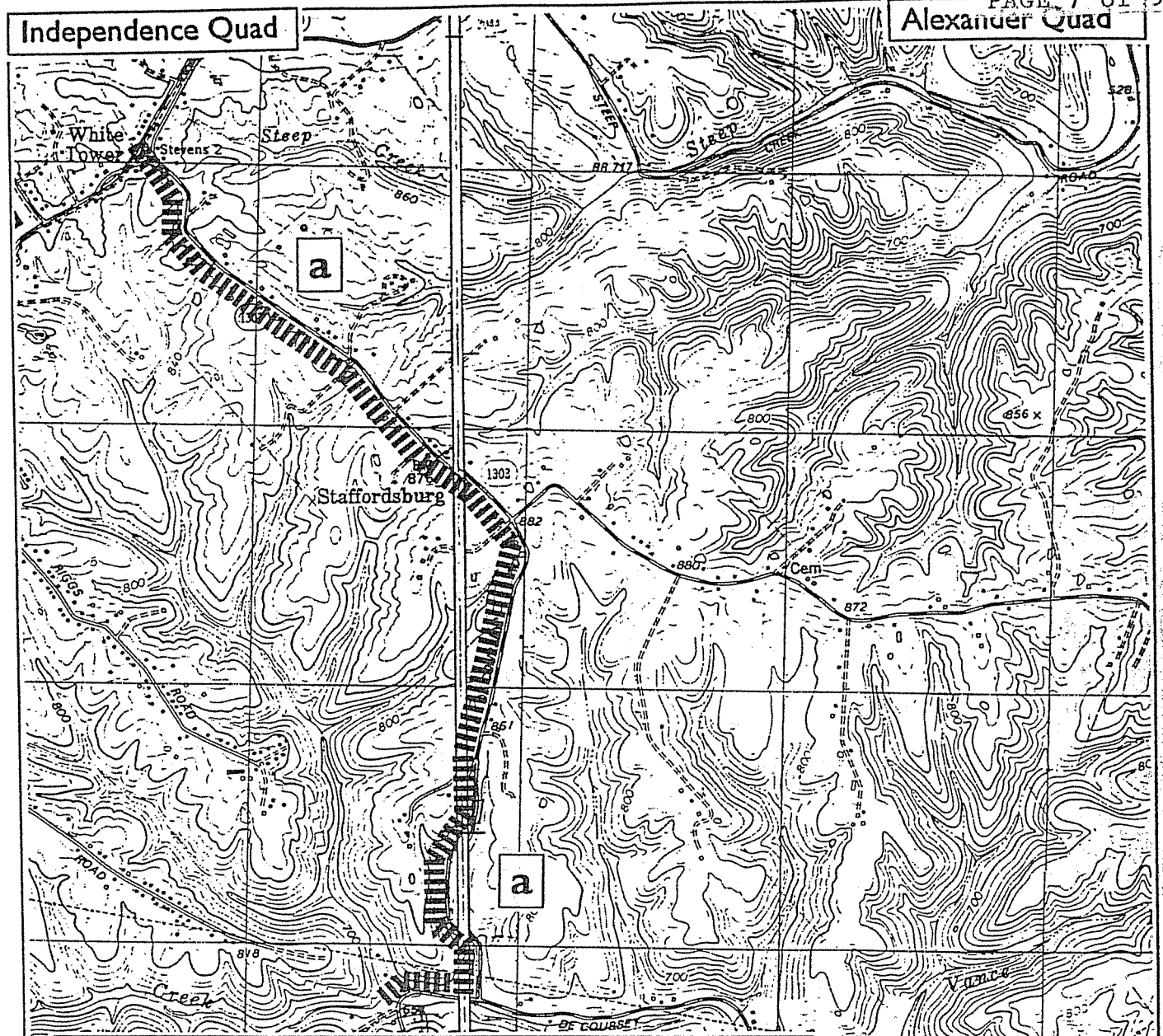
Project Map

-  Water Plant
-  Sewer Plant
-  Minority Concentrations

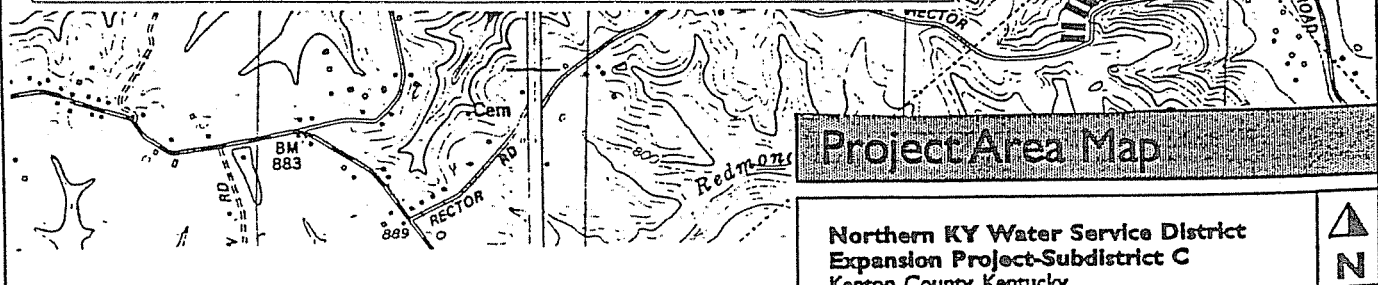
Northern KY Water Service District
Expansion Project-Subdistrict C
Kenton County, Kentucky



FEMA Community-Panel Number 210128
USGS 7.5 Topo/Specified Quads



Line ID	Road Name	Customers to be Served	Length (Miles)	Water Customers per Mile
a	Staffordsburg Road	61	2.4	25.4
b	Spillman Road	26	1	26
c	Rector Road	8	.5	16
d	Hemphling Road	39	2.1	18.6
e	US25/Green Road	147	8.6	17.1
f	Madison Pike (KY 17)	155	5.7	27.2



Project Area Map

Northern KY Water Service District
 Expansion Project-Subdistrict C
 Kenton County, Kentucky

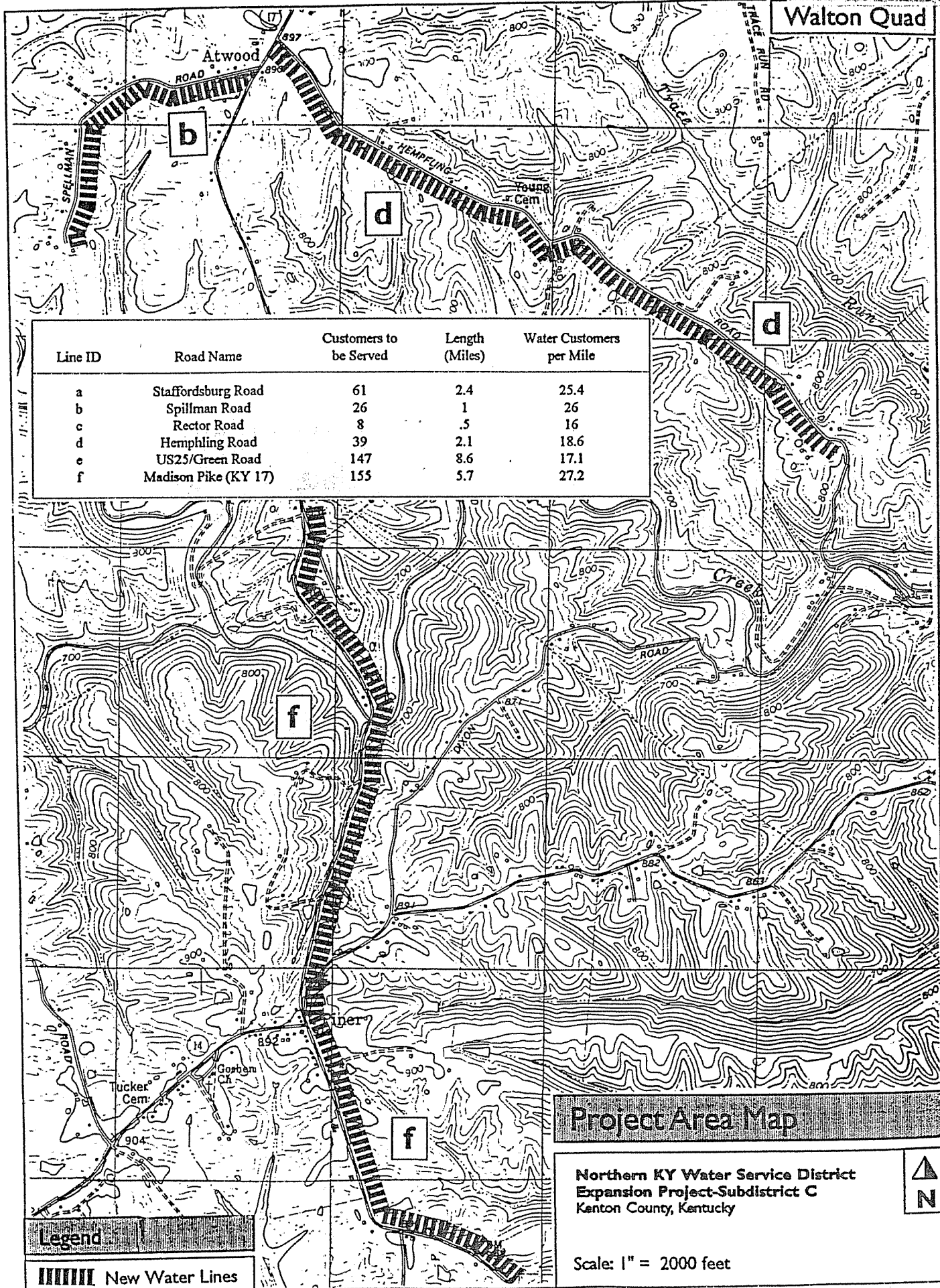


Scale: 1" = 2000 feet

Legend

||||| New Water Lines

Walton Quad



Line ID	Road Name	Customers to be Served	Length (Miles)	Water Customers per Mile
a	Staffordsburg Road	61	2.4	25.4
b	Spillman Road	26	1	26
c	Rector Road	8	.5	16
d	Hemphling Road	39	2.1	18.6
e	US25/Green Road	147	8.6	17.1
f	Madison Pike (KY 17)	155	5.7	27.2

Project Area Map

Northern KY Water Service District
Expansion Project-Subdistrict C
Kenton County, Kentucky



Scale: 1" = 2000 feet

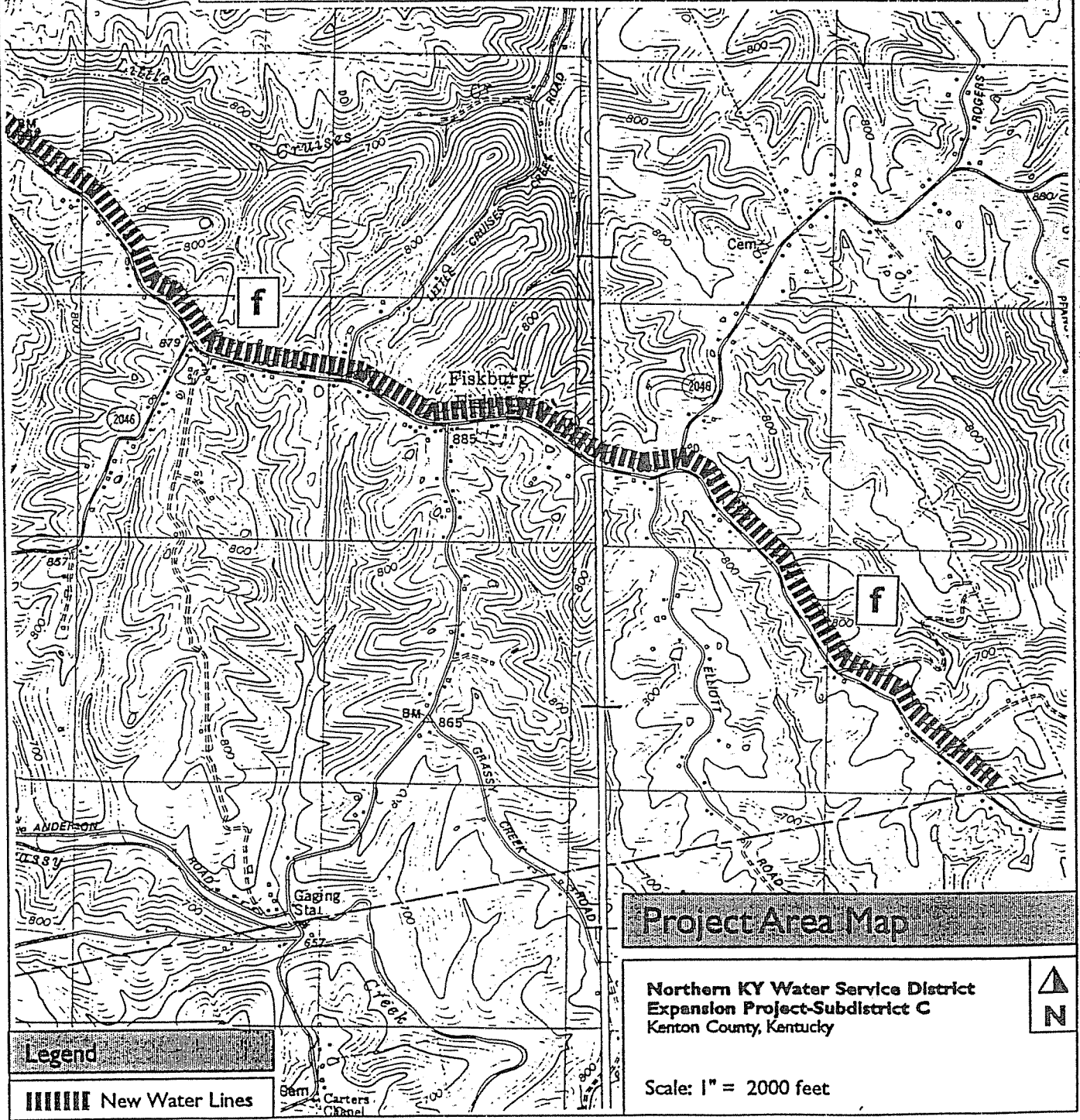
Legend

New Water Lines

Walton Quad

De Mossville Quad

Line ID	Road Name	Customers to be Served	Length (Miles)	Water Customers per Mile
a	Staffordsburg Road	61	2.4	25.4
b	Spillman Road	26	1	26
c	Rector Road	8	.5	16
d	Hemphling Road	39	2.1	18.6
e	US25/Green Road	147	8.6	17.1
f	Madison Pike (KY 17)	155	5.7	27.2

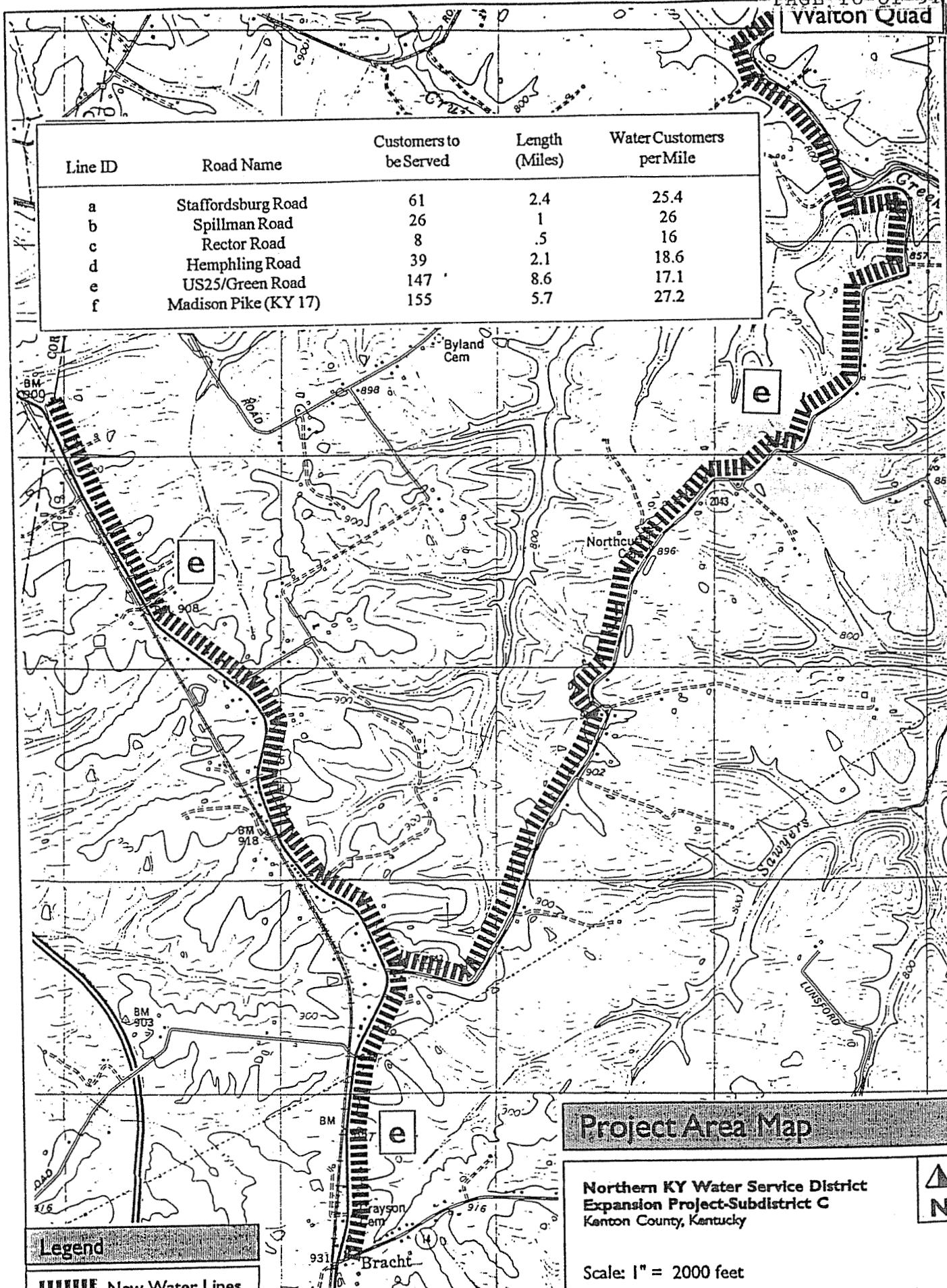


Legend
 [Hatched Pattern] New Water Lines

Project Area Map
 Northern KY Water Service District
 Expansion Project-Subdistrict C
 Kenton County, Kentucky

Scale: 1" = 2000 feet

Line ID	Road Name	Customers to be Served	Length (Miles)	Water Customers per Mile
a	Staffordsburg Road	61	2.4	25.4
b	Spillman Road	26	1	26
c	Rector Road	8	.5	16
d	Hemphling Road	39	2.1	18.6
e	US25/Green Road	147	8.6	17.1
f	Madison Pike (KY 17)	155	5.7	27.2




Project Area Map

Northern KY Water Service District
 Expansion Project-Subdistrict C
 Kenton County, Kentucky

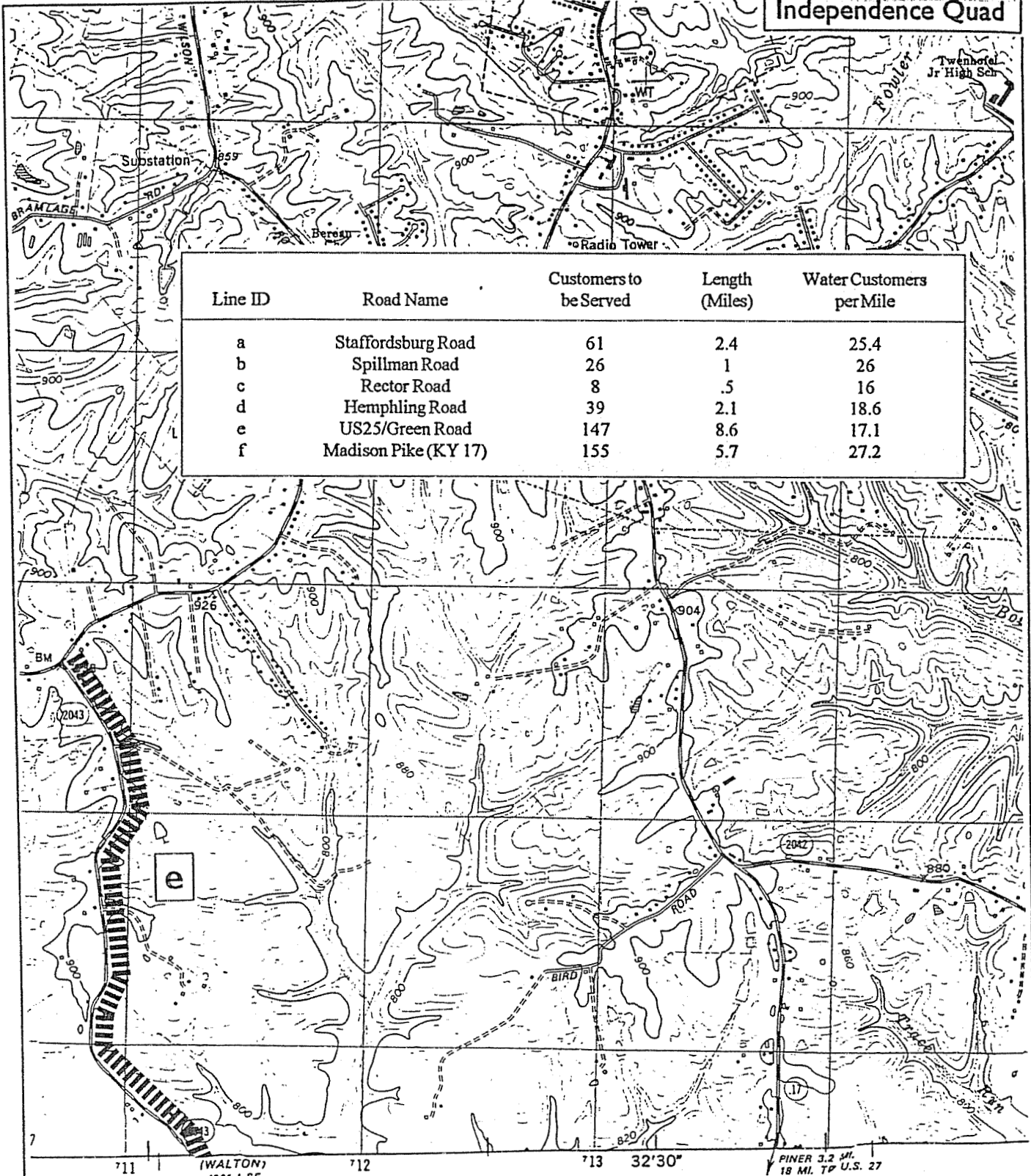


Scale: 1" = 2000 feet

Legend

 New Water Lines

Independence Quad



Line ID	Road Name	Customers to be Served	Length (Miles)	Water Customers per Mile
a	Staffordsburg Road	61	2.4	25.4
b	Spillman Road	26	1	26
c	Rector Road	8	.5	16
d	Hemphling Road	39	2.1	18.6
e	US25/Green Road	147	8.6	17.1
f	Madison Pike (KY 17)	155	5.7	27.2

SCALE 1:24 000

Project Area Map

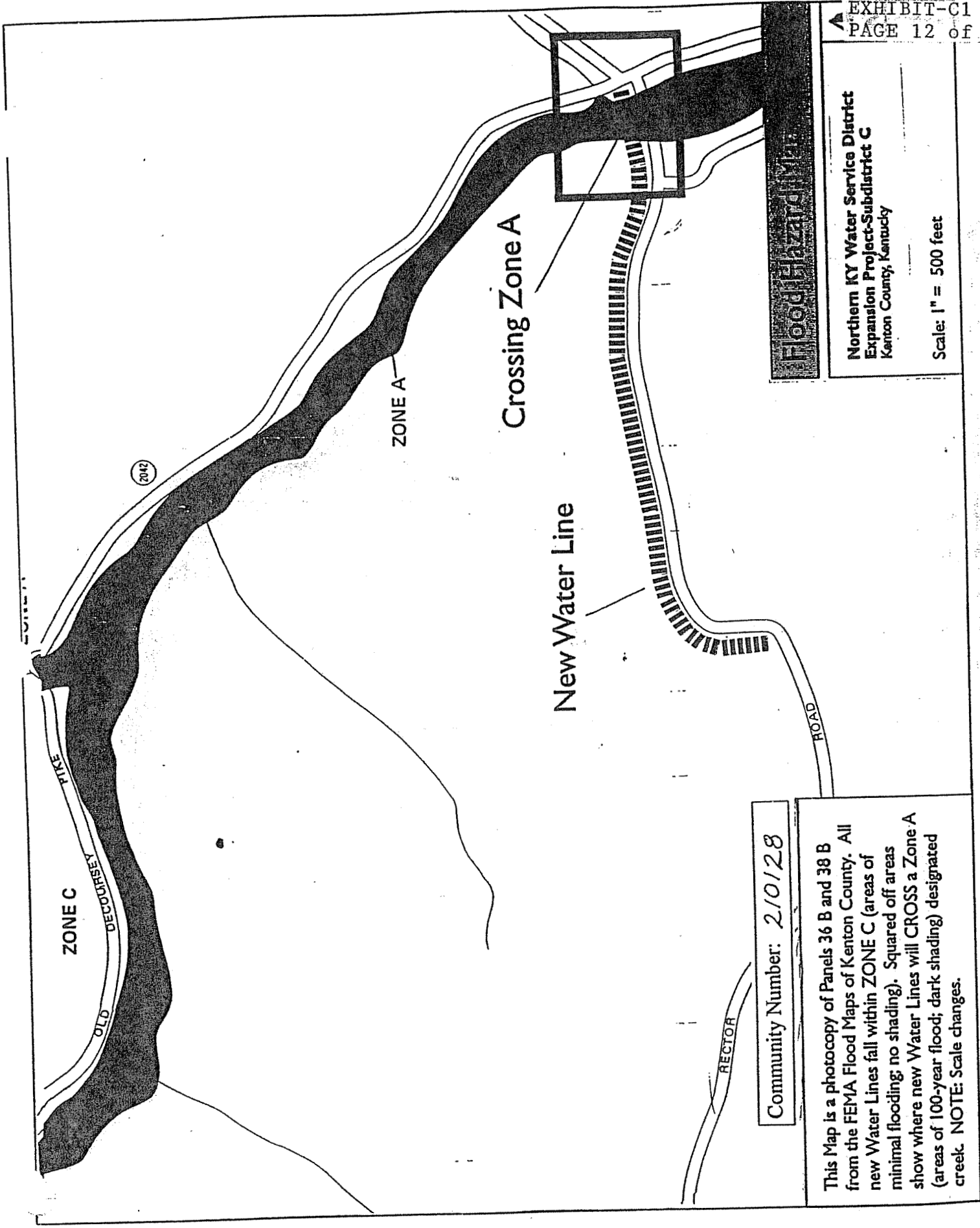
Northern KY Water Service District
 Expansion Project-Subdistrict C
 Kenton County, Kentucky



Scale: 1" = 2000 feet

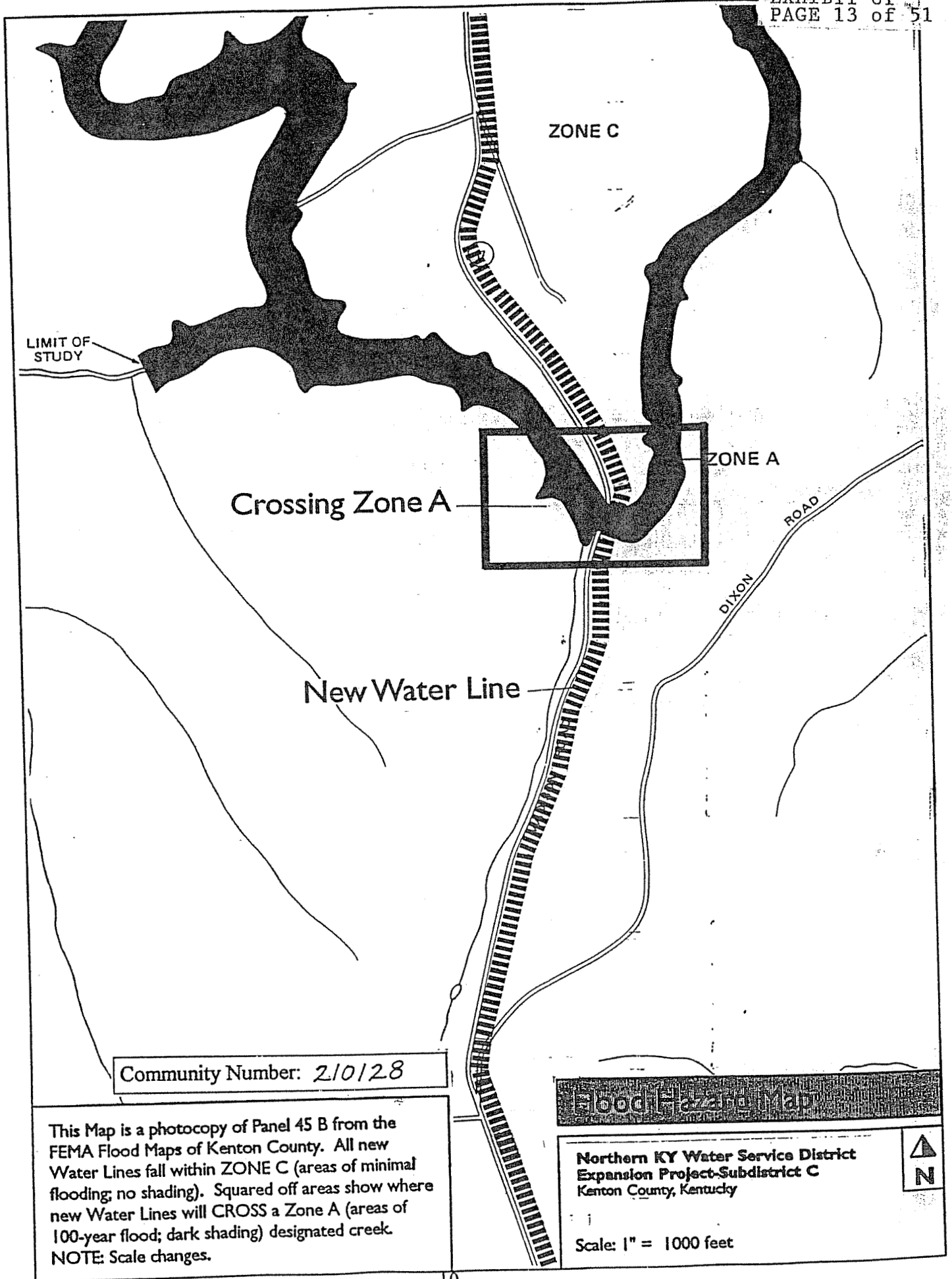
Legend

||||||| New Water Lines



Community Number: 210128

This Map is a photocopy of Panels 36 B and 38 B from the FEMA Flood Maps of Kenton County. All new Water Lines fall within ZONE C (areas of minimal flooding; no shading). Squared off areas show where new Water Lines will CROSS a Zone A (areas of 100-year flood; dark shading) designated creek. NOTE: Scale changes.



Community Number: 210128

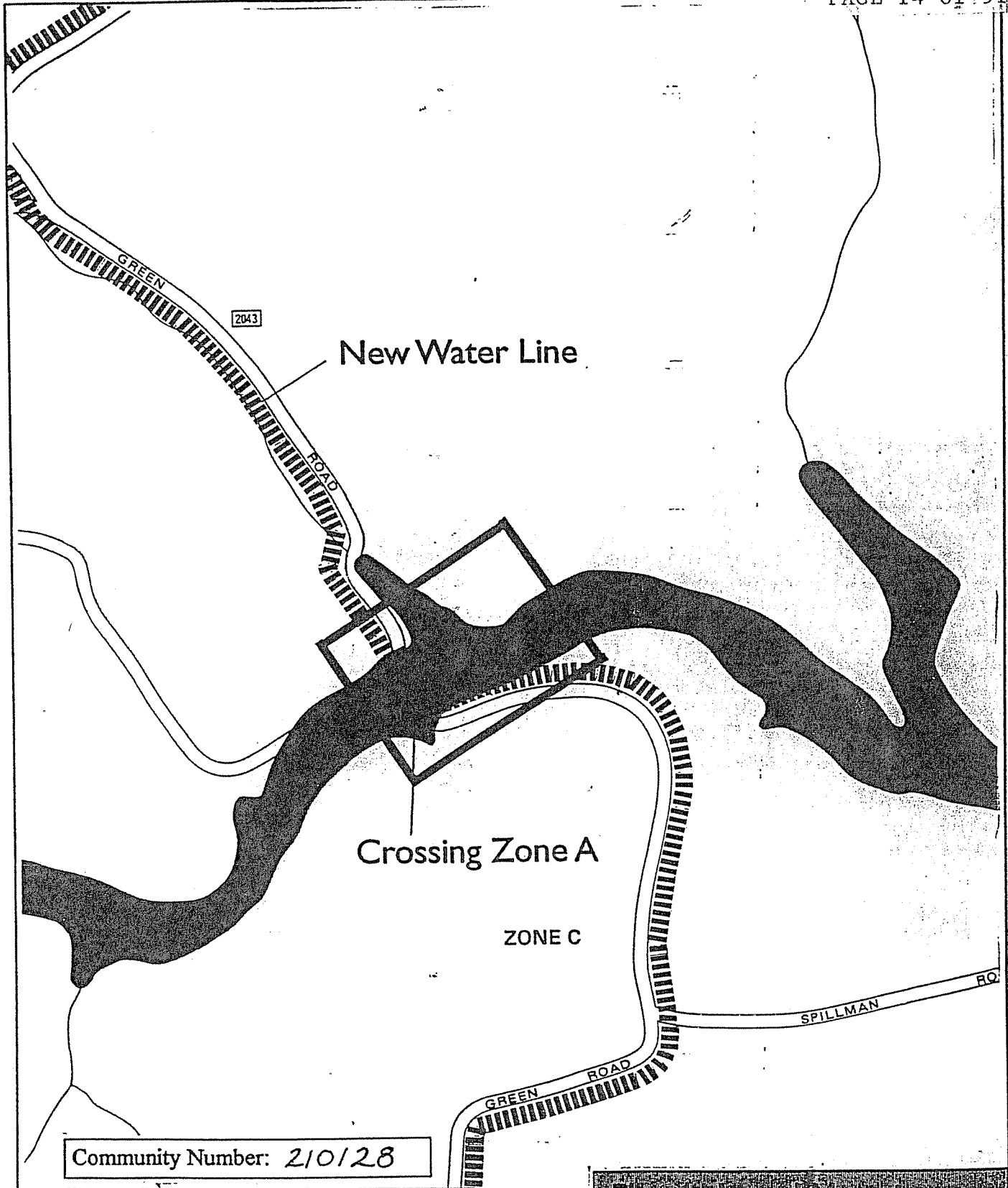
This Map is a photocopy of Panel 45 B from the FEMA Flood Maps of Kenton County. All new Water Lines fall within ZONE C (areas of minimal flooding; no shading). Squared off areas show where new Water Lines will CROSS a Zone A (areas of 100-year flood; dark shading) designated creek.
NOTE: Scale changes.

Flood Hazard Map

Northern KY Water Service District
Expansion Project-Subdistrict C
Kenton County, Kentucky



Scale: 1" = 1000 feet



Community Number: 210128

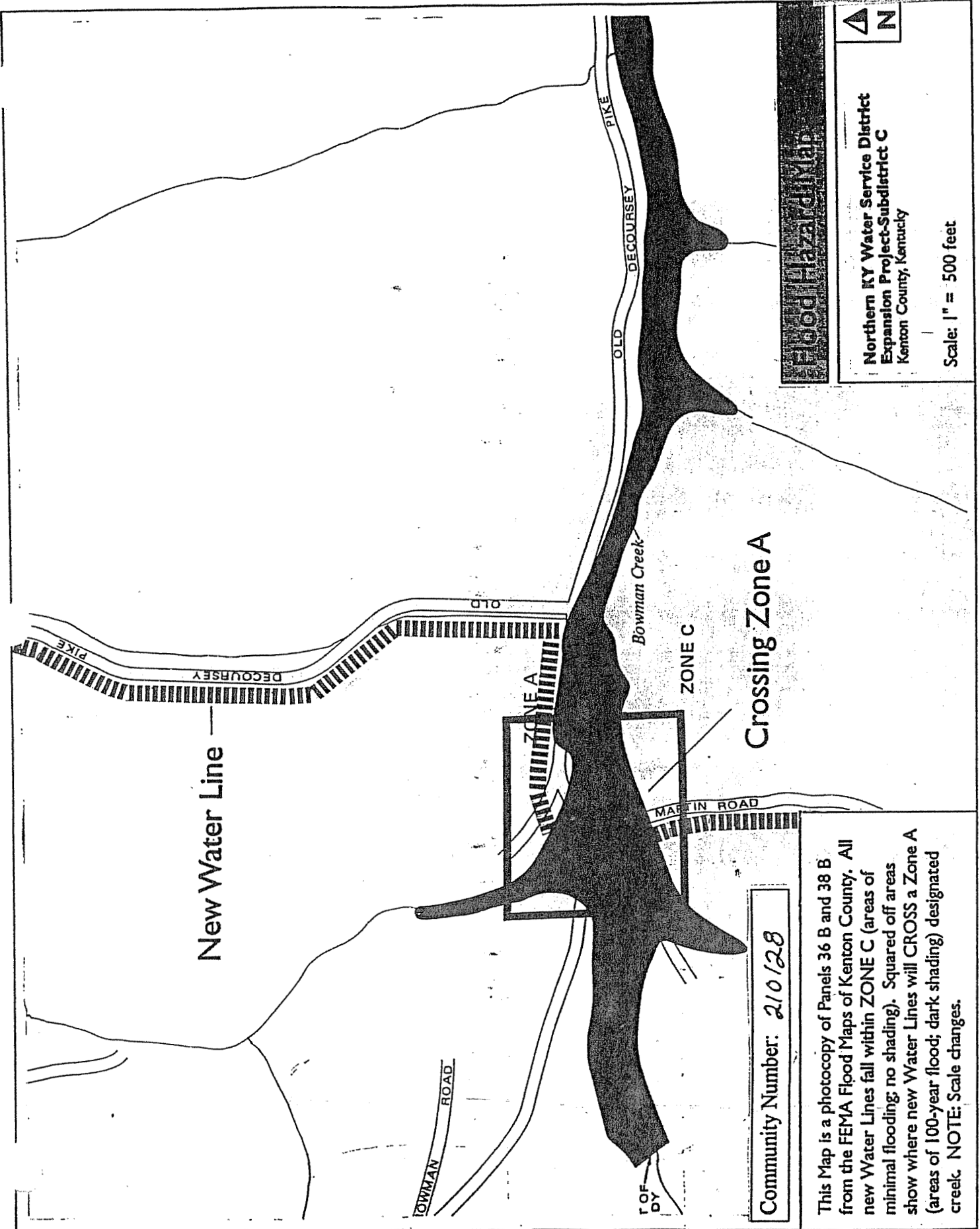
This Map is a photocopy of Panel 34 B from the FEMA Flood Maps of Kenton County. All new Water Lines fall within ZONE C (areas of minimal flooding; no shading). Squared off areas show where new Water Lines will CROSS a Zone A (areas of 100-year flood; dark shading) designated creek.
NOTE: Scale changes.

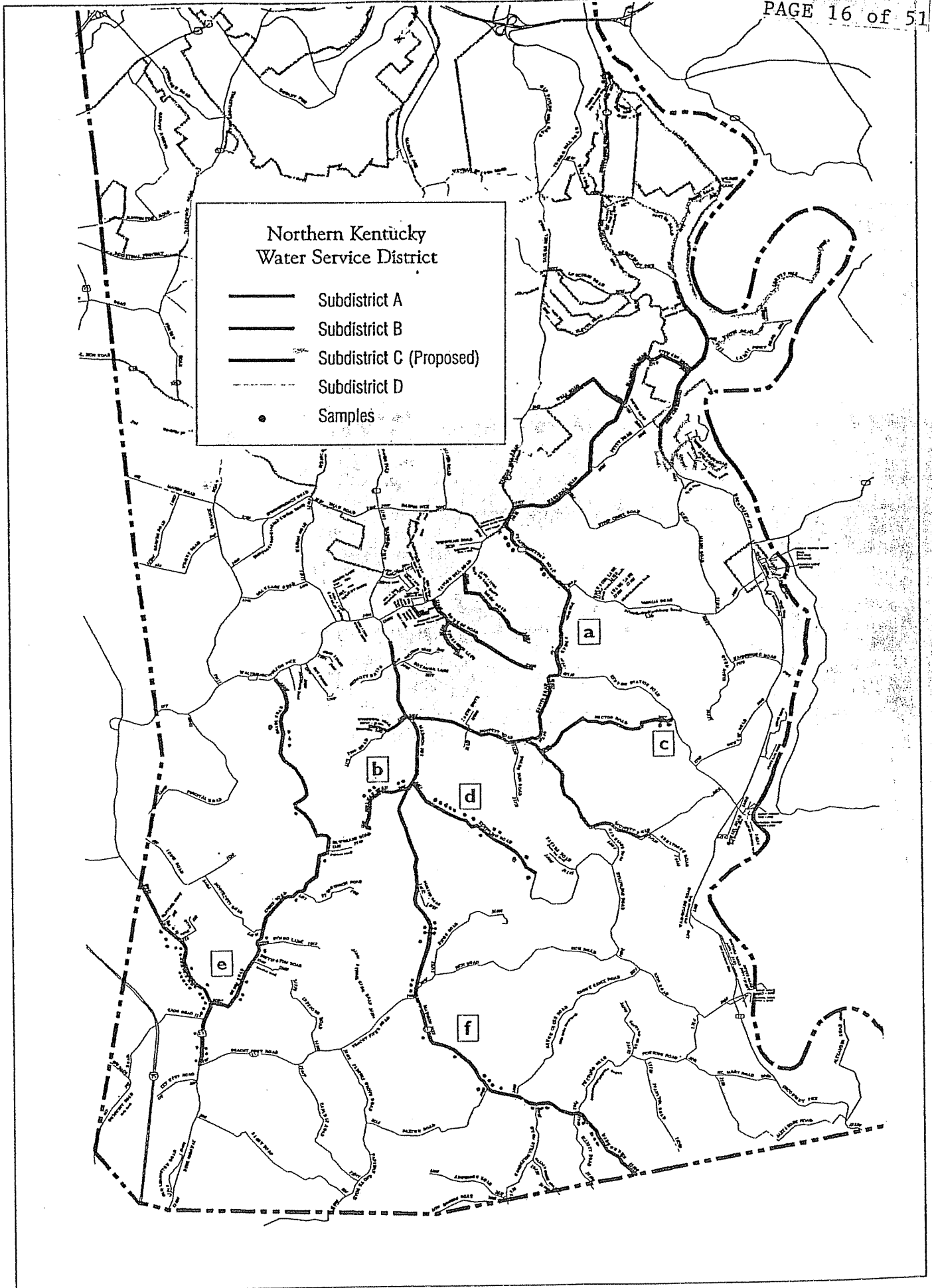
Flood Hazard Map

Northern KY Water Service District
Expansion Project-Subdistrict C
Kenton County, Kentucky



Scale: 1" = 500 feet





KENTON COUNTY - SUBDISTRICT C
 PROPOSED FUNDING - 8" TO 12" LINES

This budget expands the CDBG project budget to show additional RD funds (Martin Rd)
 and the Upgrade of the lines to be financed by the NKWSD.

HUD	DLG	ACTIVITY CATEGORY	CDBG PROJECT - 8" LINES				8" Lines Martin Rd. R.D. FUNDS	12" LINES UPGRADE WD BOND ISSUE	TOTAL
			CDBG FUNDS	R.D. FUNDS	County Funds	Com. Funds & Tap-ons			
01	1)	ACQUISITION	\$0	\$0	\$0	\$0	\$0	\$0	\$0
04	2)	CLEARANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	3)	RELOCATION							\$0
	a)	owner							\$0
	b)	renter							\$0
08	c)	buisnesses							\$0
	d)	excess payments							\$0
	e)	temporary relocation							\$0
		TOTAL RELOCATION	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	4)	REHABILITATION							\$0
15	a)	code enforcement							\$0
14A	b)	grants							\$0
14A	c)	forgivable-def. loans							\$0
14A	d)	leveraged loans							\$0
14C	e)	public housing mod.							\$0
14I	f)	lead based/lead hazard/abate							\$0
16A	g)	residential-historic preservation							\$0
16B	h)	non-residential-historic preserv.							\$0
		TOTAL REHAB.	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	5)	PUBLIC FACILITIES							\$0
03F	a)	parks & rec. facilities							\$0
K	b)	street improvements							\$0
	c)	water lines	\$925,000	\$1,502,345	\$50,000	\$176,500	\$76,395	\$1,462,655	\$4,192,895
U3J	d)	water treatment facilities							\$0
	e)	sewer lines							\$0
	f)	sewage treatment fac.							\$0
03I	g)	flood & drainage fac.							\$0
	h)	engineering design		\$191,077			\$5,500	\$105,311	\$301,888
	i)	engineering inspection		\$111,461			\$3,209	\$61,432	\$176,102
	j)	other public facilities							\$0
	1								\$0
	2								\$0
	3								\$0
		TOTAL PUBLIC FAC.	\$925,000	\$1,804,883	\$50,000	\$176,500	\$85,104	\$1,629,398	\$4,494,385
25	6)	PUBLIC SERVICES	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	7)	OTHER							\$0
12	a)	Legal Services/Bond Counsel		\$20,000				\$0	\$20,000
	b)	Interim Financing		\$120,000				\$0	\$120,000
	c)								\$0
		TOTAL OTHER	\$0	\$140,000					\$140,000
	8)	SUBTOTAL	\$925,000	\$1,944,883	\$50,000	\$176,500	\$85,104	\$1,629,398	\$4,634,385
20	9)	PLANNING	\$9,500						\$9,500
21A	10)	ADMINISTRATION	\$40,000						\$40,000
22	11)	CONTINGENCIES	\$25,500	\$185,176				\$191,614	\$402,290
	12)	TOTAL PROJECT COSTS	\$1,000,000	\$2,130,059	\$50,000	\$176,500	\$85,104	\$1,821,012	\$5,262,675

TOTAL CDBG/RD PROJECT: \$3,356,559

Kenton County/Northern Kentucky Water Service District
 Subdistrict C Water Line Extension Project

Project Cost Act. No. Activity	CDBG/RD PROJECT				PROJECT UPGRADE		Total
	CDBG (8")	RD (8")	Kenton Co. Tap-ons	Com. Funds	RD-Martin Rd. WD Bond Issue	Upgrades	
05c Waterlines:							
- Staffordsburg	\$100,000	\$223,100			\$175,360		\$498,460
- Spillman	\$90,000	\$42,905			\$0		\$132,905
- Rector	\$25,000	\$45,695			\$0		\$70,695
- Hempfling	\$160,000	\$100,720			\$0		\$260,720
- Madison Pike	\$200,000	\$420,040		\$176,500	\$624,950		\$1,421,490
- US 25/Green	\$350,000	\$669,885	\$50,000		\$662,345		\$1,732,230
Subtotal:	\$925,000	\$1,502,345	\$50,000	\$176,500	\$76,395	\$1,462,655	\$4,192,895
5h Engineering Design @ 7.2%		\$191,077			\$5,500	\$105,311	\$301,888
Engineering Inspection (Const. Ser. @ 4.2%)		\$111,461			\$3,209	\$61,432	\$176,102
Subtotal	\$0	\$302,538	\$0	\$0	\$8,709	\$166,743	\$477,990
07a Legal Services/Bond Counsel		\$20,000					\$20,000
07b Interim Financing		\$120,000					\$120,000
Subtotal	\$0	\$140,000	\$0	\$0	\$0	\$0	\$140,000
9 Planning	\$9,500						\$9,500
10 Administration	\$40,000						\$40,000
11 Contingencies	\$25,500	\$185,176				\$191,614	\$402,290
Total Project Costs:	\$1,000,000*	\$2,130,059	\$50,000	\$176,500	\$85,104	\$1,821,012	\$5,262,675

Project Funding
 Community Development Block Grant
 Rural Development
 CDBG/RD Portion \$2,130,059
 Martin Road Portion \$ 85,104
 Kenton County Fiscal Court
 Community Fund Raising
 Tap-on Fees (OI & Com: 222 @ \$750)
 KCWSD #1 Bond Issue
Total Project Funding:

27-Aug-97

KENTON COUNTY - SUBDISTRICT C - PROPOSED

STREET	DISTANCE (Miles)	TOTAL AVAIL. CUSTOMERS	CUSTOMER SIGN-UPS	CUST. PER/MI.	8" CONST. UPGRADE ESTIMATE	TOTAL CONST.
Ky 17 (Gleason to Co. Line)	5.70	155	155	27.19	\$796,540	\$1,421,490
					\$302,365	16" Gleason to Ky 14
					\$322,585	12" Ky 14 to Co. Line
US 25/Green Rd. (Walton to Ky 1	8.60	147	147	17.09	\$1,069,885	\$1,732,230
Staffordsburg Rd. (Ky 16 to Marti	2.40	61	61	25.42	\$323,100	\$498,460
Hemphling Road (First 2.1 miles)	2.10	39	39	18.57	\$260,720	\$260,720
Spillman Road	1.00	26	26	26.00	\$132,905	\$132,905
Rector Road (Subdist B to Ken.St	0.50	8	8	16.00	\$70,695	\$70,695
	20.30	436	436	21.48	\$2,653,845	\$4,116,500
RD ONLY - Over-income area						
Martin Rd. (Subdist B to Ken St.)	0.60	8	8	13.33	\$76,395	\$76,395
TOTALS	20.90	444	444	21.24	\$2,730,240	\$4,192,895

Cost Estimate:	Source of Funds:
Construction	Community Development Block Grant
Engineering @ 11.4%	Tap-on fees (222 Ol & Com @ \$750)
Planning & Administration	Community Fund Raising
Interim financing	Kenton County Cash
Legal	Rural Development Loan
Contingencies (10%)	Upgrades (KCWSD #1 Bond Issue)
\$4,192,895.00	\$1,000,000
\$477,990.00	\$166,500
\$49,500.00	\$10,000
\$120,000.00	\$50,000
\$20,000.00	\$2,215,163*
\$402,290.00	\$1,821,012
\$5,262,675.00	\$5,262,675

*RD Loan on file at \$2,999,999; to be updated upon CDBG determination



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KY. REG. NO. 6880
KY. LAND SURVEYOR NO. 797

WILLIAM R. VIOX, P.E.
KY. REG. NO. 9209
KY. LAND SURVEYOR NO. 1781

Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District C

<u>Street</u>	<u>Estimated Construction Cost</u>
1) Ky. 17 (Gleason to County Line)	\$ 796,540.00
2) Green Road	\$ 694,915.00
US 25 (Walton to Ky 14)	\$ 374,970.00
3) Staffordsburg Road [Old Decoursey] (Ky 16 to Martin Road)	\$ 323,100.00
4) Hemphling Road (First 2.1 Miles)	\$ 260,720.00
5) Spillman Road	\$ 132,905.00
6) Rector Road (Subdistrict B to Kenton Station)	\$ <u>70,695.00</u>
	\$ 2,653,845.00

From PSC App.



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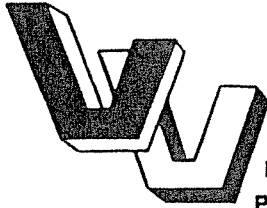
Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

Madison Pike (KY 17)

	Quantity		Unit Price	Total
Gleason To County Line				
a. 8" C-900 Pipe and Fittings	23,900	LF	15.50	370,450.00
b. 8" X 8" X 6" Ductile Iron Anch. Tees & Blocks	48	EA	230.00	11,040.00
c. 8" X 8" X 8" Ductile Iron Tees & Blocks	8	EA	250.00	2,000.00
d. 8" C.I. Pipe Plugs	10	EA	200.00	2,000.00
e. 8" C.I. Resilient Seated Gate Valves & Boxes	40	EA	525.00	21,000.00
f. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H. Blocking & Necessary Extensions	36	EA	1425.00	51,300.00
g. Street & Drive Restoration	670	SY	25.00	16,750.00
h. Service Connection w/Meter	155	EA	750.00	116,250.00
i. Controlled Density Fill	450	CY	45.00	20,250.00
j. 8" DIP Class 52 Pipe & Fittings W/ Polywrap	6000	LF	18.00	108,000.00
k. 8" DI Resilient Seated Gate Valves & Boxes (250 PSI)	4	EA	725.00	2,900.00
l. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H., Blocking & Necessary Extensions (250 PSI)	10	EA	1,975.00	19,750.00
m. Concrete Encasement	200	LF	50.00	10,000.00

	Quantity		Unit Price	Total
n. Restoration General	29,900	LF	1.50	<u>44,850.00</u>
	Sub-Total		\$	796,540.00

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Rev. 7/7/95
Rev. 4/4/96
Rev. 4/10/96
Rev. 8/4/97



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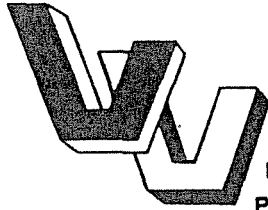
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KY. LAND SURVEYOR NO. 797

Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

WILLIAM R. VIOX, P.E.
KY. REG. NO. 9209
KY. LAND SURVEYOR NO. 1781

	Quantity		Unit Price	Total
Green Road				
a. 8" C-900 Pipe and Fittings	26,300	LF	15.50	407,650.00
b. 8" X 8" X 6" Ductile Iron Anch. Tees & Blocks	48	EA	230.00	11,040.00
c. 8" X 8" X 8" Ductile Iron Tees & Blocks	4	EA	250.00	1,000.00
d. 8" C.I. Pipe Plugs	4	EA	200.00	800.00
e. 8" C.I. Resilient Seated Gate Valves & Boxes	30	EA	525.00	15,750.00
f. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H. Blocking & Necessary Extensions	42	EA	1425.00	59,850.00
g. Street & Drive Restoration	400	SY	25.00	10,000.00
h. Service Connection w/Meter	75	EA	750.00	56,250.00
i. 8" DIP Class 52 Pipe & Fittings W/ Polywrap	3,800	LF	18.00	68,400.00
j. 8" DI Resilient Seated Gate Valves & Boxes (250 PSI)	3	EA	725.00	2,175.00
k. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H., Blocking & Necessary Extensions (250 PSI)	6	EA	1,975.00	11,850.00
l. Concrete Encasement	100	LF	50.00	5,000.00
m. Restoration General	30,100	LF	1.50	45,150.00
	Sub-Total		\$	694,915.00

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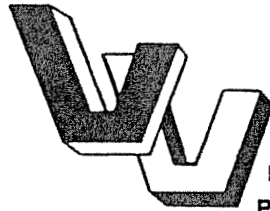
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Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

WILLIAM R. VIOX, P.E.
KY. REG. NO. 9209
KY. LAND SURVEYOR NO. 1781

	Quantity		Unit Price	Total
U.S. 25 (Walton)				
To Ky. 14)				
a. 8" C-900 Pipe and Fittings	15,000	LF	15.50	232,500.00
b. 8" X 8" X 6" Ductile Iron Anch. Tees & Blocks	24	EA	230.00	5,520.00
c. 8" X 8" X 8" Ductile Iron Tees & Blocks	3	EA	250.00	750.00
d. 8" C.I. Pipe Plugs	3	EA	200.00	600.00
e. 8" C.I. Resilient Seated Gate Valves & Boxes	16	EA	525.00	8,400.00
f. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H. Blocking & Necessary Extensions	24	EA	1425.00	34,200.00
g. Street & Drive Restoration	300	SY	25.00	7,500.00
h. Service Connection w/Meter	72	EA	750.00	54,000.00
i. Control Density Fill	200	LF	45.00	9,000.00
j. Restoration General	15,000	LF	1.50	<u>22,500.00</u>
	Sub-Total		\$	374,970.00

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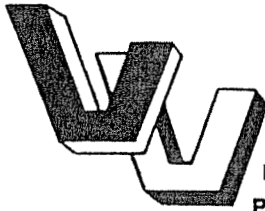
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Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

	Quantity		Unit Price	Total
Staffordsburg Road (Old Decoursey) Ky. 16 To Martin Road				
a. 8" C-900 Pipe and Fittings	10,000	LF	15.50	155,000.00
b. 8" X 8" X 6" Ductile Iron Anch. Teas & Blocks	20	EA	230.00	4,600.00
c. 8" X 8" X 8" Ductile Iron Teas & Blocks	2	EA	250.00	500.00
d. 8" C.I. Pipe Plugs	2	EA	200.00	400.00
e. 8" C.I. Resilient Seated Gate Valves & Boxes	8	EA	525.00	4,200.00
f. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H. Blocking & Necessary Extensions	16	EA	1425.00	22,800.00
g. Street & Drive Restoration	300	SY	25.00	7,500.00
h. Service Connection w/Meter	61	EA	750.00	45,750.00
i. 8" DIP Class 52 Pipe & Fittings W/ Polywrap	2,900	LF	18.00	52,200.00
j. 8" DI Resilient Seated Gate Valves & Boxes (250 PSI)	4	EA	725.00	2,900.00
k. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H., Blocking & Necessary Extensions (250 PSI)	4	EA	1,975.00	7,900.00

	Quantity		Unit Price	Total
1. Restoration General	12,900	LF	1.50	<u>19,350.00</u>
	Sub-Total		\$	323,100.00

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Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

	Quantity		Unit Price	Total
Hemphling Road				
(First 2.1 Miles)				
a. 8" C-900 Pipe and Fittings	11,090	LF	15.50	171,895.00
b. 8" X 8" X 6" Ductile Iron Anch. Tees & Blocks	18	EA	230.00	4,140.00
c. 8" X 8" X 8" Ductile Iron Tees & Blocks	1	EA	250.00	250.00
d. 8" C.I. Pipe Plugs	1	EA	150.00	150.00
e. 8" C.I. Resilient Seated Gate Valves & Boxes	10	EA	525.00	5,250.00
f. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H. Blocking & Necessary Extensions	18	EA	1425.00	25,650.00
g. Street & Drive Restoration	300	SY	25.00	7,500.00
h. Service Connection w/Meter	39	EA	750.00	29,250.00
i. Restoration General	11,090	LF	1.50	16,635.00
	Sub-Total		\$	260,720.00

4/4/96
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Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

	Quantity		Unit Price	Total
Spillman Road				
a. 8" C-900 Pipe and Fittings	5,280	LF	15.50	81,840.00
b. 8" X 8" X 6" Ductile Iron Anch. Tees & Blocks	9	EA	230.00	2,070.00
c. 8" X 8" X 8" Ductile Iron Tees & Blocks	1	EA	250.00	250.00
d. 8" C.I. Pipe Plugs	1	EA	150.00	150.00
e. 8" C.I. Resilient Seated Gate Valves & Boxes	4	EA	525.00	2,100.00
f. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H. Blocking & Necessary Extensions	9	EA	1425.00	12,825.00
g. Street & Drive Restoration	250	SY	25.00	6,250.00
h. Service Connection w/Meter	26	EA	750.00	19,500.00
i. Restoration General	5,280	LF	1.50	7,920.00
	Sub-Total		\$	132,905.00

Rev. 7/7/95
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KY. REG. NO. 9209
KY. LAND SURVEYOR NO. 1781

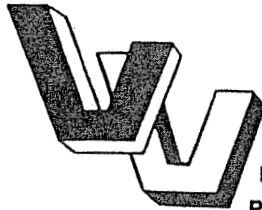
Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

	Quantity		Unit Price	Total
Rector Road (Subdistrict B To Kenton Station)				
a. 8" DIP Class 52 Pipe & Fittings W/ Polywrap	2,600	LF	18.00	46,800.00
b. 8" X 8" X 6" Ductile Iron Anch. Tees & Blocks	4	EA	230.00	920.00
c. 8" X 8" X 8" Ductile Iron Tees & Blocks	1	EA	250.00	250.00
d. 8" C.I. Pipe Plugs	1	EA	150.00	150.00
e. 8" D.I. Resilient Seated Gate Valves & Boxes (250 PSI)	4	EA	725.00	2,900.00
f. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H. Blocking & Necessary Extensions (250 PSI)	4	EA	1975.00	7,900.00
g. Street & Drive Restoration	75	SY	25.00	1,875.00
h. Service Connection w/Meter	8	EA	750.00	6,000.00
i. Restoration General	2,600	LF	1.50	<u>3,900.00</u>
	Sub-Total		\$	70,695.00

Rev. 4/4/96
Rev. 4/10/96
Rev. 8/4/97

THE FOLLOWING PAGES ARE THE ENGINEER'S ESTIMATES FOR

1.)	MARTIN ROAD (RD Only)	\$ 85,104
2.)	COST OF THE UPGRADES	
	Madison Pike (KY 17)	
	16" Gleason Rd. To Ky.14	\$302,365
	12" Ky.14 to County line	\$322,585
	Green Road (to 12")	\$433,030
	U.S.25 (to 12")	\$229,315
	Staffordsburg Road (to 12")	\$175,360



VIOX & VIOX, INC.

CONSULTING ENGINEERS & SURVEYORS

466 ERLANGER ROAD
ERLANGER, KENTUCKY 41018
PHONE: (606) 727-3293

JAMES H. VIOX, III P.E.
KY. REG. NO. 6880
KY. LAND SURVEYOR NO. 797

WILLIAM R. VIOX, P.E.
KY. REG. NO. 9209
KY. LAND SURVEYOR NO. 1781

Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

	Quantity		Unit Price	Total
Martin Road (Subdistrict B To Staffordsburg Road)				
a. 8" DIP Class 52 Pipe & Fittings W/ Polywrap	2,450	LF	18.00	44,100.00
b. 8" X 8" X 6" Ductile Iron Anch. Tees & Blocks	4	EA	230.00	920.00
c. 8" X 8" X 8" Ductile Iron Tees & Blocks	2	EA	250.00	500.00
d. 8" C.I. Pipe Plugs	2	EA	200.00	400.00
e. 8" D.I. Resilient Seated Gate Valves & Boxes (250 PSI)	4	EA	725.00	2,900.00
f. F.H. Assembly, Incl. 6" D.I. Resilient Seated Gate Valve & Valve Box, 6" D.I. Anchor Pipe, F.H. Blocking & Necessary Extensions (250 PSI)	4	EA	1975.00	7,900.00
g. Street & Drive Restoration	100	SY	25.00	2,500.00
h. Service Connection w/Meter	8	EA	750.00	6,000.00
i. Concrete Encasement	150	LF	50.00	7,500.00
j. Restoration General	2,450	LF	1.50	<u>3,675.00</u>
	Sub-Total		\$	76,395.00

Rev. 4/4/96
Rev. 4/10/96
Rev. 8/4/97



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Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

<u>Street</u>	<u>Estimated Construction Cost</u>
1a) Ky. 17 (Cost to upgrade to 16" Gleason to Ky. 14)	\$ 302,365.00
1b) Ky 17 (Cost to upgrade to 12" Ky 14 to County Line	\$ 322,585.00
2) Green Road (Cost to upgrade to 12")	\$ 433,030.00
3) US 25 (Cost to upgrade to 12")	\$ 229,315.00
4) Staffordsburg Rd. (Cost to upgrade to 12")	\$ <u>175,360.00</u>
Total	\$ 1,462,655.00

Rev. 6/23/95
Rev. 4/4/96



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Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

	Quantity		Unit Price	Total
16" Upgrade				
1a) Gleason To				
Ky. 14				
a. 16" Ductile-Iron				
Pipe Cl. 52 &				
Fittings W/	6,000	LF	27.00	162,000.00
Polywrap	2,700	LF	34.50	93,150.00
b. 16" X 16" X 6"				
Ductile Iron Anch.				
Tees & Blocks	17	EA	620.00	10,540.00
c. 16" X 16" X 8"				
Ductile Iron				
Tees & Blocks	2	EA	700.00	1,400.00
d. 16" C.I. Pipe Plugs	1	EA	450.00	450.00
e. 16" Ductile-Iron				
Butterfly Valves				
& Boxes	11	EA	1975.00	21,725.00
f. 16" D.I. Butterfly				
Valves & Boxes				
(250 PSI)	3	EA	3275.00	<u>13,100.00</u>
	Sub-Total		\$	302,365.00

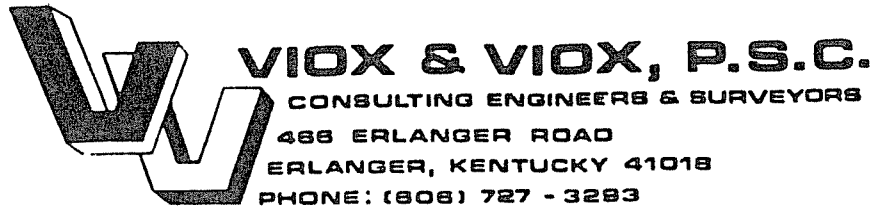


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Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

	Quantity		Unit Price	Total
2b) Green Road				
(Upgrade To 12")				
a. 12" Ductile-Iron				
Pipe Cl. 52 &				
Fittings W/	26,300	LF	14.50	381,350.00
Polywrap	3,800	LF	7.00	26,600.00
b. 12" X 12" X 6"				
Ductile Iron Anch.				
Tees & Blocks	64	EA	170.00	10,880.00
c. 12" X 12" X 8"				
Ductile Iron				
Tees & Blocks	4	EA	175.00	700.00
d. 12" C.I. Pipe Plugs	2	EA	100.00	200.00
e. 12" C.I. Resilient				
Seated Gate Valves				
& Boxes	25	EA	475.00	11,875.00
f. 12" D.I. Resilient				
Seated Gate Valves				
& Boxes (250 PSI)	3	EA	475.00	<u>1,425.00</u>
	Sub-Total		\$	433,030.00

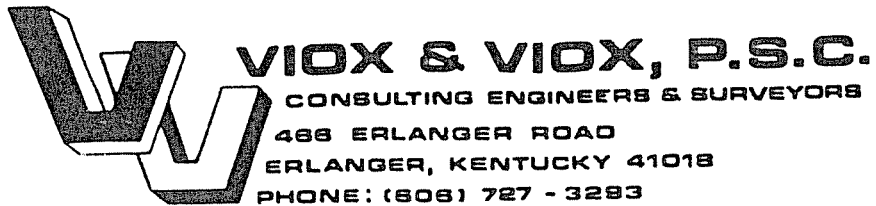


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Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

	Quantity		Unit Price	Total
3b) Upgrade To 12" U.S. 25 (Walton To Ky. 14)				
a. 12" Ductile-Iron Pipe Cl. 52 & Fittings W/ Polywrap	15,000	LF	14.50	217,500.00
b. 12" X 12" X 6" Ductile Iron Anch. Tees & Blocks	32	EA	170.00	5,440.00
c. 12" X 12" X 8" Ductile Iron Tees & Blocks	3	EA	175.00	525.00
d. 12" C.I. Pipe Plugs	2	EA	75.00	150.00
e. 12" C.I. Resilient Seated Gate Valves & Boxes	12	EA	475.00	5,700.00
	Sub-Total		\$	229,315.00



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 KY. LAND SURVEYOR NO. 1781

Public Facilities
Southern Kenton County Water Lines
Detailed Preliminary Cost Estimate
Sub-District "C"

	Quantity		Unit Price	Total
4b) Upgrade To 12" Staffordsburg Rd				
a. 12" Ductile-Iron Pipe Cl. 52 & Fittings W/ Polywrap	2,900	LF	7.00	20,300.00
	10,000	LF	14.50	145,000.00
b. 12" X 12" X 6" Ductile Iron Anch. Tees & Blocks	28	EA	170.00	4,760.00
c. 12" X 12" X 8" Ductile Iron Tees & Blocks	2	EA	175.00	350.00
d. 12" C.I. Pipe Plugs	2	EA	100.00	200.00
e. 12" C.I. Resilient Seated Gate Valves & Boxes	6	EA	475.00	2,850.00
f. 12" D.I. Resilient Seated Gate Valves Boxes (250 PSI)	4	EA	475.00	1,900.00
	Sub-Total		\$	175,360.00

IV. PROJECT OVERVIEW

PROJECT NEED

1. When was plant and/or system which serves the proposed project originally constructed? Fort Thomas - 1936 and Taylor Mill - 1954 (plants are owned by Northern Kentucky Water Service District)

<u>List Major Improvements, if any</u>	<u>Year Completed</u>	<u>Funding Used</u>	<u>Approximate Cost</u>
<u>Ft. Thomas WTP Modifications</u>	<u>1981 & 1988</u>	<u>Bond Issue</u>	<u>\$ 9,000,000</u>
<u>Taylor Mill WTP Modifications</u>	<u>1964 & 1988</u>	<u>Bond Issue</u>	<u>\$ 6,000,000</u>
			<u>\$</u>

2. If water is being hauling, provide an estimate of (does not apply to bottled water):

- a. Number of households affected 436
- b. Cost per load \$ 40
- c. Number of gallons per load 2,000 avg.
- d. Number of loads used per month 2 avg.
- e. Cost per 4,000 gallons \$ 80

3. List areas within proposed project to be served (i.e. names of roads, communities, neighborhoods) as indicated on maps (Attach additional page if necessary, using same format).

Use corresponding area letters as needed for questions 4, 5, 6, 7, 8, and effectiveness question 5.

<u>Area</u>	<u>Road, Community or Neighborhood</u>	<u>Area</u>	<u>Road, Community or Neighborhood</u>
<u>a.</u>	<u>Staffordsburg Road</u>	<u>g.</u>	
<u>b.</u>	<u>Spillman Road</u>	<u>h.</u>	
<u>c.</u>	<u>Rector Road</u>	<u>i.</u>	
<u>d.</u>	<u>Hempfling Road</u>	<u>j.</u>	
<u>e.</u>	<u>US 25/Green Road</u>	<u>k.</u>	
<u>f.</u>	<u>Madison Pike (KY 17)</u>	<u>l.</u>	

4. List and briefly discuss problems or sickness and identify areas (Include reference to sources of documentation as listed under methodology) (Attach additional page if necessary, using same format):

<u>Area(s)</u>	<u>Type of Sickness or Problems *</u>	<u># of Cases</u>	<u>Documentation</u>
<u>a</u>	<u>stomach problems</u>	<u>3</u>	<u>resident survey</u>
<u>b</u>	<u>stomach problems</u>	<u>2</u>	<u>resident survey</u>
<u>c</u>	<u>stomach problems</u>	<u>1</u>	<u>resident survey</u>
<u>d</u>	<u>stomach problems</u>	<u>5</u>	<u>resident survey</u>
<u>e</u>	<u>stomach problems</u>	<u>19</u>	<u>resident survey</u>
<u>f</u>	<u>stomach problems</u>	<u>12</u>	<u>resident survey</u>
		<u>42 Total</u>	

* Resident Health Survey undertaken in June, 1996 & May -July, 1997 by Northern Ky. Water Service Dist.

IV. PROJECT OVERVIEW
(continued)

PROJECT NEED (continued)

5. Briefly describe areas with pressure problems and reference documentation as listed under methodology. (Examples: dates hydraulic studies were conducted and conclusions, frequency and duration of pressure problems, actions taken to date to correct problems, public comments/complaints.)

The area to be served by this project does not currently have public water service available; pressure problems are not applicable. The project has been sized appropriately to adequately serve the area and pressure. The NKWSD area is a very difficult area to service as pressure fluctuates as a result of the changes in topography from 450 ft elevation at the Ohio River to 500 ft. elevations in the valley and 900+ elevations on the ridges; a difference of 450 ft. which generates a pressure change of over 250 pounds. The pressure is the reason the NKWSD uses ductile iron in certain areas instead of PVC; the standard 150 class PVC rating is exceeded. Good engineering practices do not allow use of PVC with pressures of over 150 pounds.

6. Briefly discuss areas with I&I problems and reference documentation as listed under methodology. (Examples: dates studies were conducted and conclusions, actions taken to date to correct problems, flow data.)

Not Applicable

7. For water samples/tests, provide the following information and briefly discuss on the following page the level of contamination of water supply for each area (Attach additional pages as necessary using same format) :

Area	Type of Test Taken Within Last 3 Years	# of Tests Taken	# of Samples Contaminated	# of Well Tests	# of Cistern Tests	# of Spring Tests	# of Other Tests
a.	Coliform Plate	5	2	0	5	0	0
b.	Coliform Plate	5	5 (2*)	0	5	0	0
c.	Coliform Plate	2	2 (2*)	0	2	0	0
d.	Coliform Plate	13	10 (4*)	0	13	0	0
e.	Coliform Plate	38	27 (15*)	0	38	0	0
f.	Coliform Plate	23	19 (8*)	0	23	0	0
g.							
h.							
i.							
j.							
k.							
l.							
	Total	86	65 (31*)	0	86	0	0

* number of samples testing positive for E.Coli

**IV. PROJECT OVERVIEW
(continued)**

PROJECT NEED (continued)

7. (continued) Briefly discuss level of contamination of water supply (Include type of contamination, etc.) for tests indicated above:

Random water tests were conducted on project area cisterns in July 1996 and July & August 1997, on behalf of the Northern Kentucky Water Service District. The total coliform membrane filtration tests revealed that 65 of the 86 tests (or 75.6%) were positive for total coliform which is an indicator that conditions are acceptable for pathogenic organisms to be present. Pathogenic organisms are "disease causing" which are capable of causing hepatitis, dysentery, diarrhea, and internal parasites. Of the 86 tests, 74 were tested for e.Coli and 31 or 42.9% of the 74 tested positive, indicating infiltration of fecal matter into these cisterns. Only 6 of the total 86 tests taken were determined to be "drinkable" water. The samples were collected randomly by staff of Will Linder and Associates and the Northern Kentucky Water Service District and tested at the lab of the Northern Kentucky Water Service District. The Northern Kentucky Water Service District is one of two State certified labs in the area; they maintain a State Bacteriological Analysis Certification (#00003).

Household surveys revealed that 42 of 348 (12%) of the households surveyed reported stomach problems over the past fourteen months, which could be directly linked to the same type of bacteria found in the cisterns. This number may be low as the majority of households drink bottled water.

8. Briefly discuss level of contamination in regard to sewage problems by area (Include source, type of problem, test results or studies conducted, etc.) for tests shown above:

According to conversations with the Northern Kentucky District Health Department (NKDHD), groundwater wells are not used by most households for fear of contamination from poorly operating/failing septic tanks. This is confirmed with only 4 households with wells reported by the surveys conducted on 348 households. However, improperly sealed, improperly maintained cisterns, and cisterns that have cracks can allow contaminated groundwater to flow into the cisterns as evidenced by the 31 positive e.Coli tests of the total 86 water samples (36%) taken in the past 14 months. The Northern Ky. District Health Dept. has stated a standard 50% contamination in cistern tests in their service area. There are no public sewers in this area and families must rely on septic systems; the only way to ensure safe, clean drinking water is to install public water lines or continue to utilize bottled water.

9. Identify current sanctions and attach copy(ies): **NOT APPLICABLE**

	<u>Date Imposed</u>	<u>Fines Levied to Date</u>	<u>Final Compliance Date</u>
Administrative Order	n/a		
Agreed Order	n/a	\$	
Tap-On Ban	n/a	\$	
Line Extension Ban	n/a	\$	
Others (Explain)		\$	
		\$	

IV. PROJECT OVERVIEW
(continued)

A. PROJECT NEED (continued)

10. Briefly summarize other needs in the space provided. **Additional pages are not allowed.**

Description of Need:

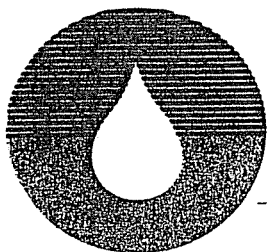
The residents in the proposed area rely on cisterns for their water supply. The residents' cisterns are most often tied into the home guttering, but must also be filled by water hauled during dry weather or if the roof surface does not provide enough water to meet their demand. As evidenced by the household surveys where 96% of the households reported using cisterns, 3% used other sources such as bottled water, and only 1% used wells, groundwater is not normally used due to the probability of contamination from septic systems. The area soil is in the Eden and Cynthiana soil associations, both of which have septic tank absorption fields classified as "severe" with little or no percolation; it allows it to perc, but does not allow the liquid to leach well. Groundwater in the area also has poor quality due to the high sulfur content, and there is insufficient quantity to meet household needs.

Water sampling on cisterns in Kenton County has been for coliform bacteria only. The results of sampling evidenced by the Northern Kentucky District Health Department during the past several years has yielded a standard of 50% contamination indicating the presence of coliform bacteria. In the 86 water samples taken by staff of Will Linder and Associates and the Northern Kentucky Water Service District over the past 14 months, 75.6% (65 of 86) showed contamination with 36% (31 of 86) tested positive for e.Coli bacteria. The tests were done by the Northern Kentucky Water Service District water lab, one of two State certified labs in the Northern Kentucky area; the other is Cardinal Lab. The tests were total coliform membrane filtration tests; an indicator test that conditions are right for pathogenic organisms to be present. Pathogenic organisms are disease causing organisms. With the testing done on the cistern water in the project area, the quality of the water in the cisterns is certainly doubtful. The e.Coli bacteria show evidence of contamination by sewage.

Another concern for these families is the quantity; having enough water to drink, cook, bathe, do laundry, and flushing toilets. Through discussions with the Northern Kentucky Water Service District, there are only 2 major haulers in the area (hauling 750,000 to 100,000 per day) with 3 others on a small scale; only 2 making "emergency" deliveries on the weekends. The cost of a load of water averages \$40 each load and contains an average of 2,000 gallons. Most families required an average of two loads each month per information from the haulers. In these instances, water bills are \$80 per month for water which, after a short time period, can test positive for coliform bacteria as evidenced by the water samples listed above.

Inadequate fire protection in the area results in an increased cost for homeowners insurance. The insurance premium for a \$50,000 brick home in the project area would be \$367/year; with adequate water service and installation of fire hydrants, the fire department class would upgrade and the insurance premium would decrease to approximately \$189 (50% reduction). This project would provide a much needed reduction in homeowners insurance costs to the LMI households in the area which alone could offset as much as 60% of the \$24.90 surcharge (\$367-\$189=\$178 savings \$178/12 months = \$14.83 which is 60% of the \$24.90 surcharge).

Also a factor in the need of the project is the growth the area is anticipating in the coming years. The Kentucky State Data Center states that from 1990 to 1995, the state population increased by 173,000 persons or 5%. During the entire previous decade, Kentucky grew demographically by less than 1%. Much of the growth has been located in the peripheral counties of the Louisville, Lexington, and Northern Kentucky metropolitan areas. These suburban areas attracted newcomers



Northern Kentucky Water Service District

February 19, 1999

Mr. Jim Dryer
604 Mary Ingles Highway
Silvergrove, Kentucky 41085

Re: Water Main Extension along Mary Ingles Highway; Silvergrove, Campbell Co., Ky.

Dear Mr. Dryer,

Attached is a "Water Main Extension Agreement" which needs to be filled out and signed by each participating property owner. Payment will also need to be made at this time. Based on the preliminary cost estimate of \$9,746 x 15% (Eng. and Contingencies) = \$11,207.90 estimated project cost. Average cost per foot is \$36.15 which means the District will contribute approx. \$5,422.50 based on 3 property owners participating. The remaining \$5,785.40 will need to be divided by the 3 participating property owners, payment of \$1,928.47 each will need to be made or one check covering the entire amount will need to be submitted to the District. Checks need to be made out to the Northern Kentucky Water Service District. Copies of the final executed agreement will be return to you for your files.

Should you have any questions or need additional information, feel free to contact this office at 578-7890.

Sincerely,

John Scheben, Jr.
Engineering Technician

Cc:file
attachment

**WATER MAIN EXTENSION AGREEMENT
FOR APPLICANT AT TIME OF EXTENSION CONSTRUCTION**

This Agreement is made and entered into this 28th day of February, 1999, by and between Dorothy Ellison, who resides at 604 Mary Ingle Hwy, Cold Spring, Ky., hereinafter referred to as "Customer," and the Northern Kentucky Water Service District, hereinafter referred to as the "District."

WHEREAS, Customer desires to participate in the construction of a water main extension pursuant to the District's Rates, Rules and Regulations; and

WHEREAS, the District desires to facilitate Customer's participation in the construction of the water main extension;

NOW, THEREFORE, Customer and the District hereby agree as follows:

1. Customer agrees to participate in the construction of a water main extension along 604 Mary Ingle Hwy, Cold Spring in accordance with the District's Rates, Rules and Regulations. The District shall determine the total cost (exclusive of the meter connection costs) and the total length of the water main extension and agrees to pay that portion of the total cost equal to fifty (50) feet for each applicant for service to the extension at the time of construction and for a period of five years after the extension is placed in service.
2. Customer understands that the total cost of the extension not covered by the District's contribution shall be paid, in equal shares, by all applicants desiring service on the extension at the time of construction and for a period of five years after the extension is placed in service. Customer agrees to pay its estimated contribution and actual share for the construction of the extension as outlined in paragraph 3 below. Customer also agrees to pay the District's approved "tap-on-fee" for a meter connection to the water main extension.
3. Based on the estimated costs for the water main extension, Customer's estimated contribution will be \$1,928.47. Customer agrees to pay this amount to the District by March 19, 1999. In consideration of Customer's payment of this amount, the District will proceed with the water main extension. After the extension is completed, the actual cost of the project will be determined. Customer agrees to pay to the District, within thirty (30) days after receiving written notification, any amount by which its actual share of the cost of the extension exceeds its estimated contribution. The District shall refund to Customer any amount by which Customer's estimated contribution exceeds its actual share of the cost.
4. For a period of five years after the water main extension is placed in service, each new applicant for connection to the water main extension (but not to laterals or extensions therefrom) will be required to contribute to the cost of the extension based on a recomputation of the District's portion and each customer's/applicant's share of the actual cost. Each year, the District will refund to those customers/applicants that have previously contributed to the cost of the extension

that amount necessary to reduce their contribution to the currently calculated amount for each customer/applicant on the extension.

5. Customer shall keep the District informed at all times of its current address using the District's "Change of Address" form. Any refunds will be sent to the most current address provided by Customer.

6. Following the expiration of five years after the water main extension is placed in service, each new applicant for service on the extension will only be required to pay the District's "tap-on-fee."

ENTERED into the date first above written.

CUSTOMER

NORTHERN KENTUCKY WATER
SERVICE DISTRICT

Signature: Donna V. Ellison

Signature: D. Williams

Printed Name: DONNA V. ELLISON

Printed Name: _____

Address: 604 Mayfield Hwy,
Cold Spring KY. 41026

Title: _____

water\mainext.agr

RECEIVED

WATER MAIN EXTENSION AGREEMENT
FOR APPLICANT AT TIME OF EXTENSION CONSTRUCTION

MAR 02 REC'D

ENGR.

This Agreement is made and entered into this 28th day of February, 1999, by and between Benjamin J. Ellison, who resides at 4437 Indian Trace Rd. Alexandria, Ky. hereinafter referred to as "Customer," and the Northern Kentucky Water Service District, hereinafter referred to as the "District."

WHEREAS, Customer desires to participate in the construction of a water main extension pursuant to the District's Rates, Rules and Regulations; and

WHEREAS, the District desires to facilitate Customer's participation in the construction of the water main extension;

NOW, THEREFORE, Customer and the District hereby agree as follows:

1. Customer agrees to participate in the construction of a water main extension along 600 Mary Fugh New Cold Spring in accordance with the District's Rates, Rules and Regulations. The District shall determine the total cost (exclusive of the meter connection costs) and the total length of the water main extension and agrees to pay that portion of the total cost equal to fifty (50) feet for each applicant for service to the extension at the time of construction and for a period of five years after the extension is placed in service.

2. Customer understands that the total cost of the extension not covered by the District's contribution shall be paid, in equal shares, by all applicants desiring service on the extension at the time of construction and for a period of five years after the extension is placed in service. Customer agrees to pay its estimated contribution and actual share for the construction of the extension as outlined in paragraph 3 below. Customer also agrees to pay the District's approved "tap-on-fee" for a meter connection to the water main extension.

3. Based on the estimated costs for the water main extension, Customer's estimated contribution will be \$1,928.47. Customer agrees to pay this amount to the District by March 19, 1999. In consideration of Customer's payment of this amount, the District will proceed with the water main extension. After the extension is completed, the actual cost of the project will be determined. Customer agrees to pay to the District, within thirty (30) days after receiving written notification, any amount by which its actual share of the cost of the extension exceeds its estimated contribution. The District shall refund to Customer any amount by which Customer's estimated contribution exceeds its actual share of the cost.

4. For a period of five years after the water main extension is placed in service, each new applicant for connection to the water main extension (but not to laterals or extensions therefrom) will be required to contribute to the cost of the extension based on a recomputation of the District's portion and each customer's/applicant's share of the actual cost. Each year, the District will refund to those customers/applicants that have previously contributed to the cost of the extension

that amount necessary to reduce their contribution to the currently calculated amount for each customer/applicant on the extension.

5. Customer shall keep the District informed at all times of its current address using the District's "Change of Address" form. Any refunds will be sent to the most current address provided by Customer.

6. Following the expiration of five years after the water main extension is placed in service, each new applicant for service on the extension will only be required to pay the District's "tap-on-fee."

ENTERED into the date first above written.

CUSTOMER

NORTHERN KENTUCKY WATER
SERVICE DISTRICT

Signature: Benjamin J. Ellison

Signature: D.H. Williams

Printed Name: BENJAMIN J. ELLISON

Printed Name: _____

Address: 4437 FAWN TR DR

Title: _____

ALEXANDRIA KY 4001

water/mainext.agr

**WATER MAIN EXTENSION AGREEMENT
FOR APPLICANT AT TIME OF EXTENSION CONSTRUCTION**

This Agreement is made and entered into this 28th day of February, 1999, by and between Jim & Cathy Dreyer, who resides at 170 Cobble Cr. Elmore, Ky. 41018, hereinafter referred to as "Customer," and the Northern Kentucky Water Service District, hereinafter referred to as the "District."

WHEREAS, Customer desires to participate in the construction of a water main extension pursuant to the District's Rates, Rules and Regulations; and

WHEREAS, the District desires to facilitate Customer's participation in the construction of the water main extension;

NOW, THEREFORE, Customer and the District hereby agree as follows:

1. Customer agrees to participate in the construction of a water main extension along 604 Mary Ingle, Hwy. 101, Elmore in accordance with the District's Rates, Rules and Regulations. The District shall determine the total cost (exclusive of the meter connection costs) and the total length of the water main extension and agrees to pay that portion of the total cost equal to fifty (50) feet for each applicant for service to the extension at the time of construction and for a period of five years after the extension is placed in service.

2. Customer understands that the total cost of the extension not covered by the District's contribution shall be paid, in equal shares, by all applicants desiring service on the extension at the time of construction and for a period of five years after the extension is placed in service. Customer agrees to pay its estimated contribution and actual share for the construction of the extension as outlined in paragraph 3 below. Customer also agrees to pay the District's approved "tap-on-fee" for a meter connection to the water main extension.

3. Based on the estimated costs for the water main extension, Customer's estimated contribution will be \$1,928.47. Customer agrees to pay this amount to the District by March 19, 1999. In consideration of Customer's payment of this amount, the District will proceed with the water main extension. After the extension is completed, the actual cost of the project will be determined. Customer agrees to pay to the District, within thirty (30) days after receiving written notification, any amount by which its actual share of the cost of the extension exceeds its estimated contribution. The District shall refund to Customer any amount by which Customer's estimated contribution exceeds its actual share of the cost.

4. For a period of five years after the water main extension is placed in service, each new applicant for connection to the water main extension (but not to laterals or extensions therefrom) will be required to contribute to the cost of the extension based on a recomputation of the District's portion and each customer's/applicant's share of the actual cost. Each year, the District will refund to those customers/applicants that have previously contributed to the cost of the extension

that amount necessary to reduce their contribution to the currently calculated amount for each customer/applicant on the extension.

5. Customer shall keep the District informed at all times of its current address using the District's "Change of Address" form. Any refunds will be sent to the most current address provided by Customer.

6. Following the expiration of five years after the water main extension is placed in service, each new applicant for service on the extension will only be required to pay the District's "tap-on-fee."

ENTERED into the date first above written.

CUSTOMER

NORTHERN KENTUCKY WATER
SERVICE DISTRICT

Signature:

Printed Name:

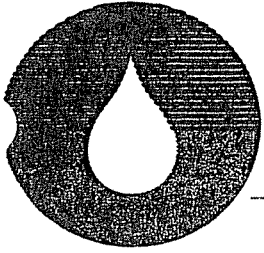
Address:

Signature:

Printed Name:

Title:

watermainext.agr



Northern Kentucky Water Service District

June 24, 1999

Mr. Billy Johnson
3354 Steep Creek Road
Independence, Kentucky 41051

Re: Water Main Extension along Steep Creek Road; Independence, Kenton County, Kentucky

Dear Mr. Johnson,

I apologize for the delay in getting back with you for your request for a water main extension cost estimate along Steep Creek Road from Marshall Road to 3382 Steep Creek Road. A "ball park" estimate based on a 3,100 linear feet of 8" water main, including fire hydrants, would cost somewhere in the neighborhood of \$78,200.00. This estimate does not include tap fee of \$750.00 for each customer and the service line extension from the house to the meter setting.

There are several different ways to finance this proposed project. This project could be added to the existing "Sub-District A" along Marshall Road. The difference from the remaining surcharge could be added to the cost of the project. The remaining project difference would have to be paid by those connecting to the public water main. Another method for water main extension allows the District to pay for 50 feet of water main extension for every new customer connected to the extension. Under this policy, if there would be 7 customers, then the approximate cost per customer would be \$9,910 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction. An alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this would limit the involvement of the District.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with their addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contracted by the District to prepare an engineer's construction estimate to firm up project cost. Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely yours,

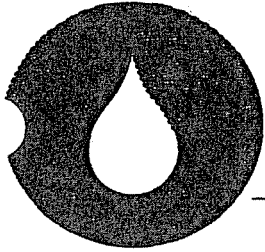
John Scheben, Jr.
Engineering Technician

cc:file

Steep Creek Road proposed 8" water main extension ---- Cost Estimate

ITEM	QUANTITY	UNIT COST	TOTAL COST
8" C-900 Pipe & Fittings	3100	LF	18.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA	600.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	6	EA	400.00
Fire Hydrant Assembly	6	EA	1,200.00
Gravel Driveway Restoration	20	SY	25.00
Restoration	1	LS	1,500.00
Sub-Total			\$68,000.00
15% Conting. (Eng., Etc.)			10,200.00
Total Cost			\$78,200.00

Average Cost/foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$25.23	\$1,261.29	1	\$76,938.71	\$76,938.71
		2	\$75,677.42	\$37,838.71
		3	\$74,416.13	\$24,805.38
		4	\$73,154.84	\$18,288.71
		5	\$71,893.55	\$14,378.71
		6	\$70,632.26	\$11,772.04
		7	\$69,370.97	\$9,910.14
		8	\$68,109.68	\$8,513.71
		9	\$66,848.39	\$7,427.60
		10	\$65,587.10	\$6,558.71



Northern Kentucky Water Service District

July 12, 1999

Mr & Mrs. Barr Manter
13681 Trace Run Road
Independence, Kentucky 41051

Re: Water Main Extension along Trace Run Road; Independence, Kenton County, Kentucky

Dear Mr. & Mrs. Manter

I apologize for the delay in getting back with you for your request for a water main extension cost estimate along Trace Run Road from Moffett Road to dead-end. A "ball park" estimated based on a 4,200 linear feet of 8" water main, including fire hydrants, would cost somewhere in the neighborhood of \$104,972.00. This estimate does not include tap fee of \$750.00 for each customer and the service line extension from the house to the meter setting.

There are several different ways to finance this proposed project. This project could be added to the existing "Sub-District B" Water Main Project along Moffett Road. The difference from the remaining surcharge could be added to the cost of the project. The remaining project difference would have to be paid by those connecting to the public water main. Another method for water main extension allows the District to pay for 50 feet of water main extension (approx. \$25/ft) for every new customer connected to the extension. Under this policy, if there would be 8 customers, then the approximate cost per customer would be \$11,871.83 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction. Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this would limit the involvement of the District.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, an Kentucky Registered Engineer will be contracted by the District to prepare a engineer's construction estimate to firm up project cost. Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely yours,

John Scheben, Jr.
Engineering Technician

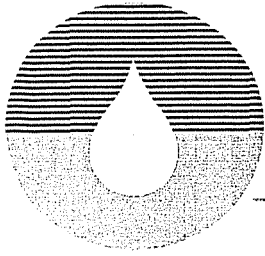
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Trace Run Road proposed 8" water main extension --- Cost Estimate

ITEM	QUANTITY	TOTAL UNIT COST	COST
8" C-900 Pipe & Fittings	4200	18.00	\$75,600.00
8" Cast Iron Res. Seated Gate Valve & Box	1	600.00	\$600.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	8	400.00	\$3,200.00
Fire Hydrant Assembly	8	1,200.00	\$9,600.00
Driveway Restoration	8	35.00	\$280.00
Restoration	1	2,000.00	\$2,000.00
Sub-Total			\$91,280.00
15% Conting. (Eng., Etc.)			13,692.00
Total Cost			\$104,972.00

Average Cost/Foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$24.99	\$1,249.67	1	\$103,722.33	###-##-###
		2	\$102,472.67	\$51,236.33
		3	\$101,223.00	\$33,741.00
		4	\$99,973.33	\$24,993.33
		5	\$98,723.67	\$19,744.73
		6	\$97,474.00	\$16,245.67
		7	\$96,224.33	\$13,746.33
		8	\$94,974.67	\$11,871.83
		9	\$93,725.00	\$10,413.89
		10	\$92,475.33	\$9,247.53

11
2/14/99



Northern Kentucky
Water Service District

August 30, 1999

Mr Tom Fry
4924 Oliver Road
Independence, Kentucky 41051

Copy

Re: Water Main Extension along Oliver Road; Independence, Kenton County, Kentucky

Dear Mr. Fry,

The Water District has reviewed your request for a water main extension cost estimate along Oliver Road. The District looked at extending from Harris Pike and from McCullum. A "ball park" estimated based on a 3,300 linear feet, from McCullum to your residence, of 8" water main, including fire hydrants, would cost in the neighborhood of \$117,719.75. A "ball park" estimated based on a 3,500 linear feet, from Harris Pike to your residence, of 8" water main, including fire hydrants, would cost in the neighborhood of \$121,532.00. These estimates do not include tap fees of \$750.00 for each customer and the service line extension from the house to the meter setting.

Under the District's Line Extension Policy, the District pays for 50 feet of water main extension (approx. \$35/ft) for every new customer connected to the extension. Under this policy, if there would be 13 customers, then the approximate cost per customer would be \$7,271.73, based on the ball park estimate for McCullum to your residence. Any additional customers would reduce the cost to each customer for a period of five years after construction. Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this would limit the involvement of the District.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, an Kentucky Registered Engineer will be contracted by the District to prepare a engineer's construction estimate to firm up project cost. Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely yours,

John Scheben, Jr.
Engineering Technician

cc:file

Oliver Road proposed 8" water main extension ---- Cost Estimate
 From Harris to 4924 Oliver Road

ITEM	QUANTITY	UNIT	TOTAL COST	COST
8" DI Pipe & Fittings	3500	LF	25.00	\$87,500.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA	600.00	\$600.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	8	EA	300.00	\$2,400.00
Fire Hydrant Assembly	8	EA	1,200.00	\$9,600.00
Driveway Restoration	36	SY	30.00	\$1,080.00
Restoration	1	LS	4,500.00	\$4,500.00
Sub-Total				\$105,680.00
15% Conting. (Eng., Etc.)				15,852.00
Total Cost				\$121,532.00

Average Cost/Foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$34.72	\$1,736.17	1	\$119,795.83	#####
		2	\$118,059.66	\$59,029.83
		3	\$116,323.49	\$38,774.50
		4	\$114,587.31	\$28,646.83
		5	\$112,851.14	\$22,570.23
		6	\$111,114.97	\$18,519.16
		7	\$109,378.80	\$15,625.54
		8	\$107,642.63	\$13,455.33
		9	\$105,906.46	\$11,767.38
		10	\$104,170.29	\$10,417.03
		11	\$102,434.11	\$9,312.19
		12	\$100,697.94	\$8,391.50
		13	\$98,961.77	\$7,612.44
		14	\$97,225.60	\$6,944.69
		15	\$95,489.43	\$6,365.96
		16	\$93,753.26	\$5,859.58
		17	\$92,017.09	\$5,412.77
		18	\$90,280.91	\$5,015.61
		19	\$88,544.74	\$4,660.25
		20	\$86,808.57	\$4,340.43

Oliver Road proposed 8" water main extension --- Cost Estimate

From McCullium to Harris

ITEM	QUANTITY		TOTAL UNIT COST	COST
8" DI Pipe & Fittings	6800	LF	25.00	\$170,000.00
8" Cast Iron Res. Seated Gate Valve & Box	4	EA	600.00	\$2,400.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	16	EA	300.00	\$4,800.00
Fire Hydrant Assembly	16	EA	1,200.00	\$19,200.00
8"x8"x8" Ductile Iron Tee & Block	1	EA	325.00	\$325.00
Roadway Restoration	6	SY	40.00	\$240.00
Driveway Restoration	65	SY	30.00	\$1,950.00
Restoration	1	LS	8,500.00	\$8,500.00
Sub-Total				\$207,415.00
15% Conting. (Eng., Etc.)				31,112.25
Total Cost				\$238,527.25

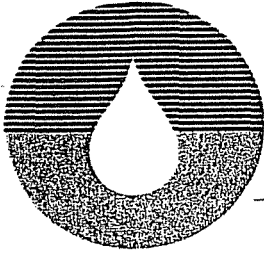
Average Cost/Foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$35.08	\$1,753.88	1	\$236,773.37	\$236,773.37
		2	\$235,019.50	\$117,509.75
		3	\$233,265.62	\$77,755.21
		4	\$231,511.74	\$57,877.94
		5	\$229,757.87	\$45,951.57
		6	\$228,003.99	\$38,000.66
		7	\$226,250.11	\$32,321.44
		8	\$224,496.24	\$28,062.03
		9	\$222,742.36	\$24,749.15
		10	\$220,988.48	\$22,098.85
		11	\$219,234.60	\$19,930.42
		12	\$217,480.73	\$18,123.39
		13	\$215,726.85	\$16,594.37
		14	\$213,972.97	\$15,283.78
		15	\$212,219.10	\$14,147.94
		16	\$210,465.22	\$13,154.08
		17	\$208,711.34	\$12,277.14
		18	\$206,957.47	\$11,497.64
		19	\$205,203.59	\$10,800.19
		20	\$203,449.71	\$10,172.49
		21	\$201,695.84	\$9,604.56
		22	\$199,941.96	\$9,088.27
		23	\$198,188.08	\$8,616.87
		24	\$196,434.21	\$8,184.76
		25	\$194,680.33	\$7,787.21
		26	\$192,926.45	\$7,420.25
		27	\$191,172.58	\$7,080.47
		28	\$189,418.70	\$6,764.95
		29	\$187,664.82	\$6,471.20
		30	\$185,910.94	\$6,197.03

Oliver Road proposed 8" water main extension --- Cost Estimate

From McCullum to 4924 Oliver Road

ITEM	QUANTITY	TOTAL UNIT COST	COST
8" DI Pipe & Fittings	3300	25.00	\$82,500.00
8" Cast Iron Res. Seated Gate Valve & Box	4	600.00	\$2,400.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	8	300.00	\$2,400.00
Fire Hydrant Assembly	8	1,200.00	\$9,600.00
8"x8"x8" Ductile Iron Tee & Block	1	325.00	\$325.00
Roadway Restoration	6	40.00	\$240.00
Driveway Restoration	30	30.00	\$900.00
Restoration	1	4,000.00	\$4,000.00
Sub-Total			\$102,365.00
15% Conting. (Eng., Etc.)			15,354.75
Total Cost			\$117,719.75

50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$1,783.63	1	\$115,936.12	###
	2	\$114,152.48	\$57,076.24
	3	\$112,368.85	\$37,456.28
	4	\$110,585.22	\$27,646.30
	5	\$108,801.59	\$21,760.32
	6	\$107,017.95	\$17,836.33
	7	\$105,234.32	\$15,033.47
	8	\$103,450.69	\$12,931.34
	9	\$101,667.06	\$11,296.34
	10	\$99,883.42	\$9,988.34
	11	\$98,099.79	\$8,918.16
	12	\$96,316.16	\$8,026.35
	13	\$94,532.53	\$7,271.73
	14	\$92,748.89	\$6,624.92
	15	\$90,965.26	\$6,064.35
	16	\$89,181.63	\$5,573.85
	17	\$87,398.00	\$5,141.06
	18	\$85,614.36	\$4,756.35
	19	\$83,830.73	\$4,412.14
	20	\$82,047.10	\$4,102.35



Northern Kentucky Water Service District

September 10, 1999

Mr. Jim Cline
3796 Steep Creek Road
Ryland Heights, Kentucky 41015

Re: Water Main Extension along Steep Creek Road; Ryland Heights, Kenton County, Kentucky

Dear Mr. Cline,

To follow-up our conversation, the District has reviewed your request for a water main extension cost estimate along Steep Creek Road from Decoursey Pike to 3796 Steep Creek Road. A "ball park" estimate based on a 3,994 linear feet of 8" water main, including fire hydrants, would cost somewhere in the neighborhood of \$135,527.50, approx. \$34/foot. This estimate does not include tap fee of \$750.00 for each customer and the service line extension from the house to the meter setting.

There are several different ways to finance this proposed project. This project could be added to the existing "Sub-District R" along Decoursey Pike. The difference from the remaining surcharge could be added to the cost of the project. The remaining project difference would have to be paid by those connecting to the public water main. Another method for water main extension allows the District to pay for 50 feet of water main extension for every new customer connected to the extension. Under this policy, if there would be 7 customers, then the approximate cost per customer would be \$17,664.43 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction. An alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this would limit the involvement of the District.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with their addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contracted by the District to prepare an engineer's construction estimate to firm up project cost. Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely yours,

John Scheben, Jr.
Engineering Technician

cc:file

Steep Creek Road proposed 8" water main extension ---- Cost Estimate

From Decoursey Pike End to 3796 Steep Creek Road

ITEM	QUANTITY	TOTAL UNIT COST	COST
8" Ductile Iron Pipe & Fittings	3994	LF 25.00	\$99,850.00
8" Cast Iron Res. Seated Gate Valve & Box	3	EA 600.00	\$1,800.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	8	EA 400.00	\$3,200.00
8"x8"x8" Ductile Iron Tee & Block	1	EA 300.00	\$300.00
Fire Hydrant Assembly	8	EA 1,200.00	\$9,600.00
Gravel Driveway Restoration	4	SY \$100.00	\$400.00
Restoration	1	LS 3,000.00	\$3,000.00
Sub-Total			\$117,850.00
15% Conting. (Eng., Etc.)			\$17,677.50
Total Cost			\$135,527.50

50' Participation District for each Customer	Amount by Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer ###.##
Average Cost/Foot \$33.93	\$1,696.64	1	\$133,830.86	\$66,067.11
		2	\$132,134.22	\$43,479.19
		3	\$130,437.58	\$32,185.24
		4	\$128,740.95	\$25,408.86
		5	\$127,044.31	\$20,891.28
		6	\$125,347.67	\$17,664.43
		7	\$123,651.03	\$15,244.30
		8	\$121,954.39	\$13,361.97
		9	\$120,257.75	\$11,856.11
		10	\$118,561.11	



Northern Kentucky
Water Service District

November 4, 1999

Ms. Rhonda Morrow
473 Courtney Road
Crittenden, Kentucky 41030

Re: Request for water main extension along Courtney Rd. & Eads Rd., Southern Kenton
Co., Ky

Dear Ms. Morrow,

The Northern Kentucky Water Service District has reviewed your petition from the residence along Courtney Rd. & Eads Rd. Funding for the current water main project going on in your area is about exhausted with the proposed additional water main extensions. The District will take your petition under consideration for future water main extension projects.

The Water District does have a Water Main Extension Policy where the District will participate with a water main extension by paying the cost of 50 feet for each customer that taps into the water main. The remaining project cost would be divided by the number of customers participating with the project which would be the cost to each customer. The District can work up a rough construction estimate if you are interested. This project will be somewhat costly, due to crossing the railroad and expressway.

Should you have any other questions or need additional information feel free to contact this office at 578-7890.

Sincerely,

John Scheben, Jr.
Engineering Technician

Cc:file

November 4, 1999

Ms. Rhonda Morrow
473 Courtney Road
Crittenden, Kentucky 41030

Re: Request for water main extension along Courtney Rd. & Eads Rd., Southern Kenton
Co., Ky

Dear Ms. Morrow,

The Northern Kentucky Water Service District has reviewed your petition from the residence along Courtney Rd. & Eads Rd. Funding for the current water main project going on in your area is about exhausted with the proposed additional water main extensions. The District will take your petition under consideration for future water main extension projects.

The Water District does have a Water Main Extension Policy where the District will participate with a water main extension by paying the cost of 50 feet for each customer that taps into the water main. The remaining project cost would be divided by the number of customers participating with the project which would be the cost to each customer. The District can work up a rough construction estimate if you are interested. This estimate will be somewhat costly due to crossing the railroad and expressway.

~~Another option is to check on the availability of getting water service from Bullock Pen Water District.~~ Should you have any other questions or need additional information feel free to contact this office at 578-7890.

Sincerely,

John Scheben, Jr.
Engineering Technician

Cc:file

*Richard,
Please Review
Thanks
John S.*

Eads Road & Courtney Rd. proposed 8" water main extension ---- Cost Estimate
 From U.S. 25 to County Line

ITEM	QUANTITY	UNIT	TOTAL COST	COST
8" DI Pipe & Fittings	550	LF	18.00	\$9,900.00
8" C-900 & Fittings	9600	LF	15.00	\$144,000.00
8" Cast Iron Res. Seated Gate Valve & Box	9	EA	600.00	\$5,400.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	20	EA	250.00	\$5,000.00
Fire Hydrant Assembly	20	EA	1,400.00	\$28,000.00
8"x8"x8" Ductile Iron Tee & Block	1	EA	325.00	\$325.00
1-75 Road Bore & Jack	300	LF	110.00	\$33,000.00
Railroad Bore & Jack	60	LF	110.00	\$6,600.00
Roadway Restoration	150	SY	40.00	\$6,000.00
Driveway Restoration	250	SY	30.00	\$7,500.00
Restoration	1	LS	10,000.00	\$10,000.00
Sub-Total				\$255,725.00
15% Conting. (Eng, Etc.)				38,358.75
Total Cost				\$294,083.75

50' Participation	Amount by	Customers	Total	Cost for each
Average	District for each	# of	Customer	Customer
Cost/Foot	Customer	connecting	Cost	Customer
		to main.		
\$28.97	\$1,448.69	1	\$292,635.06	\$292,635.06
		2	\$291,186.37	\$145,593.19
		3	\$289,737.68	\$96,579.23
		4	\$288,289.00	\$72,072.25
		5	\$286,840.31	\$57,368.06
		6	\$285,391.62	\$47,565.27
		7	\$283,942.93	\$40,563.28
		8	\$282,494.24	\$35,311.78
		9	\$281,045.55	\$31,227.28
		10	\$279,596.87	\$27,959.69
		11	\$278,148.18	\$25,286.20
		12	\$276,699.49	\$23,058.29
		13	\$275,250.80	\$21,173.14
		14	\$273,802.11	\$19,557.29
		15	\$272,353.42	\$18,156.89
		16	\$270,904.74	\$16,931.55
		17	\$269,456.05	\$15,850.36
		18	\$268,007.36	\$14,889.30
		19	\$266,558.67	\$14,029.40
		20	\$265,109.98	\$13,255.50
		21	\$263,661.29	\$12,555.30
		22	\$262,212.60	\$11,918.75
		23	\$260,763.92	\$11,337.56
		24	\$259,315.23	\$10,804.80
		25	\$257,866.54	\$10,314.66
		26	\$256,417.85	\$9,862.23
		27	\$254,969.16	\$9,443.30
		28	\$253,520.47	\$9,054.30
		29	\$252,071.79	\$8,692.13
		30	\$250,623.10	\$8,354.10

N.K.W.S.D.
EXHIBIT-C2
PAGE 1 OF 4

FINAL ENGINEERING REPORT



VIOX & VIOX, INC.
Consulting Engineers & Surveyors

**FINAL ENGINEERING REPORT
NORTHERN KENTUCKY WATER SERVICE DISTRICT
SUB-DISTRICT C WATER MAIN EXTENSION**

The bids received on March 12, 1999 included three projects that represent Sub-District C water main extensions on Green Road, US 25, Ky #17, Hempfling Road, Spillman Road, Staffordsburg Road, Martin Road and Rector Road. Estimates were prepared on 8/4/97 and updated on 3/1/99 for these projects. The following is a comparison of the construction cost portions estimated as compared to the bids received.

• Planning

<u>PROJECT</u>	<u>CONST. COST EST. 8/4/97</u>	<u>CONST. COST EST. 3/1/99</u>	<u>CONST. COST BID</u>
Phase I (Green Road & US 25)	\$1,732,230.00	\$1,770,600.00	\$1,486,579.00
Phase II (Ky #17, Hempfling Road & Spillman Road)	\$1,815,115.00	\$1,864,684.00	\$1,371,328.00
Phase III (Staffordsburg Road, Martin Road & Rector Road)	\$ 645,550.00	\$ 668,590.00	\$ 567,029.10
TOTAL PROJECT Construction Cost w/o Engineering, GeoTech, or Misc.	\$4,192,895.00	\$4,303,874.00	\$3,424,936.10

• Design

The total of the three bids (\$ 3,424,936.10) is less than the totals of the previous estimates prepared by our office.

• Surveying

Prepared By:
James H. Viox, III, P.E.

PRELIMINARY

PRELIMINARY NORTHERN KENTUCKY WATER SERVICE DISTRICT
MONTHLY WATER RATES FOR PROPOSED SUBDISTRICT C
(Subdistrict C Project)

ESTIMATED MONTHLY SURCHARGE OF \$30.00 IS INCLUDED
IN \$35.47 MONTHLY MINIMUM BILL

Monthly rates in cubic feet as follows:

First	200 cubic feet	35.47 monthly minimum bill
Next	1,300 cubic feet	1.73 per 100 cubic feet
Next	163,500 cubic feet	1.49 per 100 cubic feet
Over	163,500 cubic feet	.90 per 100 cubic feet

Monthly rates in gallons as follows:

First	1,496 gallons	35.47 monthly minimum bill
Next	9,724 gallons	2.31 per 1000 gallons = 22.46
Next	1,222,980 gallons	1.98 per 1000 gallons = 2421.50
Over	1,222,980 gallons	1.20 per 1000 gallons = 1467.58

Sample monthly bill amount as follows:

Estimated monthly usage of 4,000 gallons
Estimated monthly bill = \$39.24

Note: Actual bill will vary according to actual usage
measured

DATE: 3/18/99

SUBDISTRICT - C (Proposed)
 Revised to include free service lines
 for low to moderate income residents

STREET	DISTANCE MILES	TOTAL AVAIL. CUST	UST SIGN	CUST. PER/MI	EST. CONST.
Ph. 1 Green Road & U.S. 25	8.6	151	113	13.14	\$922,371
Cost to Upgrade to 12 in.	8.6	N/A	N/A	N/A	\$564,208
Ph. 2 Ky 17(Gleason to County Line) & Hemphling Rd (First 2.1 miles) & Spillman Rd	8.80	243	161	18.30	\$910,726
Cost to Upgrade to 12 in. & 16 in,	5.70	N/A	N/A	N/A	\$460,602
Ph. 3 Staffordsburg Rd.[Old Decoursey] (Ky 16 to Martin Road) Martin Road (Subdist. B to Staff. Rd) Rector Road (Subdist. B to Kent. St.)	3.50	85	56		\$414,291.1
Cost to Upgrade Staff. To 12 in.	2.40	N/A	N/A	N/A	\$152,738
	20.90	479	330	15.79	\$3,424,936.1
	20.90 miles		69%		

Cost Estimate:

Development	\$3,424,936.1
Land & Rights	\$10,000
Engineering	\$384,800
Legal & Administration	\$42,500
Interest	\$120,000
Contingencies	\$1,215,563.9
	<u>\$5,187,800</u>

Source of Funds:

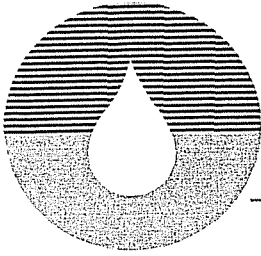
Community Development Block Grant	\$886,800
Tap-on Fees	\$76,000
Community Fund Raising	\$10,000
County Contribution	\$100,000
Upgrades (NKWSD Bond Issue)	\$1,828,000
Financed thru surcharge (FmHA Loan)	\$2,287,000
	<u>\$5,187,800</u>

Ar Hills proposed 8" water main extension --- Cost Estimate

ITEM	QUANTITY	TOTAL UNIT COST	COST
" C-900 & Fittings	470	20.00	\$9,400.00
" Cast Iron Res. Seated Gate Valve & Box	1	600.00	\$600.00
"x8"x6" Ductile Iron Anchoring Tee & Bloc	1	400.00	\$400.00
ire Hydrant Assembly	2	1,200.00	\$2,400.00
Travel Driveway Restoration	7	25.00	\$175.00
Restoration	1	1,500.00	\$1,500.00
Sub-Total			\$14,475.00
5% Conting. (Eng., Etc.)			\$2,171.25
Total Cost			\$16,646.25

50' Participation	Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
Average Cost/Foot	\$35.42			
	\$1,770.88	1	\$14,875.37	\$14,875.37
		2	\$13,104.49	\$6,552.25
		3	\$11,333.62	\$3,777.87
		4	\$9,562.74	\$2,390.68
		5	\$7,791.86	\$1,558.37
		6	\$6,020.98	\$1,003.50
		7	\$4,250.11	\$607.16
		8	\$2,479.23	\$309.90
		9	\$708.35	\$78.71
		10	(\$1,062.53)	(\$106.25)

Doug Siffers
 485-7414 Wade
 363-8112 Home
 4827 Fox Hills Dr.
 10/10/19



Northern Kentucky Water Service District

December 9, 1999

Ms. Rhonda Morrow
473 Courtney Road
Crittenden, Kentucky 41030

Re: Request for water main extension along Courtney Rd. & Eads Rd., Southern Kenton Co., Ky

Dear Ms. Morrow,

The Northern Kentucky Water Service District has reviewed your request for a water main extension cost estimate along Courtney Rd. & Eads Rd. A "ball park" estimated based on a 10,150 linear feet of 8" water main, including fire hydrants, would cost somewhere in the neighborhood of \$294,084. ~~Approx.~~ approx. \$28.97/foot. This estimate does not include tap fee of \$750.00 for each customer and the service line extension from the house to the meter setting.

The District's Water Main Extension Policy allows the District to pay for 50 feet of water main extension for every new customer connected to the extension. Under this policy, if there would be 40 customers, then the approximate cost per customer would be \$5,903 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction. An alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this would limit the involvement of the District.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, an Kentucky Registered Engineer will be contracted by the District to prepare a engineer's construction estimate to firm up project cost. Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely,

John Scheben, Jr.
Engineering Technician

Cc:file

MEMORANDUM:

Date: 12/20/99
Regarding: Blangey Road – Extension Project
Brent Ky.
To: Richard Harrison
From: Don Gibson

*Richard This is
an E-mail Attachment
I sent you, should you
need to change it or
edit it in anyway
Thanks
Don*

Richard,

As we discussed with the resident (Mr. Stegman) on Blangey Rd. earlier, we have put together costs based on historical prices and Viox Engineering's data which we use annually for estimates on newly installed mains.

Attached are estimates for an extension of the public system, constructed to meet our standards. Also attached is a cost breakdown using the fifty foot extension policy. As you can see, under this method the District's portion for each participating customer would be approximately \$ 1,519.83. And if all four of the residents were to participate, each of their portions would be \$ 15,198.30 respectively. This individual portion would change as shown should there be fewer or greater participants.

Also, on the same worksheet you will find the breakdown of costs, based once again on the above mentioned references, of a "private system". This estimate used 4" PVC and one master meter setting. Here, the residents would have to share equally in the construction costs as well as all future maintenance responsibilities and the water usage billed on the master meter. They would also have to contract services to install this method. We have also included 4-meter connections, which would be privately owned maintained and read to determine any breakdown of the single bill. This would all be the customers continuing responsibility. To accomplish this method the residents would all have to enter into an agreement with each other and the District as to these terms. Under this method it appears that it is initially half the cost of the first method. But the residents must realize that there will be ongoing costs to go with this method.

BLANGE ROAD

3/20/00

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
D.I.P. CLASS 50 (8")	2200	l.f.	\$ 27.00	\$ 59,400
GATE VALVE AND BOX (8")	2	each	\$ 650.00	\$ 1,300
CAST IRON PLUG AND BLOCK	1	each	\$ 300.00	\$ 300
TEE AND BLOCKS D.I. (8"x8"x6")	5	each	\$ 325.00	\$ 1,625
FIRE HYDRANT (HIGH PRESSURE) ASSEMBLY & VALVE (6")	4	each	\$ 2,300.00	\$ 9,200
TEMPORARY FIRE HYDRANT	1	each	\$ 2,300.00	\$ 2,300
SERVICE CONNECTION (3/4") W/ METER & REDUCER	4	each	\$ 750.00	\$ 3,000
CONCRETE ENCASUREMENT (CREEK CROSSINGS)	80	l.f.	\$ 22.00	\$ 1,760
SERVICE RE-CONNECTION	1	each	\$ 500.00	\$ 500
RESTORATION	2200	l.f.	\$ 2.25	\$ 4,950
TOTALS				\$ 84,335
COST PER L.F.				\$ 38.33
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				
3. Use Ductile Iron Pipe below elevation 720 feet (assumption)				
4. Instability problems and potential sanitary, creek, & road crossings in the vicinity were considered in pipe cost/l.f.				

Blange Road proposed 8" water main extension --- Cost Estimate

Public Water Main

ITEM	QUANTITY		TOTAL UNIT COST	COST
8" DIP Pipe & Fittings	2200	LF	20.00	\$44,000.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA	600.00	\$600.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	4	EA	400.00	\$1,600.00
Fire Hydrant Assembly	4	EA	1,500.00	\$6,000.00
Driveway Restoration	10	SY	35.00	\$350.00
Road Restoration	15	SY	40.00	\$600.00
Restoration	1	LS	5,000.00	\$5,000.00
Sub-Total				\$58,150.00
15% Conting. (Eng., Etc.)				8,722.50
Total Cost				\$66,872.50

Private Water Main

ITEM	QUANTITY		TOTAL UNIT COST	COST
4" PVC Pipe & Fittings	2200	LF	12.00	\$26,400.00
2" Water Meter	1	EA	2,000.00	\$2,000.00
Driveway Restoration	10	SY	35.00	\$350.00
Road Restoration	15	SY	40.00	\$600.00
Private Meters	4	EA	300.00	\$1,200.00
Sub-Total				\$30,550.00
15% Conting. (Eng., Etc.)				4,582.50
Total Cost				\$35,132.50

Blange Road proposed 8" water main extension ---- Cost Estimate

Public Water Main	ITEM	QUANTITY	TOTAL UNIT COST	COST
	8" DIP Pipe & Fittings	2200	LF 20.00	\$44,000.00
	8" Cast Iron Res. Seated Gate Valve & Box	1	EA 600.00	\$600.00
	8"x8"x6" Ductile Iron Anchoring Tee & Blo	4	EA 400.00	\$1,600.00
	Fire Hydrant Assembly	4	EA 1,500.00	\$6,000.00
	Driveway Restoration	10	SY 35.00	\$350.00
	Road Restoration	15	SY 40.00	\$600.00
	Restoration	1	LS 5,000.00	\$5,000.00
	Sub-Total			\$58,150.00
	15% Conting. (Eng., Etc.)			8,722.50
	Total Cost			\$66,872.50

50' Participation	Amount by Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
	\$1,519.83	1	\$65,352.67	\$65,352.67
		2	\$63,832.84	\$31,916.42
		3	\$62,313.01	\$20,771.00
		4	\$60,793.18	\$15,198.30
		5	\$59,273.35	\$11,854.67
		6	\$57,753.52	\$9,625.59
		7	\$56,233.69	\$8,033.38
		8	\$54,713.86	\$6,839.23
		9	\$53,194.03	\$5,910.45
		10	\$51,674.20	\$5,167.42

Cost /Foot
30.40

Private Water Main	ITEM	QUANTITY	TOTAL UNIT COST	COST
	4" PVC Pipe & Fittings	2200	LF 12.00	\$26,400.00
	2" Water Meter	1	EA 2,000.00	\$2,000.00
	Driveway Restoration	10	SY 35.00	\$350.00
	Road Restoration	15	SY 40.00	\$600.00
	Private Meters	4	EA 300.00	\$1,200.00
	Sub-Total			\$30,550.00
	15% Conting. (Eng., Etc.)			4,582.50
	Total Cost			\$35,132.50



Northern Kentucky
Water Service District

January 18, 2000

Mr. Robert Lape
Facilities Manager
Kenton County Schools
20 Kenton Lands Road
Erlanger, Kentucky 41018

Re: Ballpark estimate for water main extension along Visalia Road; Southern Kenton County, Kentucky

Dear Mr. Lape,

The Water District has reviewed your request for a water main extension cost estimate along Visalia Road. A "ball park" estimated based on a 4,900 linear feet, from Klein Road to the school, of 8" water main, including fire hydrants, engineering, etc., would cost in the neighborhood of \$204,125.00. This estimate has some additional cost built into it for extra depth excavations, due to unstable areas near the top of the hill. This estimate does not include service tap fees for the school or any additional customers. This estimate is contingent on Visalia Road from Staffordsburg Road to Klein Road getting funded.

There are several different ways to finance this proposed project. This project could be added to the existing "Sub-District C Project" along Visalia Road. The difference from the remaining surcharge could be added to the cost of the project. The remaining project difference would have to be paid by those connecting to the public water main.

Another method for water main extension is the "50' Line Extension Policy" which allows the District to pay for 50 feet of water main extension (approx. \$42/ft, based on estimate) for every new customer who connects to the extension. Under this policy, if there would be 18 new customers, then the approximate cost per customer would be \$9,257 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction. Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this would limit the involvement of the District. Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely yours,

John Scheben, Jr.
Engineering Technician

cc:file

Visalia Road proposed 8" water main extension --- Cost Estimate

ITEM	QUANTITY	TOTAL UNIT COST	COST
8" Ductile Iron Pipe & Fittings	4900	LF 30.00	\$147,000.00
8" Cast Iron Res. Seated Gate Valve & Box	8	EA 600.00	\$4,800.00
8"x8"x8" Ductile Iron Tee & Block	3	EA 450.00	\$1,350.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	10	EA 400.00	\$4,000.00
Fire Hydrant Assembly	10	EA 1,200.00	\$12,000.00
Asphalt Road Restoration	10	SY 40.00	\$400.00
Gravel Driveway Restoration	15	SY 30.00	\$450.00
Restoration	1	LS 7,500.00	\$7,500.00
Sub-Total			\$177,500.00
15% Conting. (Eng, Etc.)			26,625.00
Total Cost			\$204,125.00

Average Cost/Foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$41.66	\$2,082.91	1	\$202,042.09	###
		2	\$199,959.18	###
		3	\$197,876.28	###
		4	\$195,793.37	###
		5	\$193,710.46	###
		6	\$191,627.55	###
		7	\$189,544.64	###
		8	\$187,461.73	###
		9	\$185,378.83	###
		10	\$183,295.92	###
		11	\$181,213.01	###
		12	\$179,130.10	###
		13	\$177,047.19	###
		14	\$174,964.29	###
		15	\$172,881.38	###
		16	\$170,798.47	###
		17	\$168,715.56	###
		18	\$166,632.65	###
		19	\$164,549.74	###
		20	\$162,466.84	###
		21	\$160,383.93	###
		22	\$158,301.02	###

OST ESTIMATE - 3001 Amsterdam Road Water Main Extension

8/28/2001

Villa Hills, Kentucky

JAS

ITEM	QUANTITY		TOTAL UNIT COST	COST
8" D.I. Pipe & Fittings	1300	LF	24.75	\$32,175.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA	750.00	\$750.00
8"x8" Tapping Sleeve & Valve	1	EA	2,000.00	\$2,000.00
8"x8"x6" Ductile Iron Anchoring Tee & Block	2	EA	260.00	\$520.00
Fire Hydrant Assembly	2	EA	2,400.00	\$4,800.00
Install Water Service	2	EA	400.00	\$800.00
Service Line	60	LF	6.00	\$360.00
8" Plug & Block	1	EA	140.00	\$140.00
Sawcut and remove existing pavement	289	SY	25.00	\$7,225.00
Mill Pavement	94	Ton	45.00	\$4,230.00
1.5" Asphalt Surface Mix	94	Ton	60.00	\$5,640.00
6" Base Asphalt Mix	122	Ton	60.00	\$7,320.00
Restoration	1	LS	2,000.00	\$2,000.00
Sub-Total				\$67,960.00
25% Conting. (Eng., Etc.)				16,990.00
Total Cost				\$84,950.00

****Based on Southeastern's Prices



Water Service District

January 20, 2000

Dr. Susan K. Cook
Superintendent
Kenton County Schools
20 Kenton Lands Road
Erlanger, Kentucky 41018

Re: Northern Ky. Water Service District Water Main Projects

Dear Dr. Cook,

It was a pleasure meeting you at the meeting last date. Per your request, attached is a map showing the District's water main projects, which are under construction (Sub-District C, blue color) and the proposed additions to Sub-District C-Ph. 4, which are shown in red. We are awaiting approval for the additions to Sub-District C-Ph. 4 from the CDBG. The other Sub-District projects are complete. The District has several other water main replacement/improvement type projects going on in the Southern Kenton County area which will only replace existing water mains.

I have spoken to Mr. Richard Harrison of this office reference your request to extend water to Visalia School. As we discussed, there may be a possibility of adding it to Sub-District C-Ph. 4 Extension along Visalia Road. The District needs to get approval for the initial extension first before we can look at going to the school. I will contact you if we get approval for the initial extension.

Should you have any questions, or need additional information, feel free to contact this office at 578-7890.

Sincerely,

John Scheben, Jr.
Engineering Technician

Cc:file
attachments

W VIOX & VIOX, INC.
 Consulting Engineers & Surveyors

ENGINEER'S ESTIMATE 8" WATER MAIN EXTENSION ON VISALIA ROAD FROM KLEIN ROAD TO VISALIA ELEMENTARY SCHOOL

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" Ductile Iron Class 50 w/ Polywrap & Fittings	5,400	LF	\$33.00	178,200.00
4" PVC Perforated Pipe w/ Collars	2,400	LF	\$6.00	\$14,400.00
8" Cast Iron Resilient Seated Gate Valves	8	EA	\$600.00	\$4,800.00
8" X 8" X 6" Ductile Iron Anchoring Tees & Blocks	11	EA	\$400.00	\$4,400.00
8" X 8" X 8" Ductile Iron Tees & Blocks	3	EA	\$450.00	\$1,350.00
Fire Hydrant Assemblies	11	EA	\$1,200.00	\$13,200.00
Driveway Restoration	100	SY	\$30.00	\$3,000.00
Bit. Road Restoration	20	SY	\$40.00	\$1,200.00
Restoration	5400	LF	\$2.00	\$10,800.00
Estimated Contractor				\$231,350.00
15% Contingencies (Eng, GeoTech, Etc.)				\$34,703.00
TOTAL ESTIMATED COST				\$266,053.00
1/26/00				
Visalia8				



ENGINEER'S ESTIMATE 12" UPGRADE FOR WATER MAIN ON VISALIA ROAD FROM KLEIN ROAD TO VISALIA ELEMENTARY SCHOOL

ITEM	QUANTITY	UNIT	UNIT COST	COST
12" Ductile Iron Class 50 w/ Polywrap & Fittings	5,400	LF	\$7.00	37,800.00
12" Cast Iron Resilient Seated Gate Valves	8	EA	\$500.00	\$4,000.00
12" X 12" X 6" Ductile Iron Anchoring Tees & Blocks	11	EA	\$200.00	\$2,200.00
12" X 12" X 8" Ductile Iron Tees & Blocks	3	EA	\$200.00	\$600.00
Estimated Contractor				\$44,600.00
15% Contingencies (Eng, GeoTech, Etc.)				\$6,690.00
TOTAL ESTIMATED COST				\$51,290.00
1/26/00				
Visalia12				

Case No. 200-____
Exhibit ____ C ____

NORTHERN KENTUCKY WATER
SERVICE DISTRICT

Sub District D

Campbell County
184-069

ENGINEERING REPORTS

Engineer's Preliminary Estimate

Final Estimate and Review of Bids

Project Specifications
(See Attached Specifications)

System Hydraulic Model
(See Attached)

Project Map

Revenue Requirements

Case No. 200-____
Exhibit ____C____

NORTHERN KENTUCKY WATER
SERVICE DISTRICT

Sub District D

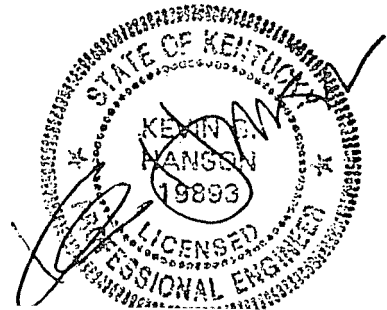
Campbell County
184-069

Engineer's Preliminary Estimate

7/26/99

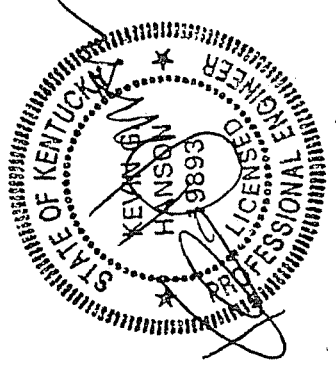
TOTALS

	Quantity	Unit	Estimated Cost/Unit	Projected Cost
STATE ROUTE 8	1300	l.f.	\$ 39.04	\$ 50,750
WINTERS LANE	5110	l.f.	\$ 38.22	\$ 195,280
PERSIMMON GROVE (Stevens to Shaw Hess)	5488	l.f.	\$ 34.04	\$ 186,822
PERSIMMON GROVE (Shaw Hess to Burns)	5317	l.f.	\$ 33.57	\$ 178,479
PERSIMMON GROVE (Burns to Calf x Rd)	8185	l.f.	\$ 32.02	\$ 262,071
CALIFORNIA CROSS ROAD	22536	l.f.	\$ 37.75	\$ 850,784
FOUR MILE PIKE	2250	l.f.	\$ 32.78	\$ 73,763
TOTALS FOR PROJECT	50186	l.f.	\$ 35.83	\$ 1,797,949
<i>Note: these totals assume all pipe and fittings being no larger than 8" diameter.</i>				
Cardinal				
Design (7.00%)				125,856
Geotechnical Engineering				25,000
Sub-total Engineering				\$ 150,856



7/26/95

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
D.I.P. CLASS 52 (8")	1300	i.f.	\$ 23.00	\$ 29,900
AIR RELIEF VALVE (1")	1	each	\$ 650.00	\$ 650
TAPPING VALVE (8")	2	each	\$ 2,100.00	\$ 4,200
TEE AND BLOCKS D.I. (8"x8"x8")	2	each	\$ 350.00	\$ 700
TEE AND BLOCKS D.I. (8"x8"x6")	3	each	\$ 325.00	\$ 975
TEE AND BLOCKS D.I. (8"x8"x8")	3	each	\$ 2,300.00	\$ 6,900
FIRE HYDRANT (HIGH PRESSURE) ASSEMBLY & VALVE (6")	3	each	\$ 750.00	\$ 4,500
SERVICE CONNECTION (3/4") W/ METER & REDUCER	6	each	\$ 2.25	\$ 2,925
RESTORATION	1300	i.f.	\$	\$
TOTALS				\$ 50,750
COST PER L.F.				\$ 39.04
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				
3. Use Ductile Iron Pipe below elevation 720 feet (assumption)				

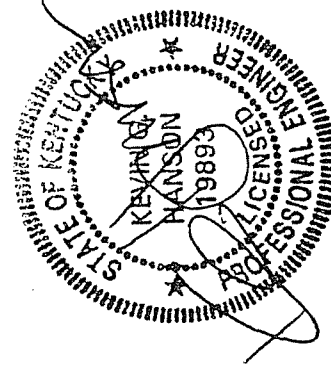


3/23/00

7/26/95

WINTERS

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
D.I.P. CLASS 50 (8")	5110	l.f.	\$ 23.00	\$ 117,530
AIR RELIEF VALVE (1")	2	each	\$ 650.00	\$ 1,300
GATE VALVE AND BOX (8")	3	each	\$ 650.00	\$ 1,950
TEE AND BLOCKS D.I. (8"x8"x6")	10	each	\$ 325.00	\$ 3,250
REGULATOR PIT (Pressure Reduction Valve & Meter)	1	each	\$ 25,000.00	\$ 25,000
FIRE HYDRANT (HIGH PRESSURE) ASSEMBLY & VALVE (6")	10	each	\$ 2,300.00	\$ 23,000
SERVICE CONNECTION W/ METER & REDUCER	31	each	\$ 750.00	\$ 23,250
RESTORATION	5110	l.f.	\$ 2.25	\$ 11,498
TOTALS				\$ 195,280
COST PER L.F.				\$ 38.22
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				
3. Use Ductile Iron Pipe below elevation 720 feet (assumption)				

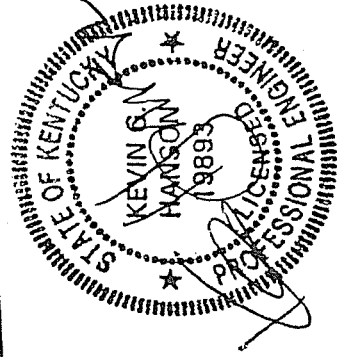


3/23/00

PERSIMMCO, INC. (Stevens Branch to Shaw Hess Road)

7/26/95

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
D.I.P. CLASS 52 (8")	5488	l.f.	\$ 23.00	\$ 126,224
AIR RELIEF VALVE (1")	1	each	\$ 650.00	\$ 650
GATE VALVE AND BOX (8")	2	each	\$ 650.00	\$ 1,300
TAPPING VALVE (8")	1	each	\$ 2,100.00	\$ 2,100
TEE AND BLOCKS D.I. (8"x8"x6")	14	each	\$ 325.00	\$ 4,550
TEE AND BLOCKS D.I. (8"x8"x8")	2	each	\$ 350.00	\$ 700
REDUCER (8"-4") "Shaw Hess Int"	1	each	\$ 250.00	\$ 250
FIRE HYDRANT (HIGH PRESSURE) ASSEMBLY & VALVE (6")	7	each	\$ 2,300.00	\$ 16,100
FIRE HYDRANT ASSEMBLY & VALVE (6")	4	each	\$ 1,900.00	\$ 7,600
SERVICE CONNECTION W/ METER & REDUCER RESTORATION	20	each	\$ 750.00	\$ 15,000
TOTALS	5488	l.f.	\$ 2.25	\$ 12,348
COST PER L.F.				\$ 186,822
notes:				\$ 34.04
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				
3. Use Ductile Iron Pipe below elevation 720 feet (assumption)				



3/23/00

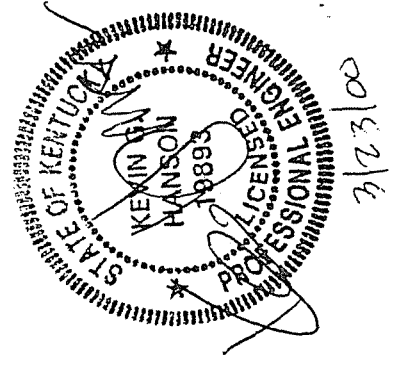
PERSIMMONS VE
 (Shaw Hess Road to Burns Road)

7/26/99

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
D.I.P. CLASS 52 (8")	5317	l.f.	\$ 23.00	\$ 122,291
AIR RELIEF VALVE (1")	3	each	\$ 650.00	\$ 1,950
GATE VALVE AND BOX (8")	3	each	\$ 650.00	\$ 1,950
TEE AND BLOCKS D.I. (8"x8"x6")	7	each	\$ 325.00	\$ 2,275
TEE AND BLOCKS D.I. (8"x8"x8")	3	each	\$ 350.00	\$ 1,050
TEE AND BLOCKS D.I. (8"x8"x8")	1	each	\$ 250.00	\$ 250
REDUCER (8"-3") "Race Track Road"	1	each	\$ 250.00	\$ 250
REDUCER (8"-2") "Burns Road Int"	10	each	\$ 1,900.00	\$ 19,000
FIRE HYDRANT ASSEMBLY & VALVE (6")	35	each	\$ 500.00	\$ 17,500
SERVICE RE-CONNECTION	5317	l.f.	\$ 2.25	\$ 11,963
RESTORATION				\$ 178,479
TOTALS				\$ 33.57
COST PER L.F.				

notes:

1. Fire hydrant spacing @ 500 l.f. per
2. Gate valve/butterfly valve spacing @ 2000 l.f. per
3. Use Ductile Iron Pipe below elevation 720 feet (assumption)

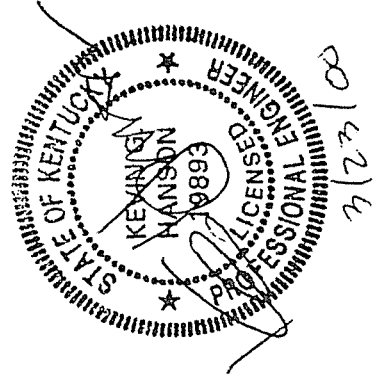


PERSIMMG, VE
(Burns Road to California Cross Road)

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
D.I.P. CLASS 52 (8")	800	l.f.	\$ 23.00	\$ 18,400
PVC C-900 (8")	7385	l.f.	\$ 23.00	\$ 169,855
AIR RELIEF VALVE (1")	1	each	\$ 650.00	\$ 650
GATE VALVE AND BOX (8")	4	each	\$ 650.00	\$ 2,600
TEE AND BLOCKS D.I. (8" x8" x6")	16	each	\$ 325.00	\$ 5,200
TEE AND BLOCKS D.I. (8" x8" x8") "Calif X Rd Int"	1	each	\$ 350.00	\$ 350
FIRE HYDRANT (HIGH PRESSURE) ASSEMBLY & VALVE (6")	3	each	\$ 2,300.00	\$ 6,900
FIRE HYDRANT ASSEMBLY & VALVE (6")	13	each	\$ 1,900.00	\$ 24,700
SERVICE CONNECTION W/ METER & REDUCER	20	each	\$ 750.00	\$ 15,000
RESTORATION	8185	l.f.	\$ 2.25	\$ 18,416
TOTALS				\$ 262,071
COST PER L.F.				\$ 32.02

notes:

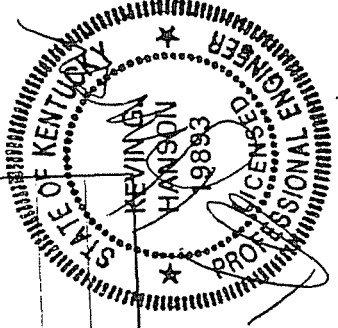
1. Fire hydrant spacing @ 500 l.f. per
2. Gate valve/butterfly valve spacing @ 2000 l.f. per
3. Use Ductile Iron Pipe below elevation 720 feet (assumption)



CALIFORNIA CREEK ROAD
(Saint Peter and Paul to Washington Trace Road)

7/26/95

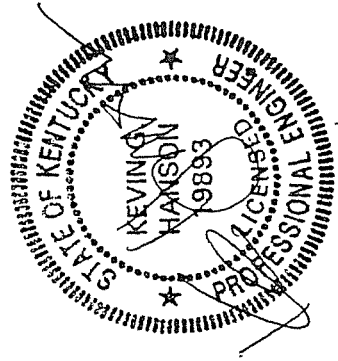
Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
D.I.P. CLASS 50 (8")	22536	l.f.	\$ 23.00	\$ 518,328
AIR RELIEF VALVE (1")	8	each	\$ 650.00	\$ 5,200
GATE VALVE AND BOX (8")	23	each	\$ 650.00	\$ 14,950
TEE AND BLOCKS D.I. (8"x8"x8")	10	each	\$ 350.00	\$ 3,500
TEE AND BLOCKS D.I. (8"x8"x6")	12	each	\$ 325.00	\$ 3,900
TAPPING VALVE (8")	6	each	\$ 2,100.00	\$ 12,600
CONCRETE ENCASMENT (CREEK CROSSINGS)	300	l.f.	\$ 22.00	\$ 6,600
REGULATOR PIT (Pressure Reduction Valve & Meter)	1	each	\$ 25,000.00	\$ 25,000
BORE AND JACK (12")	500	l.f.	\$ 150.00	\$ 75,000
FIRE HYDRANT (HIGH PRESSURE) ASSEMBLY & VALVE (6")	45	each	\$ 2,300.00	\$ 103,500
SERVICE CONNECTION W/ METER & REDUCER	42	each	\$ 750.00	\$ 31,500
RESTORATION	22536	l.f.	\$ 2.25	\$ 50,706
TOTALS				\$ 850,784
COST PER L.F.				\$ 37.75
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				
3. Use Ductile Iron Pipe below elevation 720 feet (assumption)				



2/7/00

FOUR MILE
(UHL ROAD TO KNOTHOLE FIELDS)

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
D.I.P. CLASS 50 (8")	2250	l.f.	\$ 23.00	\$ 51,750
AIR RELIEF VALVE (1")	2	each	\$ 650.00	\$ 1,300
GATE VALVE AND BOX (8")	1	each	\$ 650.00	\$ 650
FIRE HYDRANT (HIGH PRESSURE) ASSEMBLY & VALVE (6")	5	each	\$ 2,300.00	\$ 11,500
SERVICE CONNECTION (3/4") W/ METER & REDUCER	2	each	\$ 750.00	\$ 1,500
SERVICE CONNECTION (2") W/ METER & REDUCER	1	each	\$ 2,000.00	\$ 2,000
RESTORATION	2250	l.f.	\$ 2.25	\$ 5,063
TOTALS				\$ 73,763
COST PER L.F.				\$ 32.78
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				
3. Use Ductile Iron Pipe below elevation 720 feet (assumption)				



0012213

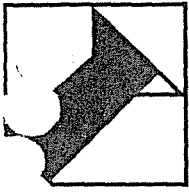
Case No. 200-____
Exhibit ____ C ____

NORTHERN KENTUCKY WATER
SERVICE DISTRICT

Sub District D

184-069

Engineer's Final Estimate



CARDINAL

ENGINEERING
ARCHITECTURE
LAND SURVEYING

March 14, 2000

Mr. Don Gibson
Northern Kentucky Water Service District
3049 Dixie Highway
Edgewood, Kentucky 41017

RE: Project Contract Award Recommendation

Dear Don:

After reviewing the low bidders for all four phases of the "Sub District D Water Main Extension," I have the following comments:

PHASE I – STATE ROUTE 8 / WINTERS LANE

After thoroughly reviewing all bids submitted for this project, the apparent low bidder is Tim Hartig Construction at \$261,750.00. Based upon our firm's past experience with the low bidder on other similar projects we believe that Tim Hartig Construction is qualified to perform the work on the above captioned project and recommend awarding the contract to said firm (Providing that all bonding requirements can be addressed).

PHASE II – FOUR MILE PIKE (STATE ROUTE 547)

After thoroughly reviewing all bids submitted for this project, the apparent low bidder is Southeastern Contractors, Inc. at \$72,840.00. Upon request we received a list of three projects and references similar in size and scope from said Contractor, and after reviewing said information we agree that Southeastern Contractors, Inc. is qualified to perform the work on the above captioned project and recommend awarding the contract to said firm (Providing all bonding requirements can be addressed).

PHASE III – FOUR MILE PIKE (STATE ROUTE 547)

After thoroughly reviewing all bids submitted for this project, the apparent low bidder is Tim Hartig Construction at \$533,316.00. Based upon our firm's past experience with the low bidder on other similar projects we believe that Tim Hartig Construction is qualified to perform the work on the above captioned project and recommend awarding the contract to said firm (Providing that all bonding requirements can be addressed).

PHASE IV – CALIFORNIA CROSS ROAD

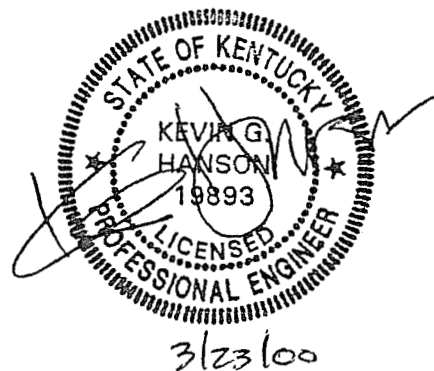
After thoroughly reviewing all bids submitted for this project, the apparent low bidder is Distel Construction, Inc. at \$680,596.41. Upon request we received a list of three projects and references similar in size and scope from said Contractor, and after reviewing said information we agree that Distel Construction, Inc. is qualified to perform the work on the above captioned project and recommend awarding the contract to said firm (Providing all bonding requirements can be addressed).

Should you have any questions, please contact me.

Respectfully Submitted,

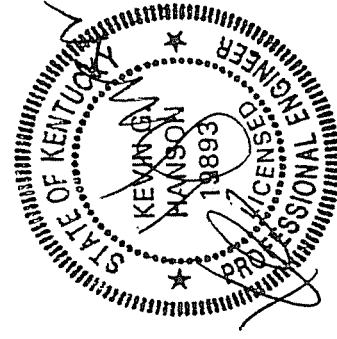


Kevin Hanson, P.E.
Project Engineer



STATE ROUTE 8 AND ... LANE
8" WATER MAIN EXTENSION
SUB DISTRICT D - PHASE I
SUMMARY

Hartig Company, Inc.	\$ 261,750.00
Southeastern Contractors	\$ 294,753.15
Glover Construction Co.	\$ 318,100.00
Howell Contractors	\$ 329,352.60
Apex Environmental	\$ 333,965.86
Jack Gemmer and Sons	\$ 351,825.00
Schweitzer Construction	\$ 354,696.00
Lawrence Construction	\$ 354,793.00
Larry Smith Construction	\$ 368,982.00
D.F. Bailey, Inc.	\$ 422,175.85
Hartman and Smith	\$ 436,752.00

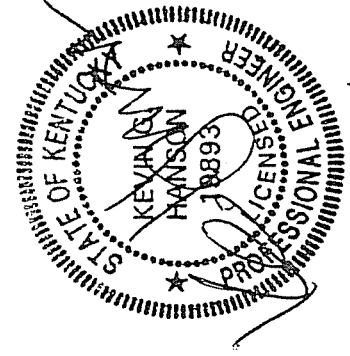


3/23/00

STATE ROUTE 211
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE I

S. R. ...
 MARCH 7, 2000

	Quantity	Hartig Company, Inc.		Southeastern Contractors		Glover Construction Co.	
		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
6327		\$ 25.00	\$ 158,175.00	\$ 28.45	\$ 180,003.15	\$ 25.00	\$ 158,175.00
3	inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	\$ 250.00	\$ 750.00	\$ 500.00	\$ 1,500.00	\$ 500.00	\$ 1,500.00
9	inch Air Release Valve	\$ 550.00	\$ 4,950.00	\$ 850.00	\$ 7,650.00	\$ 850.00	\$ 7,650.00
14	inch Ductile Iron Resilient Seated Gate Valve & Box	\$ 200.00	\$ 2,800.00	\$ 250.00	\$ 3,500.00	\$ 300.00	\$ 4,200.00
2	inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	\$ 250.00	\$ 500.00	\$ 275.00	\$ 550.00	\$ 600.00	\$ 1,200.00
14	inch x 8-inch x 8-inch Ductile Iron Tee & Blocks	\$ 1,850.00	\$ 25,900.00	\$ 2,100.00	\$ 29,400.00	\$ 3,200.00	\$ 44,800.00
3	inch Pressure Fire Hydrant Assembly	\$ 300.00	\$ 900.00	\$ 95.00	\$ 285.00	\$ 200.00	\$ 600.00
1	inch Cast Iron Plug and Block	\$ 2,200.00	\$ 2,200.00	\$ 500.00	\$ 500.00	\$ 400.00	\$ 400.00
15	connect to Existing 8-inch Main	\$ 200.00	\$ 3,000.00	\$ 250.00	\$ 3,750.00	\$ 800.00	\$ 12,000.00
16	Water Service-Short	\$ 250.00	\$ 4,000.00	\$ 300.00	\$ 4,800.00	\$ 850.00	\$ 13,600.00
1680	Water Service-Long	\$ 13.00	\$ 21,840.00	\$ 5.00	\$ 8,400.00	\$ 15.00	\$ 25,200.00
1	inch 1/2-inch Service from meter to within 2-feet of the House	\$10,500.00	\$ 10,500.00	\$ 12,000.00	\$ 12,000.00	\$ 16,000.00	\$ 16,000.00
102	Pressure Regulator Pit	\$ 100.00	\$ 10,200.00	\$ 100.00	\$ 10,200.00	\$ 123.00	\$ 12,546.00
361	Concrete Encasement for Creek Crossing	\$ 30.00	\$ 10,830.00	\$ 70.00	\$ 25,270.00	\$ 38.00	\$ 13,718.00
72	Asphalt Road Restoration	\$ 30.00	\$ 2,160.00	\$ 50.00	\$ 3,600.00	\$ 28.00	\$ 2,016.00
115	Asphalt Driveway Restoration	\$ 12.00	\$ 1,380.00	\$ 13.00	\$ 1,495.00	\$ 23.00	\$ 2,645.00
37	Gravel Driveway Restoration	\$ 45.00	\$ 1,665.00	\$ 50.00	\$ 1,850.00	\$ 50.00	\$ 1,850.00
	Concrete Driveway Restoration						
	TOTALS		\$ 261,750.00		\$ 294,753.15		\$ 318,100.00



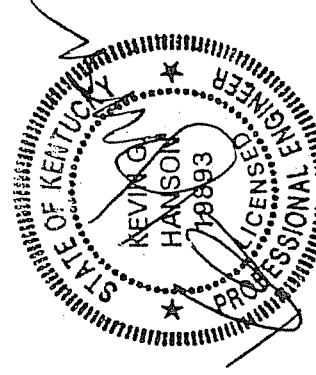
3/22/00

STATE ROUTE 600
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE I

DATE: MARCH 7, 2000

	Quantity	Howell Contractors		Apex Environmental		Jack Gemmer and Sons	
		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
6327		\$ 33.60	\$ 212,587.20	\$ 38.78	\$ 245,361.06	\$ 38.00	\$ 240,426.00
3		\$ 94.50	\$ 283.50	\$ 16.09	\$ 48.27	\$ 275.00	\$ 825.00
9		\$ 680.60	\$ 6,125.40	\$ 550.35	\$ 4,953.15	\$ 550.00	\$ 4,950.00
14		\$ 193.00	\$ 2,702.00	\$ 223.97	\$ 3,135.58	\$ 250.00	\$ 3,500.00
2		\$ 186.20	\$ 372.40	\$ 217.72	\$ 435.44	\$ 250.00	\$ 500.00
14		\$ 1,869.70	\$ 26,175.80	\$ 1,986.13	\$ 27,805.82	\$ 2,200.00	\$ 30,800.00
3		\$ 124.50	\$ 373.50	\$ 123.55	\$ 370.65	\$ 175.00	\$ 525.00
1		\$ 1,204.80	\$ 1,204.80	\$ 420.56	\$ 420.56	\$ 1,000.00	\$ 1,000.00
15		\$ 313.60	\$ 4,704.00	\$ 315.42	\$ 4,731.30	\$ 250.00	\$ 3,750.00
16		\$ 513.30	\$ 8,212.80	\$ 508.49	\$ 8,135.84	\$ 350.00	\$ 5,600.00
1680		\$ 9.40	\$ 15,792.00	\$ 4.08	\$ 6,854.40	\$ 10.00	\$ 16,800.00
1		\$ 9,725.60	\$ 9,725.60	\$ 13,188.57	\$ 13,188.57	\$ 10,500.00	\$ 10,500.00
102		\$ 285.00	\$ 29,070.00	\$ 73.86	\$ 7,533.72	\$ 85.00	\$ 8,670.00
361		\$ 22.40	\$ 8,086.40	\$ 21.20	\$ 7,653.20	\$ 50.00	\$ 18,050.00
72		\$ 21.10	\$ 1,519.20	\$ 21.20	\$ 1,526.40	\$ 42.00	\$ 3,024.00
115		\$ 12.50	\$ 1,437.50	\$ 8.42	\$ 968.30	\$ 14.00	\$ 1,610.00
37		\$ 26.50	\$ 980.50	\$ 22.80	\$ 843.60	\$ 35.00	\$ 1,295.00
			\$ 329,352.60		\$ 333,965.86		\$ 351,825.00

TOTALS

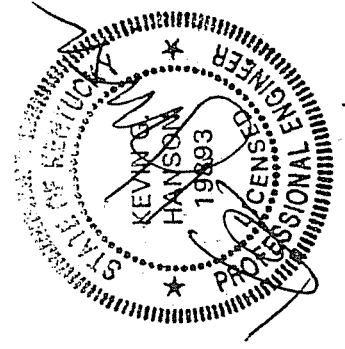


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STATE ROUTE 600 - ANE
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE I

IDS R-101
 MARCH 7, 2000

Item	Quantity	Schweitzer Construction		Lawrence Construction		Larry Smith Construction	
		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
3-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	6327	\$ 33.00	\$208,791.00	\$ 39.00	\$246,753.00	\$ 36.00	\$ 227,772.00
3/4-inch Air Release Valve	3	\$ 150.00	\$ 450.00	\$ 200.00	\$ 600.00	\$ 500.00	\$ 1,500.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	9	\$ 700.00	\$ 6,300.00	\$ 875.00	\$ 7,875.00	\$ 500.00	\$ 4,500.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	14	\$ 150.00	\$ 2,100.00	\$ 200.00	\$ 2,800.00	\$ 250.00	\$ 3,500.00
8-inch x 8-inch x 8-inch Ductile Iron Tee & Blocks	2	\$ 200.00	\$ 400.00	\$ 400.00	\$ 800.00	\$ 250.00	\$ 500.00
High Pressure Fire Hydrant Assembly	14	\$ 2,600.00	\$ 36,400.00	\$ 1,900.00	\$ 26,600.00	\$2,100.00	\$ 29,400.00
8-inch Cast Iron Plug and Block	3	\$ 150.00	\$ 450.00	\$ 200.00	\$ 600.00	\$ 150.00	\$ 450.00
Connect to Existing 8-inch Main	1	\$ 3,000.00	\$ 3,000.00	\$ 1,000.00	\$ 1,000.00	\$2,500.00	\$ 2,500.00
Water Service-Short	15	\$ 700.00	\$ 10,500.00	\$ 300.00	\$ 4,500.00	\$ 250.00	\$ 3,750.00
Water Service-Long	16	\$ 1,000.00	\$ 16,000.00	\$ 500.00	\$ 8,000.00	\$1,200.00	\$ 19,200.00
3/4-inch Service from meter to within 2-feet of the House	1680	\$ 12.00	\$ 20,160.00	\$ 8.00	\$ 13,440.00	\$ 24.00	\$ 40,320.00
Pressure Regulator Pit	1	\$12,000.00	\$ 12,000.00	\$12,000.00	\$ 12,000.00	\$7,500.00	\$ 7,500.00
Concrete Encasement for Creek Crossing	102	\$ 150.00	\$ 15,300.00	\$ 120.00	\$ 12,240.00	\$ 35.00	\$ 3,570.00
Asphalt Road Restoration	361	\$ 45.00	\$ 16,245.00	\$ 35.00	\$ 12,635.00	\$ 55.00	\$ 19,855.00
Asphalt Driveway Restoration	72	\$ 50.00	\$ 3,600.00	\$ 30.00	\$ 2,160.00	\$ 25.00	\$ 1,800.00
Gravel Driveway Restoration	115	\$ 10.00	\$ 1,150.00	\$ 13.00	\$ 1,495.00	\$ 4.00	\$ 460.00
Concrete Driveway Restoration	37	\$ 50.00	\$ 1,850.00	\$ 35.00	\$ 1,295.00	\$ 65.00	\$ 2,405.00
TOTALS			\$ 354,696.00		\$ 354,793.00		\$ 368,982.00

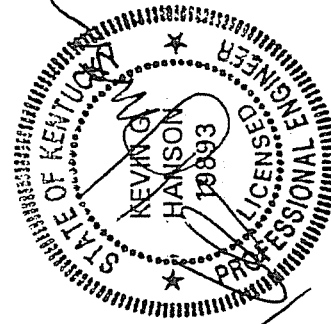


00/62/3

STATE ROUTE 607 JANE
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE I

DS R.L.S.
 MARCH 7, 2000

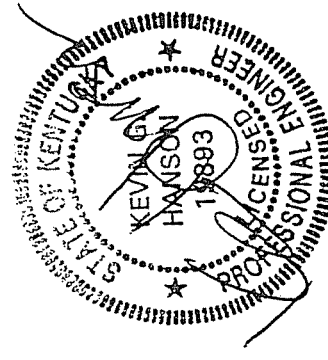
Item	Quantity	D.F. Bailey, Inc.		Hartman and Smith	
		Unit Cost	Total Cost	Unit Cost	Total Cost
4-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	6327	\$ 33.14	\$ 209,676.78	\$ 48.00	\$ 303,696.00
4-inch Air Release Valve	3	\$ 135.89	\$ 407.67	\$ 400.00	\$ 1,200.00
4-inch Ductile Iron Resilient Seated Gate Valve & Box	9	\$ 703.24	\$ 6,329.16	\$ 600.00	\$ 5,400.00
4-inch Ductile Iron Anchoring Tee & Blocks	14	\$ 272.56	\$ 3,815.84	\$ 200.00	\$ 2,800.00
4-inch x 8-inch x 6-inch Ductile Iron Tee & Blocks	2	\$ 285.03	\$ 570.06	\$ 200.00	\$ 400.00
4-inch x 8-inch x 8-inch Ductile Iron Tee & Blocks	14	\$ 2,939.45	\$ 41,152.30	\$ 2,500.00	\$ 35,000.00
High Pressure Fire Hydrant Assembly	3	\$ 90.45	\$ 271.35	\$ 500.00	\$ 1,500.00
3-inch Cast Iron Plug and Block	1	\$ 306.59	\$ 306.59	\$ 3,500.00	\$ 3,500.00
Connect to Existing 8-inch Main	15	\$ 296.48	\$ 4,447.20	\$ 400.00	\$ 6,000.00
Water Service-Short	16	\$ 592.96	\$ 9,487.36	\$ 600.00	\$ 9,600.00
Water Service-Long	1680	\$ 13.14	\$ 22,075.20	\$ 20.00	\$ 33,600.00
3/4-inch Service from meter to within 2-feet of the House	1	\$ 22,000.00	\$ 22,000.00	\$ 4,200.00	\$ 4,200.00
Pressure Regulator Pit	102	\$ 57.36	\$ 5,850.72	\$ 100.00	\$ 10,200.00
Concrete Encasement for Creek Crossing	361	\$ 203.92	\$ 73,615.12	\$ 36.00	\$ 12,996.00
Asphalt Road Restoration	72	\$ 189.37	\$ 13,634.64	\$ 36.00	\$ 2,592.00
Asphalt Driveway Restoration	115	\$ 15.16	\$ 1,743.40	\$ 18.00	\$ 2,070.00
Gravel Driveway Restoration	37	\$ 183.58	\$ 6,792.46	\$ 54.00	\$ 1,998.00
Concrete Driveway Restoration					
TOTALS			\$ 422,175.85		\$ 436,752.00



3/23/00

FOUR MILE PIKE (S. JUTE 547)
8" WATER MAIN EXTENSION
SUB DISTRICT D - PHASE II
SUMMARY

Southeastern Contractors	\$	72,840.00
Hartig Company, Inc	\$	76,570.00
Hartman and Smith	\$	82,430.00
Lawrence Construction	\$	82,830.00
Jack Gemmer and Sons	\$	83,185.00
Seevers' Excavating, Inc.	\$	93,652.50
D.F. Bailey, Inc.	\$	94,294.84
Paul Rack Excavating	\$	98,352.50
Larry Smith Construction	\$	107,750.00
Schweitzer Construction	\$	108,570.00
Glover Construction Co.	\$	121,745.00
Howell Contractors	\$	128,286.40

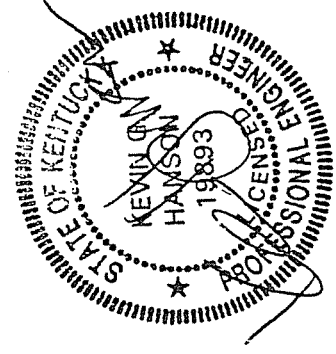


3/23/00

FOUR MILE PIKE (ROUTE 547)
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE II

BIDS FOR
 MARCH 7, 2000

Item	Quantity	Southeastern Contractors		Hartig Company, Inc		Hartman and Smith	
		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	2165	\$ 26.00	\$ 56,290.00	\$ 28.00	\$ 60,620.00	\$ 28.00	\$ 60,620.00
3/4-inch Air Release Valve	1	\$ 500.00	\$ 500.00	\$ 250.00	\$ 250.00	\$ 400.00	\$ 400.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	2	\$ 850.00	\$ 1,700.00	\$ 550.00	\$ 1,100.00	\$ 600.00	\$ 1,200.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	3	\$ 250.00	\$ 750.00	\$ 200.00	\$ 600.00	\$ 200.00	\$ 600.00
High Pressure Fire Hydrant Assembly	2	\$ 2,100.00	\$ 4,200.00	\$ 1,850.00	\$ 3,700.00	\$ 2,500.00	\$ 5,000.00
Temporary Fire Hydrant Assembly	1	\$ 2,000.00	\$ 2,000.00	\$ 1,850.00	\$ 1,850.00	\$ 2,300.00	\$ 2,300.00
8-inch Cast Iron Plug and Block	1	\$ 100.00	\$ 100.00	\$ 300.00	\$ 300.00	\$ 500.00	\$ 500.00
Connect to Existing 8-inch Main	1	\$ 500.00	\$ 500.00	\$ 2,200.00	\$ 2,200.00	\$ 3,500.00	\$ 3,500.00
Water Service-Long	2	\$ 250.00	\$ 500.00	\$ 250.00	\$ 500.00	\$ 600.00	\$ 1,200.00
3/4-inch Service from meter to within 2-feet of the House	50	\$ 5.00	\$ 250.00	\$ 13.00	\$ 650.00	\$ 20.00	\$ 1,000.00
2-inch Water Service-Short	1	\$ 350.00	\$ 350.00	\$ 200.00	\$ 200.00	\$ 800.00	\$ 800.00
Gravel Driveway Restoration	75	\$ 10.00	\$ 750.00	\$ 10.00	\$ 750.00	\$ 18.00	\$ 1,350.00
Asphalt Road Restoration	110	\$ 45.00	\$ 4,950.00	\$ 35.00	\$ 3,850.00	\$ 36.00	\$ 3,960.00
TOTALS			\$ 72,840.00		\$ 76,570.00		\$ 82,430.00

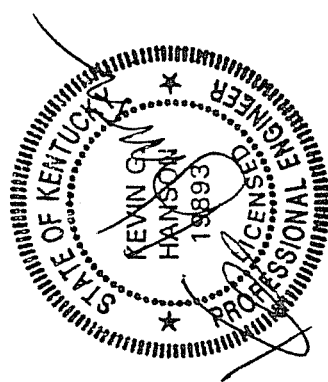


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FOUR MILE PIKE (S. JTE 547)
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE II

BIDS R...
 MARCH 7, 2000

Item	Quantity	Lawrence Construction		Jack Gemmer and Sons		Seevers' Excavating, Inc.	
		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	2165	\$ 30.00	\$ 64,950.00	\$ 31.00	\$ 67,115.00	\$ 35.00	\$ 75,775.00
3/4-inch Air Release Valve	1	\$ 200.00	\$ 200.00	\$ 250.00	\$ 250.00	\$ 450.00	\$ 450.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	2	\$ 900.00	\$ 1,800.00	\$ 525.00	\$ 1,050.00	\$ 650.00	\$ 1,300.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	3	\$ 300.00	\$ 900.00	\$ 250.00	\$ 750.00	\$ 300.00	\$ 900.00
High Pressure Fire Hydrant Assembly	2	\$ 2,400.00	\$ 4,800.00	\$ 2,100.00	\$ 4,200.00	\$ 2,000.00	\$ 4,000.00
Temporary Fire Hydrant Assembly	1	\$ 1,500.00	\$ 1,500.00	\$ 1,800.00	\$ 1,800.00	\$ 2,000.00	\$ 2,000.00
8-inch Cast Iron Plug and Block	1	\$ 300.00	\$ 300.00	\$ 150.00	\$ 150.00	\$ 225.00	\$ 225.00
Connect to Existing 8-inch Main	1	\$ 1,500.00	\$ 1,500.00	\$ 800.00	\$ 800.00	\$ 1,200.00	\$ 1,200.00
Water Service-Long	2	\$ 1,200.00	\$ 2,400.00	\$ 350.00	\$ 700.00	\$ 750.00	\$ 1,500.00
3/4-inch Service from meter to within 2-feet of the House	50	\$ 8.00	\$ 400.00	\$ 10.00	\$ 500.00	\$ 10.00	\$ 500.00
2-inch Water Service-Short	1	\$ 500.00	\$ 500.00	\$ 350.00	\$ 350.00	\$ 1,200.00	\$ 1,200.00
Gravel Driveway Restoration	75	\$ 14.00	\$ 1,050.00	\$ 12.00	\$ 900.00	\$ 11.50	\$ 862.50
Asphalt Road Restoration	110	\$ 23.00	\$ 2,530.00	\$ 42.00	\$ 4,620.00	\$ 34.00	\$ 3,740.00
TOTALS			\$ 82,830.00		\$ 83,185.00		\$ 93,652.50



3/23/00

FOUR MILE PIKE (C... UTE 547)
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE II

BIDS R...
 MARCH 7, 2000

Item	Quantity	D.F. Bailey, Inc.		Paul Rack Excavating		Larry Smith Construction	
		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	2165	\$ 27.44	\$ 59,407.60	\$ 37.50	\$ 81,187.50	\$ 40.00	\$ 86,600.00
3/4-inch Air Release Valve	1	\$ 35.89	\$ 35.89	\$ 600.00	\$ 600.00	\$ 500.00	\$ 500.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	2	\$ 703.24	\$ 1,406.48	\$ 575.00	\$ 1,150.00	\$ 500.00	\$ 1,000.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	3	\$ 272.56	\$ 817.68	\$ 185.00	\$ 555.00	\$ 250.00	\$ 750.00
High Pressure Fire Hydrant Assembly	2	\$ 2,939.45	\$ 5,878.90	\$ 2,000.00	\$ 4,000.00	\$ 2,100.00	\$ 4,200.00
Temporary Fire Hydrant Assembly	1	\$ 2,244.15	\$ 2,244.15	\$ 1,750.00	\$ 1,750.00	\$ 1,800.00	\$ 1,800.00
8-inch Cast Iron Plug and Block	1	\$ 90.45	\$ 90.45	\$ 85.00	\$ 85.00	\$ 150.00	\$ 150.00
Connect to Existing 8-inch Main	1	\$ 306.59	\$ 306.59	\$ 1,200.00	\$ 1,200.00	\$ 2,500.00	\$ 2,500.00
Water Service-Long	2	\$ 592.96	\$ 1,185.92	\$ 450.00	\$ 900.00	\$ 1,200.00	\$ 2,400.00
3/4-inch Service from meter to within 2-feet of the House	50	\$ 13.14	\$ 657.00	\$ 15.00	\$ 750.00	\$ 25.00	\$ 1,250.00
2-inch Water Service-Short	1	\$ 296.48	\$ 296.48	\$ 700.00	\$ 700.00	\$ 250.00	\$ 250.00
Gravel Driveway Restoration	75	\$ 15.16	\$ 1,137.00	\$ 7.00	\$ 525.00	\$ 4.00	\$ 300.00
Asphalt Road Restoration	110	\$ 189.37	\$ 20,830.70	\$ 45.00	\$ 4,950.00	\$ 55.00	\$ 6,050.00
TOTALS			\$ 94,294.84		\$ 98,352.50		\$ 107,750.00

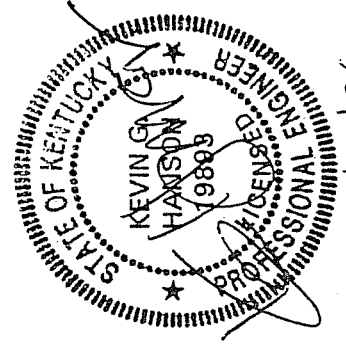


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 3/23/00

FOUR MILE PIKE (JTE 547)
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE II

BIDS R...
 MARCH 7, 2000

Item	Quantity	Schweitzer Construction		Glover Construction Co.		Howell Contractors	
		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	2165	\$ 38.00	\$ 82,270.00	\$ 46.00	\$ 99,590.00	\$ 49.50	\$ 107,167.50
3/4-inch Air Release Valve	1	\$ 300.00	\$ 300.00	\$ 500.00	\$ 500.00	\$ 518.70	\$ 518.70
8-inch Ductile Iron Resilient Seated Gate Valve & Box	2	\$ 800.00	\$ 1,600.00	\$ 850.00	\$ 1,700.00	\$ 985.40	\$ 1,970.80
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	3	\$ 200.00	\$ 600.00	\$ 300.00	\$ 900.00	\$ 272.00	\$ 816.00
High Pressure Fire Hydrant Assembly	2	\$ 3,000.00	\$ 6,000.00	\$ 3,200.00	\$ 6,400.00	\$ 2,528.60	\$ 5,057.20
Temporary Fire Hydrant Assembly	1	\$ 3,000.00	\$ 3,000.00	\$ 3,200.00	\$ 3,200.00	\$ 2,516.80	\$ 2,516.80
8-inch Cast Iron Plug and Block	1	\$ 200.00	\$ 200.00	\$ 200.00	\$ 200.00	\$ 452.50	\$ 452.50
Connect to Existing 8-inch Main	1	\$ 3,000.00	\$ 3,000.00	\$ 400.00	\$ 400.00	\$ 1,760.90	\$ 1,760.90
Water Service-Long	2	\$ 1,500.00	\$ 3,000.00	\$ 850.00	\$ 1,700.00	\$ 608.60	\$ 1,217.20
3/4-inch Service from meter to within 2-feet of the House	50	\$ 20.00	\$ 1,000.00	\$ 31.00	\$ 1,550.00	\$ 13.80	\$ 690.00
2-inch Water Service-Short	1	\$ 1,500.00	\$ 1,500.00	\$ 800.00	\$ 800.00	\$ 556.80	\$ 556.80
Gravel Driveway Restoration	75	\$ 8.00	\$ 600.00	\$ 23.00	\$ 1,725.00	\$ 8.60	\$ 645.00
Asphalt Road Restoration	110	\$ 50.00	\$ 5,500.00	\$ 28.00	\$ 3,080.00	\$ 44.70	\$ 4,917.00
TOTALS			\$ 108,570.00		\$ 121,745.00		\$ 128,286.40



3/23/00

To:
Kevin Hanson
Cardinal Engineering Corp.

From:
John Niehaus
Southeastern Contractors, Inc.

Fax #:
(606) 581-9636

Date:
March 14, 2000

Phone #:
(606) 581-9600

of Pages: (including cover sheet)
2

RE:
8" Water Main Extension - Sub District D Phase II @ Four Mile Pike
(State Route 547) Bid Qualifications.

Here is the information that you had asked for:

Chestnut St. Water Main -- City of Oxford, OH -- 168,000.

N. Medallion Storm Sewer Phase V -- Village of Evandale, OH -- 81,000.

Tanners 15" Sewer Extension -- City of Greendale, IN -- 68,000.

References

Darren Owens -- Engineer -- City of Oxford -- (513) 524-5208.

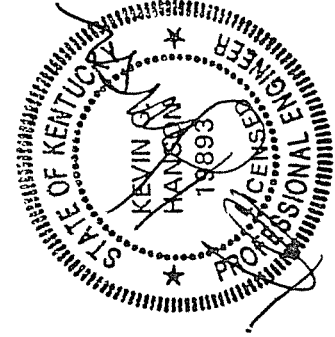
James Jeffers -- Engineer -- Savage Walker -- (513) 793-7410.

Bob Hrezo -- Hrezo Engineering -- (812) 537-4700.

If you need any further information, please feel free to contact our office at (812) 926-1812. Thank you.

PERSIMMON GROVE PIKE () TE ROUTE 1121)
8" WATER MAIN EXTENSION
SUB DISTRICT D - PHASE III
SUMMARY

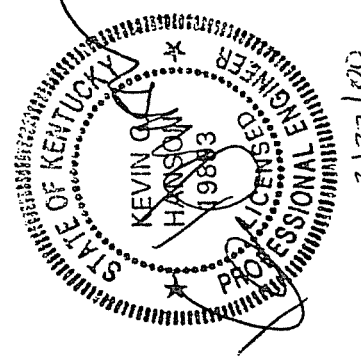
Hartig Company, Inc	\$ 533,316.00
Howell Contractors	\$ 549,172.87
Reynolds, Inc.	\$ 598,000.00
Paul Rack Excavating	\$ 603,603.80
Staton's Construction Co.	\$ 606,313.00
Glover Construction Co.	\$ 622,178.00
Lonkard Construction	\$ 642,400.00
Schweitzer Construction	\$ 649,564.00
D.F. Bailey, Inc.	\$ 661,983.13
Seevers' Excavating, Inc.	\$ 702,874.50
Larry Smith Construction	\$ 739,533.00
Lawrence Construction	\$ 753,409.00
Hartman and Smith	\$ 868,104.00



PERSIMMON GROVE PLANT
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE III

BID O.P.L.
 MARCH 7, 2000

Item	Quantity	Hartig Company, Inc		Howell Contractors	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	5468	\$ 21.00	\$ 114,828.00	\$ 24.77	\$ 135,442.36
8-INCH C-900 OR C-909 PVC Pipe and Fittings	13904	\$ 19.50	\$ 271,128.00	\$ 19.61	\$ 272,657.44
3/4-inch Air Release Valve	5	\$ 250.00	\$ 1,250.00	\$ 76.32	\$ 381.60
8-inch Ductile Iron Resilient Seated Gate Valve & Box	26	\$ 530.00	\$ 13,780.00	\$ 650.65	\$ 16,916.90
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	2	\$ 1,600.00	\$ 3,200.00	\$ 688.71	\$ 1,377.42
Concrete Encasement for Creek Crossings	197	\$ 50.00	\$ 9,850.00	\$ 80.13	\$ 15,785.61
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	39	\$ 200.00	\$ 7,800.00	\$ 184.98	\$ 7,214.22
High Pressure Fire Hydrant Assembly	10	\$ 1,850.00	\$ 18,500.00	\$ 2,013.07	\$ 20,130.70
Standard Pressure Fire Hydrant Assembly	20	\$ 1,500.00	\$ 30,000.00	\$ 1,657.58	\$ 33,151.60
8-inch Cast Iron Plug and Block	2	\$ 300.00	\$ 600.00	\$ 176.49	\$ 352.98
Connect to Existing 8-inch Main	1	\$ 2,000.00	\$ 2,000.00	\$ 1,504.40	\$ 1,504.40
Connect to Existing 4-inch Main	1	\$ 1,200.00	\$ 1,200.00	\$ 1,178.50	\$ 1,178.50
Connect to Existing 2-inch Main	3	\$ 1,300.00	\$ 3,900.00	\$ 392.83	\$ 1,178.49
8-inch x 4-inch Reducer	1	\$ 125.00	\$ 125.00	\$ 134.65	\$ 134.65
8-inch x 2-inch Reducer	3	\$ 120.00	\$ 360.00	\$ 134.63	\$ 403.89
Reconnect All Existing Services	35	\$ 200.00	\$ 7,000.00	\$ 208.93	\$ 7,312.55
Water Service-Short	16	\$ 250.00	\$ 4,000.00	\$ 294.95	\$ 4,719.20
Water Service-Long	1750	\$ 13.00	\$ 22,750.00	\$ 389.10	\$ 6,225.60
3/4-inch Service from meter to within 2-feet of the House	50	\$ 50.00	\$ 2,500.00	\$ 4.35	\$ 7,612.50
Concrete Driveway Restoration	28	\$ 35.00	\$ 980.00	\$ 27.65	\$ 1,382.50
Asphalt Driveway Restoration	417	\$ 10.00	\$ 4,170.00	\$ 26.54	\$ 743.12
Gravel Driveway Restoration	200	\$ 35.00	\$ 7,000.00	\$ 6.48	\$ 2,702.16
State Road (Asphalt) Restoration	9	\$ 355.00	\$ 3,195.00	\$ 29.89	\$ 5,978.00
6-inch Ductile Iron Resilient Seated Gate Valve, Valve Box, and Blocking				\$ 520.72	\$ 4,686.48
TOTALS			\$ 533,316.00		\$ 549,172.87

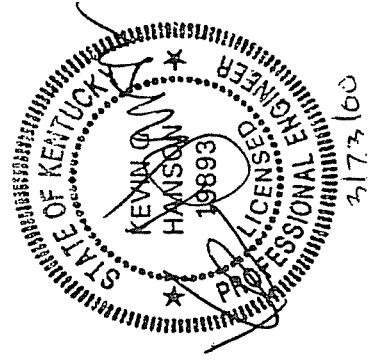


2122100

PERSIMMON GROVE PIPING ROUTE 1121
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE III

BID OF L.
 MARCH 7, 2000

Item	Quantity	Reynolds, Inc.		Paul Rack Excavating	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	5468	\$ 24.00	\$ 131,232.00	\$ 23.85	\$ 130,411.80
8-INCH C-900 OR C-909 PVC Pipe and Fittings	13904	\$ 22.00	\$ 305,888.00	\$ 22.50	\$ 312,840.00
3/4-inch Air Release Valve	5	\$ 370.00	\$ 1,850.00	\$ 600.00	\$ 3,000.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	26	\$ 745.00	\$ 19,370.00	\$ 575.00	\$ 14,950.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	2	\$ 1,120.00	\$ 2,240.00	\$ 1,000.00	\$ 2,000.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	197	\$ 50.00	\$ 9,850.00	\$ 44.00	\$ 8,668.00
Concrete Encasement for Creek Crossings	39	\$ 305.00	\$ 11,895.00	\$ 185.00	\$ 7,215.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	10	\$ 2,185.00	\$ 21,850.00	\$ 2,000.00	\$ 20,000.00
High Pressure Fire Hydrant Assembly	20	\$ 1,800.00	\$ 36,000.00	\$ 1,750.00	\$ 35,000.00
Standard Pressure Fire Hydrant Assembly	2	\$ 200.00	\$ 400.00	\$ 85.00	\$ 170.00
8-inch Cast Iron Plug and Block	1	\$ 4,320.00	\$ 4,320.00	\$ 1,200.00	\$ 1,200.00
Connect to Existing 8-inch Main	1	\$ 3,000.00	\$ 3,000.00	\$ 1,100.00	\$ 1,100.00
Connect to Existing 4-inch Main	3	\$ 1,150.00	\$ 3,450.00	\$ 1,200.00	\$ 3,600.00
Connect to Existing 2-inch Main	1	\$ 45.00	\$ 45.00	\$ 75.00	\$ 75.00
8-inch x 4-inch Reducer	3	\$ 85.00	\$ 255.00	\$ 72.00	\$ 216.00
8-inch x 2-inch Reducer	35	\$ 380.00	\$ 13,300.00	\$ 250.00	\$ 8,750.00
Reconnect All Existing Services	16	\$ 190.00	\$ 3,040.00	\$ 250.00	\$ 4,000.00
Water Service-Short	16	\$ 382.00	\$ 6,112.00	\$ 350.00	\$ 5,600.00
Water Service-Long	1750	\$ 4.00	\$ 7,000.00	\$ 15.00	\$ 26,250.00
3/4-inch Service from meter to within 2-feet of the House	50	\$ 62.00	\$ 3,100.00	\$ 36.00	\$ 1,800.00
Concrete Driveway Restoration	28	\$ 31.00	\$ 868.00	\$ 27.00	\$ 756.00
Asphalt Driveway Restoration	417	\$ 5.00	\$ 2,085.00	\$ 6.00	\$ 2,502.00
Gravel Driveway Restoration	200	\$ 34.00	\$ 6,800.00	\$ 45.00	\$ 9,000.00
State Road (Asphalt) Restoration	9	\$ 450.00	\$ 4,050.00	\$ 500.00	\$ 4,500.00
6-inch Ductile Iron Resilient Seated Gate Valve, Valve Box, and Blocking					
TOTALS			\$ 598,000.00		\$ 603,603.80

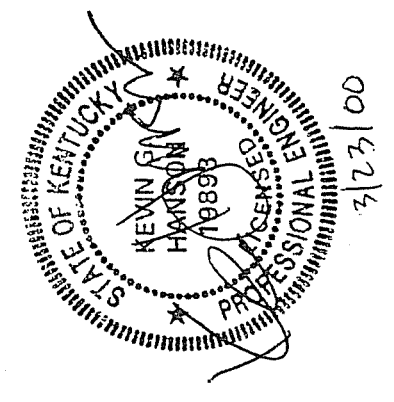


3/17/00

PERSIMMON GROVE PIN (ROUTE 1121)
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE III

BID OP.
 MARCH 7, 2000

Item	Quantity	Staton's Construction Co.		Glover Construction Co.	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	5468	\$ 24.00	\$ 131,232.00	\$ 22.00	\$ 120,296.00
8-INCH C-909 OR C-909 PVC Pipe and Fittings	13904	\$ 19.00	\$ 264,176.00	\$ 22.00	\$ 305,888.00
3/4-inch Air Release Valve	5	\$ 400.00	\$ 2,000.00	\$ 500.00	\$ 2,500.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	26	\$ 690.00	\$ 17,940.00	\$ 500.00	\$ 13,000.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	2	\$ 2,500.00	\$ 5,000.00	\$ 1,000.00	\$ 2,000.00
Concrete Encasement for Creek Crossings	197	\$ 90.00	\$ 17,730.00	\$ 62.00	\$ 12,214.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	39	\$ 550.00	\$ 21,450.00	\$ 125.00	\$ 4,875.00
High Pressure Fire Hydrant Assembly	10	\$ 2,400.00	\$ 24,000.00	\$ 2,000.00	\$ 20,000.00
Standard Pressure Fire Hydrant Assembly	20	\$ 2,200.00	\$ 44,000.00	\$ 2,000.00	\$ 40,000.00
8-inch Cast Iron Plug and Block	2	\$ 300.00	\$ 600.00	\$ 100.00	\$ 200.00
Connect to Existing 8-inch Main	1	\$ 2,200.00	\$ 2,200.00	\$ 1,000.00	\$ 1,000.00
Connect to Existing 4-inch Main	1	\$ 2,000.00	\$ 2,000.00	\$ 1,000.00	\$ 1,000.00
Connect to Existing 2-inch Main	3	\$ 1,900.00	\$ 5,700.00	\$ 500.00	\$ 1,500.00
8-inch x 4-inch Reducer	1	\$ 500.00	\$ 500.00	\$ 100.00	\$ 100.00
8-inch x 2-inch Reducer	3	\$ 450.00	\$ 1,350.00	\$ 100.00	\$ 300.00
Reconnect All Existing Services	35	\$ 350.00	\$ 12,250.00	\$ 300.00	\$ 10,500.00
Water Service-Short	16	\$ 200.00	\$ 3,200.00	\$ 500.00	\$ 8,000.00
Water Service-Long	16	\$ 700.00	\$ 11,200.00	\$ 700.00	\$ 11,200.00
3/4-inch Service from meter to within 2-feet of the House	1750	\$ 5.00	\$ 8,750.00	\$ 30.00	\$ 52,500.00
Concrete Driveway Restoration	50	\$ 90.00	\$ 4,500.00	\$ 42.00	\$ 2,100.00
Asphalt Driveway Restoration	28	\$ 45.00	\$ 1,260.00	\$ 28.00	\$ 784.00
Gravel Driveway Restoration	417	\$ 25.00	\$ 10,425.00	\$ 13.00	\$ 5,421.00
State Road (Asphalt) Restoration	200	\$ 45.00	\$ 9,000.00	\$ 16.00	\$ 3,200.00
6-inch Ductile Iron Resilient Seated Gate Valve, Valve Box, and Blocking	9	\$ 650.00	\$ 5,850.00	\$ 400.00	\$ 3,600.00
TOTALS			\$ 606,313.00		\$ 622,178.00

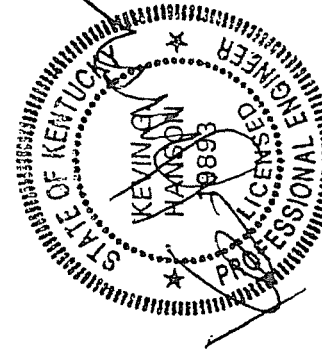


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PERSIMMON GROVE PIK (E ROUTE 1121)
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE III

BID OPEN
 MARCH 7, 2000

Item	Quantity	Lonkard Construction		Schweitzer Construction	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	5468	\$ 27.00	\$ 147,636.00	\$ 23.00	\$ 125,764.00
8-INCH C-900 OR C-909 PVC Pipe and Fittings	13904	\$ 23.50	\$ 326,744.00	\$ 23.00	\$ 319,792.00
3/4-inch Air Release Valve	5	\$ 350.00	\$ 1,750.00	\$ 250.00	\$ 1,250.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	26	\$ 700.00	\$ 18,200.00	\$ 700.00	\$ 18,200.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	2	\$ 1,100.00	\$ 2,200.00	\$ 1,000.00	\$ 2,000.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	197	\$ 25.00	\$ 4,925.00	\$ 50.00	\$ 9,850.00
Concrete Encasement for Creek Crossings	39	\$ 200.00	\$ 7,800.00	\$ 150.00	\$ 5,850.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	10	\$ 2,300.00	\$ 23,000.00	\$ 2,600.00	\$ 26,000.00
High Pressure Fire Hydrant Assembly	20	\$ 1,900.00	\$ 38,000.00	\$ 2,400.00	\$ 48,000.00
Standard Pressure Fire Hydrant Assembly	2	\$ 250.00	\$ 500.00	\$ 150.00	\$ 300.00
8-inch Cast Iron Plug and Block	1	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00
Connect to Existing 8-inch Main	1	\$ 1,600.00	\$ 1,600.00	\$ 2,000.00	\$ 2,000.00
Connect to Existing 4-inch Main	3	\$ 1,000.00	\$ 3,000.00	\$ 1,004.00	\$ 3,012.00
Connect to Existing 2-inch Main	1	\$ 200.00	\$ 200.00	\$ 150.00	\$ 150.00
8-inch x 4-inch Reducer	3	\$ 200.00	\$ 600.00	\$ 150.00	\$ 450.00
8-inch x 2-inch Reducer	35	\$ 300.00	\$ 10,500.00	\$ 400.00	\$ 14,000.00
Reconnect All Existing Services	16	\$ 350.00	\$ 5,600.00	\$ 700.00	\$ 11,200.00
Water Service-Short	16	\$ 650.00	\$ 10,400.00	\$ 1,000.00	\$ 16,000.00
Water Service-Long	1750	\$ 8.00	\$ 14,000.00	\$ 12.00	\$ 21,000.00
3/4-inch Service from meter to within 2-feet of the House	50	\$ 35.00	\$ 1,750.00	\$ 45.00	\$ 2,250.00
Concrete Driveway Restoration	28	\$ 30.00	\$ 840.00	\$ 45.00	\$ 1,260.00
Asphalt Driveway Restoration	417	\$ 15.00	\$ 6,255.00	\$ 8.00	\$ 3,336.00
Gravel Driveway Restoration	200	\$ 45.00	\$ 9,000.00	\$ 50.00	\$ 10,000.00
State Road (Asphalt) Restoration	9	\$ 600.00	\$ 5,400.00	\$ 600.00	\$ 5,400.00
6-inch Ductile Iron Resilient Seated Gate Valve, Valve Box, and Blocking					
TOTALS			\$ 642,400.00		\$ 649,564.00

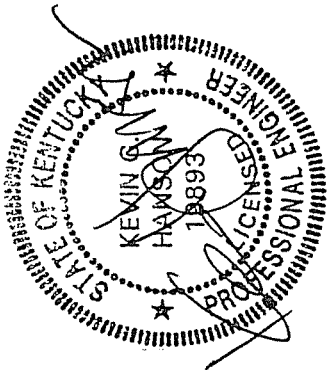


2172100

PERSIMMON GROVE PIN 3 ROUTE 1121)
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE III

BID OF...
 MARCH 7, 2000

Item	Quantity	D.F. Bailey, Inc.		Seewers' Excavating, Inc.	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	5468	\$ 22.62	\$ 123,686.16	\$ 28.50	\$ 155,838.00
8-INCH C-900 OR C-909 PVC Pipe and Fittings	13904	\$ 20.28	\$ 281,973.12	\$ 26.00	\$ 361,504.00
3/4-inch Air Release Valve	5	\$ 135.89	\$ 679.45	\$ 475.00	\$ 2,375.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	26	\$ 703.24	\$ 18,284.24	\$ 610.00	\$ 15,860.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	2	\$ 1,043.65	\$ 2,087.30	\$ 1,200.00	\$ 2,400.00
Concrete Encasement for Creek Crossings	197	\$ 57.64	\$ 11,355.08	\$ 11.50	\$ 2,265.50
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	39	\$ 272.56	\$ 10,629.84	\$ 300.00	\$ 11,700.00
High Pressure Fire Hydrant Assembly	10	\$ 2,939.45	\$ 29,394.50	\$ 2,500.00	\$ 25,000.00
Standard Pressure Fire Hydrant Assembly	20	\$ 2,565.90	\$ 51,318.00	\$ 1,975.00	\$ 39,500.00
8-inch Cast Iron Plug and Block	2	\$ 90.45	\$ 180.90	\$ 250.00	\$ 500.00
Connect to Existing 8-inch Main	1	\$ 306.59	\$ 306.59	\$ 750.00	\$ 750.00
Connect to Existing 4-inch Main	1	\$ 351.67	\$ 351.67	\$ 650.00	\$ 650.00
Connect to Existing 2-inch Main	3	\$ 354.42	\$ 1,063.26	\$ 500.00	\$ 1,500.00
8-inch x 4-inch Reducer	1	\$ 120.38	\$ 120.38	\$ 175.00	\$ 175.00
8-inch x 2-inch Reducer	3	\$ 184.24	\$ 552.72	\$ 150.00	\$ 450.00
Reconnect All Existing Services	35	\$ 270.77	\$ 9,476.95	\$ 500.00	\$ 17,500.00
Water Service-Short	16	\$ 296.48	\$ 4,743.68	\$ 450.00	\$ 7,200.00
Water Service-Long	16	\$ 592.96	\$ 9,487.36	\$ 750.00	\$ 12,000.00
3/4-inch Service from meter to within 2-feet of the House	1750	\$ 13.14	\$ 22,995.00	\$ 12.00	\$ 21,000.00
Concrete Driveway Restoration	50	\$ 181.30	\$ 9,065.00	\$ 30.00	\$ 1,500.00
Asphalt Driveway Restoration	28	\$ 189.37	\$ 5,302.36	\$ 34.00	\$ 952.00
Gravel Driveway Restoration	417	\$ 15.16	\$ 6,321.72	\$ 15.00	\$ 6,255.00
State Road (Asphalt) Restoration	200	\$ 275.84	\$ 55,168.00	\$ 35.00	\$ 7,000.00
6-inch Ductile Iron Resilient Seated Gate Valve, Valve Box, and Blocking	9	\$ 826.65	\$ 7,439.85	\$ 1,000.00	\$ 9,000.00
TOTALS			\$ 661,983.13		\$ 702,874.50

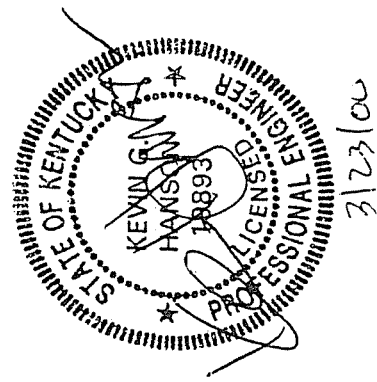


3/23/00

PERSIMMON GROVE Pkwy E ROUTE 1121
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE III

BID OF -
 MARCH 7, 2000

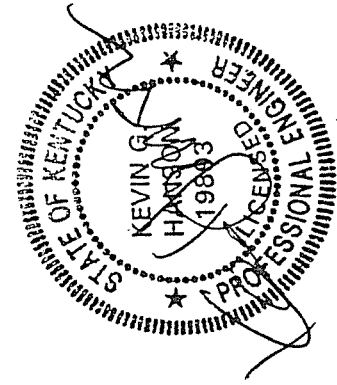
Item	Quantity	Larry Smith Construction		Lawrence Construction	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	5468	\$ 31.00	\$ 169,508.00	\$ 32.00	\$ 174,976.00
8-INCH C-900 OR C-909 PVC Pipe and Fittings	13904	\$ 28.00	\$ 389,312.00	\$ 30.00	\$ 417,120.00
3/4-inch Air Release Valve	5	\$ 500.00	\$ 2,500.00	\$ 400.00	\$ 2,000.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	26	\$ 500.00	\$ 13,000.00	\$ 650.00	\$ 16,900.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	2	\$ 750.00	\$ 1,500.00	\$ 1,200.00	\$ 2,400.00
Concrete Encasement for Creek Crossings	197	\$ 35.00	\$ 6,895.00	\$ 25.00	\$ 4,925.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	39	\$ 150.00	\$ 5,850.00	\$ 300.00	\$ 11,700.00
High Pressure Fire Hydrant Assembly	10	\$ 2,100.00	\$ 21,000.00	\$ 1,800.00	\$ 18,000.00
Standard Pressure Fire Hydrant Assembly	20	\$ 1,800.00	\$ 36,000.00	\$ 1,500.00	\$ 30,000.00
8-inch Cast Iron Plug and Block	2	\$ 150.00	\$ 300.00	\$ 200.00	\$ 400.00
Connect to Existing 8-inch Main	1	\$ 2,500.00	\$ 2,500.00	\$ 2,000.00	\$ 2,000.00
Connect to Existing 4-inch Main	1	\$ 1,200.00	\$ 1,200.00	\$ 2,000.00	\$ 2,000.00
Connect to Existing 2-inch Main	3	\$ 900.00	\$ 2,700.00	\$ 500.00	\$ 1,500.00
8-inch x 4-inch Reducer	1	\$ 100.00	\$ 100.00	\$ 200.00	\$ 200.00
8-inch x 2-inch Reducer	3	\$ 150.00	\$ 450.00	\$ 150.00	\$ 450.00
Reconnect All Existing Services	35	\$ 300.00	\$ 10,500.00	\$ 200.00	\$ 7,000.00
Water Service-Short	16	\$ 250.00	\$ 4,000.00	\$ 500.00	\$ 8,000.00
Water Service-Long	1750	\$ 1,250.00	\$ 20,000.00	\$ 1,500.00	\$ 24,000.00
3/4-inch Service from meter to within 2-feet of the House	50	\$ 20.00	\$ 35,000.00	\$ 6.00	\$ 10,500.00
Concrete Driveway Restoration	28	\$ 25.00	\$ 1,250.00	\$ 35.00	\$ 1,750.00
Asphalt Driveway Restoration	417	\$ 4.00	\$ 1,668.00	\$ 25.00	\$ 700.00
Gravel Driveway Restoration	200	\$ 50.00	\$ 10,000.00	\$ 14.00	\$ 5,838.00
State Road (Asphalt) Restoration	9	\$ 400.00	\$ 3,600.00	\$ 35.00	\$ 7,000.00
6-inch Ductile Iron Resilient Seated Gate Valve, Valve Box, and Blocking				\$ 450.00	\$ 4,050.00
TOTALS			\$ 739,533.00		\$ 753,409.00



3/23/00

PERSIMMON GROVE PIPING E ROUTE 1121)
 8" WATER MAIN EXTENSION
 MARCH 7, 2000
 SUB DISTRICT D - PHASE III

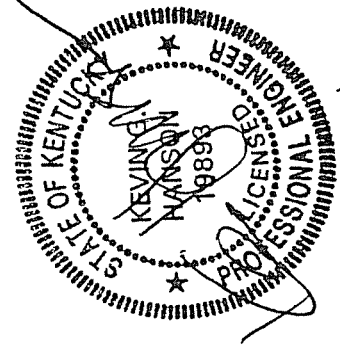
Item	Quantity	Hartman and Smith	
		Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	5468	\$ 34.00	\$ 185,912.00
8-INCH C-900 OR C-909 PVC Pipe and Fittings	13904	\$ 32.00	\$ 444,928.00
3/4-inch Air Release Valve	5	\$ 400.00	\$ 2,000.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	26	\$ 600.00	\$ 15,600.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	2	\$ 800.00	\$ 1,600.00
Concrete Encasement for Creek Crossings	197	\$ 100.00	\$ 19,700.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	39	\$ 200.00	\$ 7,800.00
High Pressure Fire Hydrant Assembly	10	\$ 2,500.00	\$ 25,000.00
Standard Pressure Fire Hydrant Assembly	20	\$ 2,800.00	\$ 56,000.00
8-inch Cast Iron Plug and Block	2	\$ 500.00	\$ 1,000.00
Connect to Existing 8-inch Main	1	\$ 3,500.00	\$ 3,500.00
Connect to Existing 4-inch Main	1	\$ 3,500.00	\$ 3,500.00
Connect to Existing 2-inch Main	3	\$ 3,500.00	\$ 10,500.00
8-inch x 4-inch Reducer	1	\$ 150.00	\$ 150.00
8-inch x 2-inch Reducer	3	\$ 100.00	\$ 300.00
Reconnect All Existing Services	35	\$ 400.00	\$ 14,000.00
Water Service-Short	16	\$ 400.00	\$ 6,400.00
Water Service-Long	16	\$ 600.00	\$ 9,600.00
3/4-inch Service from meter to within 2-feet of the House	1750	\$ 20.00	\$ 35,000.00
Concrete Driveway Restoration	50	\$ 54.00	\$ 2,700.00
Asphalt Driveway Restoration	28	\$ 36.00	\$ 1,008.00
Gravel Driveway Restoration	417	\$ 18.00	\$ 7,506.00
State Road (Asphalt) Restoration	200	\$ 54.00	\$ 10,800.00
6-inch Ductile Iron Resilient Seated Gate Valve, Valve Box, and Blocking	9	\$ 400.00	\$ 3,600.00
TOTALS			\$ 868,104.00



2/23/06

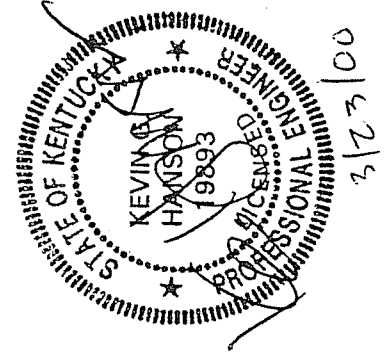
CALIFORNIA... ROAD
8" WATER MAIN EXTENSION
SUB DISTRICT D - PHASE IV
SUMMARY

Distel Construction, Inc.	\$ 680,596.41
Howell Contractors, Inc.	\$ 743,586.89
Glover Construction Co.	\$ 774,605.00
Paul Rack Excavating	\$ 831,238.00
Schweitzer Construction	\$ 832,819.00
Lonkard Contruction	\$ 836,732.50
Staton's Construction Co.	\$ 840,537.50
Larry Smith Construction	\$ 919,871.00
Seever's Excavating, Inc.	\$ 920,318.55
D.F. Bailey, Inc.	\$ 921,045.06
Lawrence Construction	\$ 953,140.80
Hartman and Smith	\$ 1,121,632.00



3/23/00

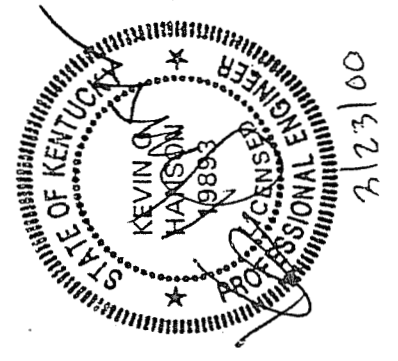
Item	Quantity	Distel Construction, Inc.		Howell Contractors, Inc.	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	19213	\$ 23.75	\$ 456,308.75	\$ 22.41	\$ 430,563.33
8-INCH C-900 OR C-909 PVC Pipe and Fittings	2040	\$ 19.00	\$ 38,760.00	\$ 18.09	\$ 36,903.60
3/4-inch Air Release Valve	9	\$ 250.00	\$ 2,250.00	\$ 73.11	\$ 657.99
8-inch Ductile Iron Resilient Seated Gate Valve & Box	29	\$ 581.00	\$ 16,849.00	\$ 624.95	\$ 18,123.55
8-inch x 8-inch x 8-inch Ductile Iron Anchoring Tee & Blocks	10	\$ 175.00	\$ 1,750.00	\$ 176.67	\$ 1,766.70
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	6	\$ 690.00	\$ 4,140.00	\$ 670.83	\$ 4,024.98
Concrete Encasement for Creek Crossings	1060	\$ 6.00	\$ 6,360.00	\$ 80.16	\$ 84,969.60
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	44	\$ 150.00	\$ 6,600.00	\$ 180.87	\$ 7,958.28
High Pressure Fire Hydrant Assembly	41	\$ 2,100.00	\$ 86,100.00	\$ 1,870.42	\$ 76,687.22
Standard Pressure Fire Hydrant Assembly	2	\$ 1,900.00	\$ 3,800.00	\$ 1,606.33	\$ 3,212.66
Temporary Fire Hydrant Assembly	1	\$ 1,900.00	\$ 1,900.00	\$ 413.76	\$ 413.76
8-inch Cast Iron Plug and Block	8	\$ 50.00	\$ 400.00	\$ 179.10	\$ 1,432.80
Pressure Regulator Pit	1	\$ 7,000.00	\$ 7,000.00	\$ 9,826.72	\$ 9,826.72
Connect to Existing 6-inch Main	2	\$ 400.00	\$ 800.00	\$ 1,217.27	\$ 2,434.54
Connect to Existing 8-inch Main	1	\$ 500.00	\$ 500.00	\$ 1,428.00	\$ 1,428.00
8-inch x 6-inch Reducer	2	\$ 100.00	\$ 200.00	\$ 130.18	\$ 260.36
Bore and Jack 18-inch Steel Encasement Pipe	98	\$ 183.67	\$ 17,999.66	\$ 283.37	\$ 27,770.26
Water Service-Short	16	\$ 150.00	\$ 2,400.00	\$ 282.71	\$ 4,523.36
Water Service-Long	17	\$ 200.00	\$ 3,400.00	\$ 375.55	\$ 6,384.35
3/4-inch Service from meter to within 2-feet of the House	1820	\$ 3.00	\$ 5,460.00	\$ 4.17	\$ 7,589.40
Asphalt Driveway Restoration	53	\$ 31.00	\$ 1,643.00	\$ 25.45	\$ 1,348.85
Gravel Driveway Restoration	319	\$ 4.00	\$ 1,276.00	\$ 6.22	\$ 1,984.18
State Road (Asphalt) Restoration	420	\$ 35.00	\$ 14,700.00	\$ 31.72	\$ 13,322.40
TOTALS			\$ 680,596.41		\$ 743,586.89



CALIFORNIA CROSS ROAD
8" WATER MAIN EXTENSION
SUB DISTRICT D - PHASE IV

BID OPEN
MARCH 7, 2000

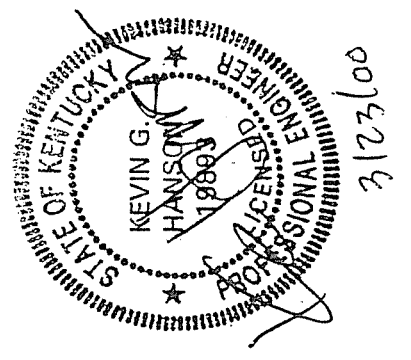
Item	Quantity	Glover Construction Co.		Paul Rack Excavating	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	19213	\$ 21.00	\$ 403,473.00	\$ 26.00	\$ 499,538.00
8-INCH C-900 OR C-909 PVC Pipe and Fittings	2040	\$ 31.00	\$ 63,240.00	\$ 24.00	\$ 48,960.00
3/4-inch Air Release Valve	9	\$ 500.00	\$ 4,500.00	\$ 600.00	\$ 5,400.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	29	\$ 500.00	\$ 14,500.00	\$ 575.00	\$ 16,675.00
8-inch x 8-inch x 8-inch Ductile Iron Anchoring Tee & Blocks	10	\$ 200.00	\$ 2,000.00	\$ 250.00	\$ 2,500.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	6	\$ 1,000.00	\$ 6,000.00	\$ 1,000.00	\$ 6,000.00
Concrete Encasement for Creek Crossings	1060	\$ 33.00	\$ 34,980.00	\$ 44.00	\$ 46,640.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	44	\$ 125.00	\$ 5,500.00	\$ 185.00	\$ 8,140.00
High Pressure Fire Hydrant Assembly	41	\$ 2,000.00	\$ 82,000.00	\$ 2,000.00	\$ 82,000.00
Standard Pressure Fire Hydrant Assembly	2	\$ 2,000.00	\$ 4,000.00	\$ 1,750.00	\$ 3,500.00
Temporary Fire Hydrant Assembly	1	\$ 2,000.00	\$ 2,000.00	\$ 1,650.00	\$ 1,650.00
8-inch Cast Iron Plug and Block	8	\$ 1,000.00	\$ 8,000.00	\$ 85.00	\$ 680.00
Pressure Regulator Pit	1	\$ 35,500.00	\$ 35,500.00	\$ 20,600.00	\$ 20,600.00
Connect to Existing 6-inch Main	2	\$ 1,000.00	\$ 2,000.00	\$ 1,200.00	\$ 2,400.00
Connect to Existing 8-inch Main	1	\$ 1,000.00	\$ 1,000.00	\$ 1,200.00	\$ 1,200.00
8-inch x 6-inch Reducer	2	\$ 100.00	\$ 200.00	\$ 75.00	\$ 150.00
Bore and Jack 18-inch Steel Encasement Pipe	98	\$ 200.00	\$ 19,600.00	\$ 195.00	\$ 19,110.00
Water Service-Short	16	\$ 500.00	\$ 8,000.00	\$ 450.00	\$ 7,200.00
Water Service-Long	17	\$ 700.00	\$ 11,900.00	\$ 550.00	\$ 9,350.00
3/4-inch Service from meter to within 2-feet of the House	1820	\$ 30.00	\$ 54,600.00	\$ 15.00	\$ 27,300.00
Asphalt Driveway Restoration	53	\$ 28.00	\$ 1,484.00	\$ 27.00	\$ 1,431.00
Gravel Driveway Restoration	319	\$ 12.00	\$ 3,828.00	\$ 6.00	\$ 1,914.00
State Road (Asphalt) Restoration	420	\$ 15.00	\$ 6,300.00	\$ 45.00	\$ 18,900.00
TOTALS			\$ 774,605.00		\$ 831,238.00



CALIFORNIA CREEK ROAD
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE IV

BID OPEN
 MARCH 7, 2000

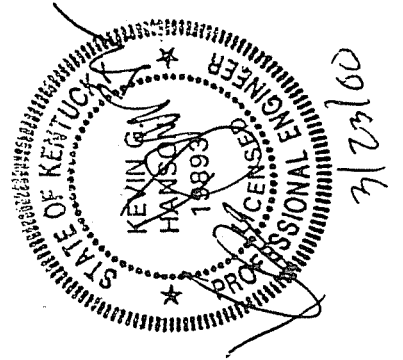
Item	Quantity	Schweitzer Construction		Lonkard Construction	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-Inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	19213	\$ 24.00	\$ 461,112.00	\$ 27.50	\$ 528,357.50
8-INCH C-900 OR C-909 PVC Pipe and Fittings	2040	\$ 22.00	\$ 44,880.00	\$ 24.00	\$ 48,960.00
3/4-Inch Air Release Valve	9	\$ 250.00	\$ 2,250.00	\$ 350.00	\$ 3,150.00
8-Inch Ductile Iron Resilient Seated Gate Valve & Box	29	\$ 700.00	\$ 20,300.00	\$ 650.00	\$ 18,850.00
8-Inch x 8-Inch x 8-Inch Ductile Iron Anchoring Tee & Blocks	10	\$ 150.00	\$ 1,500.00	\$ 250.00	\$ 2,500.00
8-Inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	6	\$ 1,000.00	\$ 6,000.00	\$ 1,000.00	\$ 6,000.00
Concrete Encasement for Creek Crossings	1060	\$ 50.00	\$ 53,000.00	\$ 25.00	\$ 26,500.00
8-Inch x 8-Inch x 6-Inch Ductile Iron Anchoring Tee & Blocks	44	\$ 150.00	\$ 6,600.00	\$ 200.00	\$ 8,800.00
High Pressure Fire Hydrant Assembly	41	\$ 2,600.00	\$ 106,600.00	\$ 2,300.00	\$ 94,300.00
Standard Pressure Fire Hydrant Assembly	2	\$ 2,400.00	\$ 4,800.00	\$ 1,900.00	\$ 3,800.00
Temporary Fire Hydrant Assembly	1	\$ 2,500.00	\$ 2,500.00	\$ 1,900.00	\$ 1,900.00
8-Inch Cast Iron Plug and Block	8	\$ 150.00	\$ 1,200.00	\$ 250.00	\$ 2,000.00
Pressure Regulator Pit	1	\$ 12,000.00	\$ 12,000.00	\$ 10,000.00	\$ 10,000.00
Connect to Existing 6-Inch Main	2	\$ 2,000.00	\$ 4,000.00	\$ 2,000.00	\$ 4,000.00
Connect to Existing 8-Inch Main	1	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00
8-Inch x 6-Inch Reducer	2	\$ 150.00	\$ 300.00	\$ 250.00	\$ 500.00
Bore and Jack 18-Inch Steel Encasement Pipe	98	\$ 300.00	\$ 29,400.00	\$ 185.00	\$ 18,130.00
Water Service-Short	16	\$ 700.00	\$ 11,200.00	\$ 350.00	\$ 5,600.00
Water Service-Long	17	\$ 1,000.00	\$ 17,000.00	\$ 650.00	\$ 11,050.00
3/4-Inch Service from meter to within 2-feet of the House	1820	\$ 12.00	\$ 21,840.00	\$ 8.00	\$ 14,560.00
Asphalt Driveway Restoration	53	\$ 45.00	\$ 2,385.00	\$ 30.00	\$ 1,590.00
Gravel Driveway Restoration	319	\$ 8.00	\$ 2,552.00	\$ 15.00	\$ 4,785.00
State Road (Asphalt) Restoration	420	\$ 45.00	\$ 18,900.00	\$ 45.00	\$ 18,900.00
TOTALS			\$ 832,819.00		\$ 836,732.50



2/27/00

CALIFORNIA CROSS ROAD
8" WATER MAIN EXTENSION
SUB DISTRICT D - PHASE IV

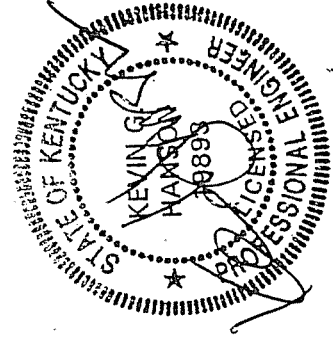
Item	Quantity	Staton's Construction Co.		Larry Smith Construction	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	19213	\$ 23.50	\$ 451,505.50	\$ 30.00	\$ 576,390.00
8-INCH C-900 OR C-909 PVC Pipe and Fittings	2040	\$ 18.00	\$ 36,720.00	\$ 27.00	\$ 55,080.00
3/4-inch Air Release Valve	9	\$ 400.00	\$ 3,600.00	\$ 500.00	\$ 4,500.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	29	\$ 690.00	\$ 20,010.00	\$ 500.00	\$ 14,500.00
8-inch x 8-inch x 8-inch Ductile Iron Anchoring Tee & Blocks	10	\$ 550.00	\$ 5,500.00	\$ 250.00	\$ 2,500.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	6	\$ 2,500.00	\$ 15,000.00	\$ 750.00	\$ 4,500.00
Concrete Encasement for Creek Crossings	1060	\$ 90.00	\$ 95,400.00	\$ 35.00	\$ 37,100.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	44	\$ 350.00	\$ 15,400.00	\$ 150.00	\$ 6,600.00
High Pressure Fire Hydrant Assembly	41	\$ 2,400.00	\$ 98,400.00	\$ 2,100.00	\$ 86,100.00
Standard Pressure Fire Hydrant Assembly	2	\$ 2,200.00	\$ 4,400.00	\$ 1,800.00	\$ 3,600.00
Temporary Fire Hydrant Assembly	1	\$ 1,900.00	\$ 1,900.00	\$ 1,500.00	\$ 1,500.00
8-inch Cast Iron Plug and Block	8	\$ 300.00	\$ 2,400.00	\$ 150.00	\$ 1,200.00
Pressure Regulator Pit	1	\$ 18,000.00	\$ 18,000.00	\$ 10,000.00	\$ 10,000.00
Connect to Existing 6-inch Main	2	\$ 2,200.00	\$ 4,400.00	\$ 2,300.00	\$ 4,600.00
Connect to Existing 8-inch Main	1	\$ 2,200.00	\$ 2,200.00	\$ 2,500.00	\$ 2,500.00
8-inch x 6-inch Reducer	2	\$ 550.00	\$ 1,100.00	\$ 150.00	\$ 300.00
Bore and Jack 18-inch Steel Encasement Pipe	98	\$ 150.00	\$ 14,700.00	\$ 250.00	\$ 24,500.00
Water Service-Short	16	\$ 200.00	\$ 3,200.00	\$ 250.00	\$ 4,000.00
Water Service-Long	17	\$ 700.00	\$ 11,900.00	\$ 1,200.00	\$ 20,400.00
3/4-inch Service from meter to within 2-feet of the House	1820	\$ 5.00	\$ 9,100.00	\$ 20.00	\$ 36,400.00
Asphalt Driveway Restoration	53	\$ 20.00	\$ 1,060.00	\$ 25.00	\$ 1,325.00
Gravel Driveway Restoration	319	\$ 18.00	\$ 5,742.00	\$ 4.00	\$ 1,276.00
State Road (Asphalt) Restoration	420	\$ 45.00	\$ 18,900.00	\$ 50.00	\$ 21,000.00
TOTALS			\$ 840,537.50		\$ 919,871.00



CALIFORNIA CROSS ROAD
 8" WATER MAIN EXTENSION
 SUB DISTRICT D - PHASE IV

BID OF -
 MARCH 7, 2000

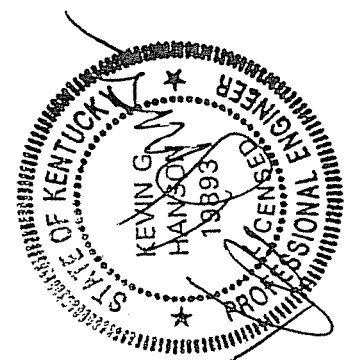
Item	Quantity	Seevers' Excavating, Inc.		D.F. Bailey, Inc.	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	19213	\$ 32.85	\$ 631,147.05	\$ 22.62	\$ 434,598.06
8-INCH C-900 OR C-909 PVC Pipe and Fittings	2040	\$ 30.50	\$ 62,220.00	\$ 20.28	\$ 41,371.20
3/4-inch Air Release Valve	9	\$ 450.00	\$ 4,050.00	\$ 135.89	\$ 1,223.01
8-inch Ductile Iron Resilient Seated Gate Valve & Box	29	\$ 650.00	\$ 18,850.00	\$ 703.24	\$ 20,393.96
8-inch x 8-inch x 8-inch Ductile Iron Anchoring Tee & Blocks	10	\$ 250.00	\$ 2,500.00	\$ 285.03	\$ 2,850.30
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	6	\$ 975.00	\$ 5,850.00	\$ 1,043.65	\$ 6,261.90
Concrete Encasement for Creek Crossings	1060	\$ 10.00	\$ 10,600.00	\$ 57.36	\$ 60,801.60
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	44	\$ 250.00	\$ 11,000.00	\$ 272.56	\$ 11,992.64
High Pressure Fire Hydrant Assembly	41	\$ 1,975.00	\$ 80,975.00	\$ 2,939.45	\$ 120,517.45
Standard Pressure Fire Hydrant Assembly	2	\$ 1,850.00	\$ 3,700.00	\$ 2,565.90	\$ 5,131.80
Temporary Fire Hydrant Assembly	1	\$ 2,000.00	\$ 2,000.00	\$ 2,053.00	\$ 2,053.00
8-inch Cast Iron Plug and Block	8	\$ 225.00	\$ 1,800.00	\$ 90.45	\$ 723.60
Pressure Regulator Pit	1	\$ 8,500.00	\$ 8,500.00	\$ 22,000.00	\$ 22,000.00
Connect to Existing 6-inch Main	2	\$ 1,000.00	\$ 2,000.00	\$ 366.38	\$ 732.76
Connect to Existing 8-inch Main	1	\$ 1,500.00	\$ 1,500.00	\$ 306.59	\$ 306.59
8-inch x 6-inch Reducer	2	\$ 195.00	\$ 390.00	\$ 127.80	\$ 255.60
Bore and Jack 18-inch Steel Encasement Pipe	98	\$ 175.00	\$ 17,150.00	\$ 207.83	\$ 20,367.34
Water Service-Short	16	\$ 375.00	\$ 6,000.00	\$ 296.48	\$ 4,743.68
Water Service-Long	17	\$ 750.00	\$ 12,750.00	\$ 592.96	\$ 10,080.32
3/4-inch Service from meter to within 2-feet of the House	1820	\$ 9.75	\$ 17,745.00	\$ 13.14	\$ 23,914.80
Asphalt Driveway Restoration	53	\$ 31.00	\$ 1,643.00	\$ 189.37	\$ 10,036.61
Gravel Driveway Restoration	319	\$ 11.50	\$ 3,668.50	\$ 15.16	\$ 4,836.04
State Road (Asphalt) Restoration	420	\$ 34.00	\$ 14,280.00	\$ 275.84	\$ 115,852.80
TOTALS			\$ 920,318.55		\$ 921,045.06



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CALIFORNIA - ROAD
8" WATER MAIN EXTENSION
SUB DISTRICT D - PHASE IV

Item	Quantity	Lawrence Construction		Hartman and Smith	
		Unit Cost	Total Cost	Unit Cost	Total Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	19213	\$ 33.00	\$ 634,029.00	\$ 34.00	\$ 653,242.00
8-INCH C-900 OR C-909 PVC Pipe and Fittings	2040	\$ 31.72	\$ 64,708.80	\$ 32.00	\$ 65,280.00
3/4-inch Air Release Valve	9	\$ 400.00	\$ 3,600.00	\$ 400.00	\$ 3,600.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	29	\$ 650.00	\$ 18,850.00	\$ 600.00	\$ 17,400.00
8-Inch x 8-Inch x 8-Inch Ductile Iron Anchoring Tee & Blocks	10	\$ 200.00	\$ 2,000.00	\$ 200.00	\$ 2,000.00
8-Inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	6	\$ 1,200.00	\$ 7,200.00	\$ 800.00	\$ 4,800.00
Concrete Encasement for Creek Crossings	1060	\$ 25.00	\$ 26,500.00	\$ 100.00	\$ 106,000.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	44	\$ 200.00	\$ 8,800.00	\$ 600.00	\$ 26,400.00
High Pressure Fire Hydrant Assembly	41	\$ 1,800.00	\$ 73,800.00	\$ 2,500.00	\$ 102,500.00
Standard Pressure Fire Hydrant Assembly	2	\$ 1,500.00	\$ 3,000.00	\$ 2,500.00	\$ 5,000.00
Temporary Fire Hydrant Assembly	1	\$ 1,700.00	\$ 1,700.00	\$ 2,500.00	\$ 2,500.00
8-Inch Cast Iron Plug and Block	8	\$ 150.00	\$ 1,200.00	\$ 500.00	\$ 4,000.00
Pressure Regulator Pit	1	\$ 15,000.00	\$ 15,000.00	\$ 4,500.00	\$ 4,500.00
Connect to Existing 6-Inch Main	2	\$ 2,000.00	\$ 4,000.00	\$ 3,500.00	\$ 7,000.00
Connect to Existing 8-Inch Main	1	\$ 2,200.00	\$ 2,200.00	\$ 3,500.00	\$ 3,500.00
8-Inch x 6-Inch Reducer	2	\$ 200.00	\$ 400.00	\$ 100.00	\$ 200.00
Bore and Jack 18-Inch Steel Encasement Pipe	98	\$ 250.00	\$ 24,500.00	\$ 310.00	\$ 30,380.00
Water Service-Short	16	\$ 500.00	\$ 8,000.00	\$ 400.00	\$ 6,400.00
Water Service-Long	17	\$ 1,500.00	\$ 25,500.00	\$ 600.00	\$ 10,200.00
3/4-Inch Service from meter to within 2-feet of the House	1820	\$ 6.00	\$ 10,920.00	\$ 20.00	\$ 36,400.00
Asphalt Driveway Restoration	53	\$ 19.00	\$ 1,007.00	\$ 36.00	\$ 1,908.00
Gravel Driveway Restoration	319	\$ 14.00	\$ 4,466.00	\$ 18.00	\$ 5,742.00
State Road (Asphalt) Restoration	420	\$ 28.00	\$ 11,760.00	\$ 54.00	\$ 22,680.00
TOTALS			\$ 953,140.80		\$ 1,121,632.00



3/23/00

DISTEL CONSTRUCTION, INC.
2351 CHARLES STREET
PORTSMOUTH, OHIO 45662
(740) 353-2815
FAX (740) 354-0632

FACSIMILE TRANSMISSION: COVER LETTER

DATE: 3-13-00

TIME: 5:40 pm.

TO: Cardinal Eng.
Kevin Hanson

FAX# (606) 581-9636

FROM: Becky

FAX# (740) 354-0632

NUMBER OF PAGES SENT: 2

COMMENTS: Following is the references you
requested. If you need anything else,
Please let ME know.

Thanks

Copies to _____

Signed: Becky Distel

**DISTEL CONSTRUCTION, INC.
2351 CHARLES STREET
PORTSMOUTH, OHIO 45662
(740) 353-2815
FAX (740) 354-0632**

March 13, 2000

Cardinal Engineering
ATTENTION: Kevin Hanson
One Mooock Road
Wilder, KY

Dear Mr. Hanson:

Re: 8" Water Main Extension: Sub District D
Phase IV @ California Cross Road

The following are the references that you requested that I fax to you for the above referenced bid.

Mike Blackburn, Service Director, City of Portsmouth, (740) 354-7766, \$520,000.00

Lawrence Water Corporation, Barry Bowman, (740) 886-6212, \$132,073.00

Village of Coal Grove, Diana Nance, (740) 533-0102, \$58,875.00

Pike County Community Development, Ron Pfeiffer, (740) 947-5808, \$ 75,000.00

Northwest Water System, Terry Altman, (740) 259-2789, \$100,00.00

Chris Payton, Engineering Department, City of Portsmouth, (740) 354-7557, \$325,000.00

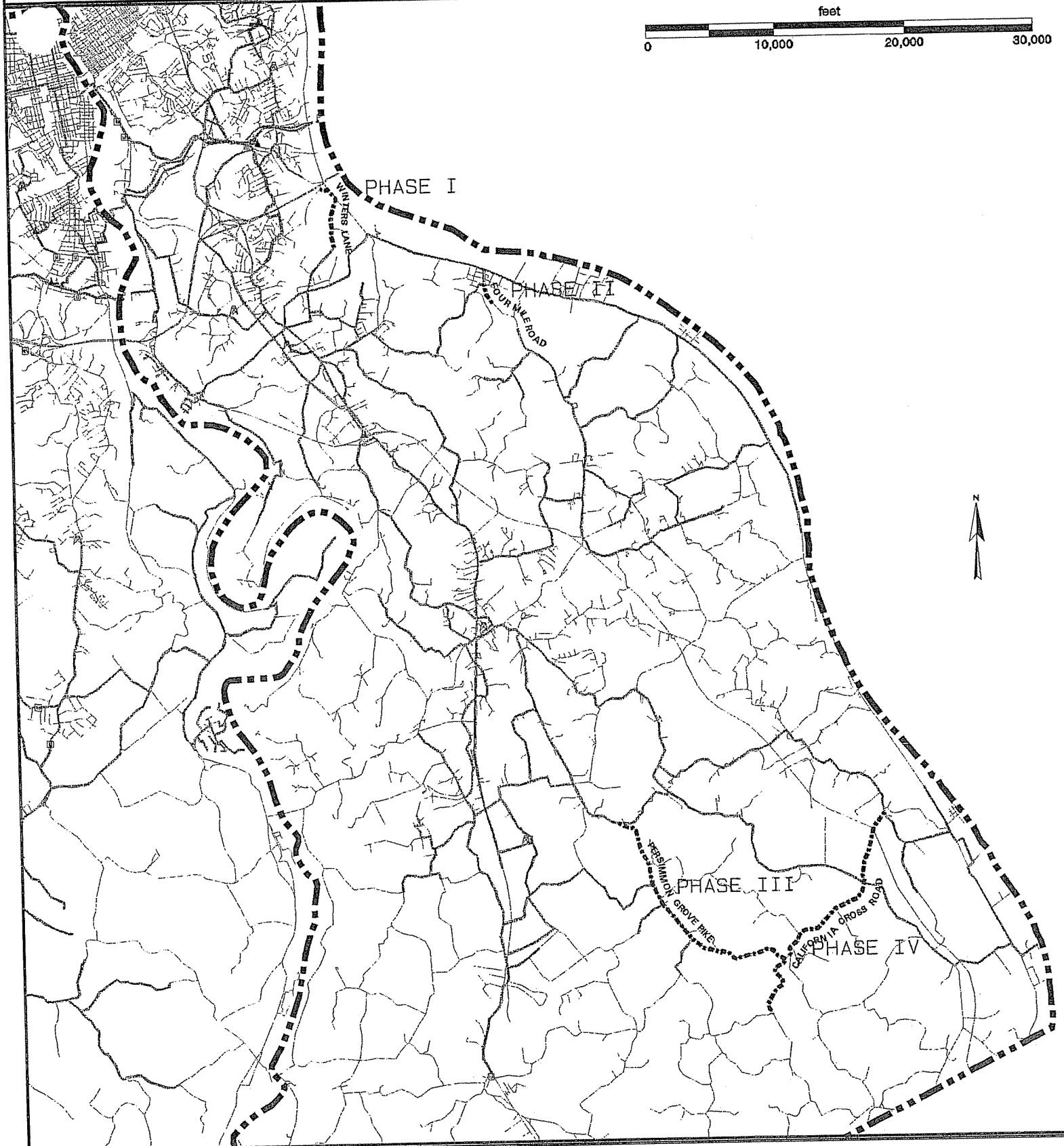
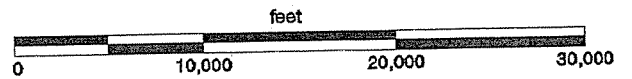
If you need anything else, please feel free to contact our office.

Sincerely,



David Distel
Distel Construction, Inc.

Northern Kentucky Water Service District Campbell County Service Area



Apr-10-2000

SUB-DISTRICT D

Project Funding

C.D.B.G. Grant - Current Proposed Project



**REVENUE REQUIREMENTS
SUBDISTRICT D WATER PROJECT**

NORTHERN KENTUCKY WATER SERVICE DISTRICT \$949,117 BAN (to become future bond issue reimbursed by the surcharge)

SURCHARGE PROJECTION

- **74 initial users paying the \$30 monthly surcharge**
- **\$949,117 BAN (to become a future 30 year bond issue)**
- **Future Bond issue will be for 30 years at an estimated 6 percent interest rate**

Estimated annual debt service including interest for future bond issue of \$949,117 is \$68,953.35 annually.

Initial surcharge annual contribution is $74 * 12 * \$30 = \$26,640$.

The Northern Kentucky Water Service District is anticipating 4 additional users annually for the 30-year period which will increase the surcharge revenue to 194 projected users * $12 * \$30 = \$69,840$ which will meet the \$68,953.35 projected revenue requirements.

NORTHERN KENTUCKY WATER SERVICE DISTRICT \$216,869 BAN (to become future bond issue not part of the surcharge)

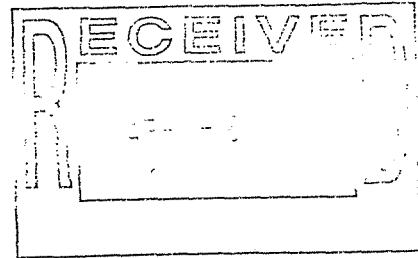
The Northern Kentucky Water Service District is contributing \$216,869 to the project to replace an existing section of 4-inch water main located on Persimmon Grove. This contribution will be part of a future Bond Issue. The debt service and interest estimated for this amount is \$15,755.53 annually. This is not part of the surcharge calculation.

HYDROSOURCE

8182 Chagrin Road • Chagrin Falls, Ohio 44023

April 4, 2000

Mr. Jerry Beatty
Utility Service & Supply, Inc.
P.O. Box 438
Monroe, OH 45050

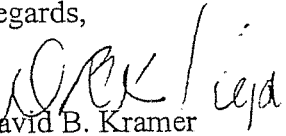


Dear Jerry:

The price of PVC continues to escalate. We have had three price increases since January 1, 2000. These increases reflect an approximate 7% change in pricing so far this year. We expect another 2% increase in May and we should plan on a 2% increase each month through August. The raw material shortages have caused these problems and I do not see any end in sight.

The Northern California crossroads project for Northern Kentucky water district of approximately 2,000 feet of 8" DR 18 is obviously effected since this project was bid on March 10, 2000. The sooner your customer puts this on order the better the price and delivery will be.

Regards,


David B. Kramer

Cc: Ken Bell - NAPC
DBK/ejd

LIPPERT CONTRACTORS

Homer C. Lippert

P.O. Box 466

4243 Licking Pike

Alexandria, KY 41001-0466

Telephone 635-2976

RECEIVED

MAY 09 REC'D

ENGR.

May 5, 2000

Northern KY Water Service District
100 Aqua Drive
Cold Spring, KY 41076

RE: Water Installation

Dear NKWSD:

I am requesting information on any plans you may or may not have to have water installed on Licking Pike in Alexandria. This is the third time in eight years that I have tried to get water installed at our address above. I live one mile away from the water tower in Alexandria at U.S. 27 and there is a fire hydrant about 3/10 of a mile from my home. If you do not have any plans currently to put water where I live, could you tell me how to go about it myself. Do you have any kind of low interest rate loans, can I pay someone to do it for me, etc? A lot of my neighbors on my road and on Steffen, Poplar Thicket, and Rifle Range Rd. would like to have water. I look forward to hearing from you.

Sincerely,

Homer Lippert

Homer Lippert

Licking Pike Water Main Estimate
 From Pond Creek Road 8"

ITEM	QUANTITY	TOTAL UNIT COST	COST
8" Ductile Iron Pipe & Fittings	2320	LF	\$48,720.00
8" Cast Iron Res. Seated Gate Valve & Box	4	EA	\$2,800.00
8"x8"x6" Ductile Iron Anchoring Tee & Blo	6	EA	\$1,500.00
Fire Hydrant Assembly (High Pressure)	6	EA	2,000.00
8"x8"x8" Ductile Iron Anchoring Tee & Blo	1	EA	\$300.00
Remove 8" Plug & Block	1	EA	\$150.00
8" Plug & Block	2	EA	\$300.00
Driveway Restoration	20	SY	\$700.00
Roadway Restoration	10	SY	\$450.00
Restoration	1	LS	\$4,000.00
Sub-Total			\$70,920.00
15% Conting. (Eng., Etc.)			10,638.00
Total Cost			\$81,558.00

Average Cost/Foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$35.15	\$1,757.72	1	\$79,800.28	\$79,800.28
		2	\$78,042.57	\$39,021.28
		3	\$76,284.85	\$25,428.28
		4	\$74,527.14	\$18,631.78
		5	\$72,769.42	\$14,553.88
		6	\$71,011.71	\$11,835.28
		7	\$69,253.99	\$9,893.43
		8	\$67,496.28	\$8,437.03
		9	\$65,738.56	\$7,304.28
		10	\$63,980.84	\$6,398.08



Water Service District

May 17, 2000

Mr. Homer C. Lippert
Lippert Contractors
P. O. Box 466
4243 Licking Pike
Alexandria, KY 41001-0466

Re: Information on Water Main Extension to your residence at 4243 Licking Pike; Alexandria, Campbell County, Kentucky

Dear Mr. Lippert,

Currently, the Water District does not have any plans to extend water main along Licking Pike in front of your property. The District has worked up a "ball park" estimate based on a 2,320 linear feet of 8" water main, including fire hydrants, which would cost approximately \$81,558.00. This estimate does not include tap fee of \$750.00 for each customer and the service line extension from the house to the meter setting.

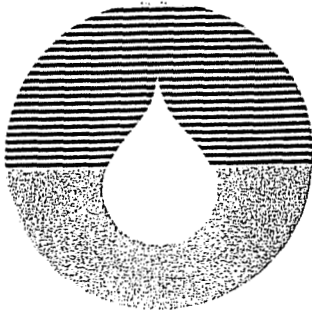
The District does not have any kind of low interest rate loans, but there is couple of different ways, under the District's Tariff, to construct this project. One method for water main extension allows the District to pay for 50 feet of water main extension for every new customer connected to the extension. Under this policy, if there would be 2 customers, then the approximate cost per customer would be \$39,021.28 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction.

Another method to extending the water main is to privately hire a Kentucky Registered Engineer to design the water main extension project and a contractor to construct the waterline, but this would limit the involvement of the District.

The District also works with the Campbell Co. Fiscal Court to secure grant monies for water main extension projects. The District currently has a grant project underway, (Sud-District D), which the monies have been allocated for other streets in Campbell County. If you and your neighbors want to look closer at the 50 feet extension method or you all want to be taken under consideration for future grant projects, the District will need a petition, signed by everyone that is interested along with there addresses. Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely yours,

John Scheben, Jr.
Engineering Technician
cc:file



Northern Kentucky Water District

July 21, 2000

Mr. & Mrs. Wilson
207 Independence Station Road
Independence, Kentucky 41015

Re: Water Main Extension Cost Estimate for Independence Station Road; Independence,
Kenton County, Kentucky

Dear Mr & Mrs Wilson,

Per your request, the District has worked up a rough cost estimate to extend a water main along Independence Station Road from the existing water main end at #142 to the far side of your property. It is estimated to cost approx. \$54,286. This rough cost estimate is based on approx. 1,625 linear feet of 8" water main, including fire hydrants, but this estimate does not include tap fee of \$750.00 for each customer and the service line extension from the house to the meter setting. Under the District's Tariff, it allows the District to participate with the water main extension project by paying for 50 feet of water main cost for each customer that connects to the extension. The remainder of the cost of the project is borne by the property owners that connect to the extension. Any additional customers to the extension would reduce the cost to each customer for a period of five years after construction. Under the District's Policy, if 8 property owners connected, then the approximate cost per customer would be \$5,115, based on the ball park estimate.

Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the District. Should you have any questions or need additional information feel free to contact the Engineering office at 578-7890.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contracted by the District to prepare an engineer's construction estimate to firm up project cost. Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely yours,

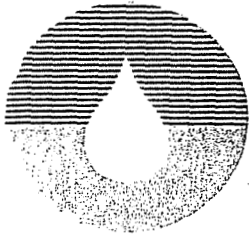
John Scheben, Jr.
Engineering Technician

cc file

Independence Station proposed 8" water main extension ---- Cost Estimate

ITEM	QUANTITY	TOTAL UNIT COST	COST
8" C-900 & Fittings	1575	LF 20.00	\$31,500.00
8" DIP & Fittings	50	LF 30.00	\$1,500.00
8" Cast Iron Res. Seated Gate Valve & Box	3	EA 600.00	\$1,800.00
8"x8"x6" Ductile Iron Anchoring Tee & Bloc	3	EA 400.00	\$1,200.00
Fire Hydrant Assembly	3	EA 1,200.00	\$3,600.00
8" Plug & Block	1	EA 150.00	\$150.00
Creek Crossing	50	LF 35.00	\$1,750.00
Easement	1	LS 1,500.00	\$1,500.00
Gravel Driveway Restoration	7	SY 25.00	\$175.00
Driveway Restoration	13	SY 30.00	\$390.00
Road Restoration	4	SY 35.00	\$140.00
General Restoration	1	LS 3,500.00	\$3,500.00
Sub-Total			\$47,205.00
15% Conting. (Eng., Etc.)			\$7,080.75
Total Cost			\$54,285.75

Average Cost/Foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$33.41	\$1,670.33	1	\$52,615.42	\$52,615.42
		2	\$50,945.09	\$25,472.54
		3	\$49,274.76	\$16,424.92
		4	\$47,604.43	\$11,901.11
		5	\$45,934.10	\$9,186.82
		6	\$44,263.77	\$7,377.29
		7	\$42,593.43	\$6,084.78
		8	\$40,923.10	\$5,115.39
		9	\$39,252.77	\$4,361.42
		10	\$37,582.44	\$3,758.24



Northern Kentucky
Water District

November 8, 2000

Mr. Mike Nolan
548 Upton Lane
Independence, KY 41051

Re: Water Main Extension along Cody Road and Upton Lane, Kenton County, Kentucky

Dear Mr. Nolan,

Attached is a copy of the letter sent to Mr. Jim Berling reference connecting into the water main in Troopers Crossing for a water main extension. The Water District has put together a rough "ball park" estimate based on a 3,150 linear feet of 8" water main, including fire hydrants, from where the developer of Troopers Crossing stops his extension on Cody Road to the last house on Upton Lane. The cost would be roughly \$114,510.00. This estimate does not include tap fee of \$750.00 for each customer and the service line extension from the house to the meter setting.

The District's Water Main Extension Policy allows the District to pay for 50 feet of water main extension for every new customer connected to the extension. Under this policy, if there would be 9 customers that tap into the water main, then the approximate cost per customer would be \$10,905 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction. Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this would limit the involvement of the District.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, an Kentucky Registered Engineer will be contracted by the District to prepare a engineer's construction estimate to firm up project cost. Should you have any questions or need additional information feel free to contact this office at 578-7890.

Sincerely yours,

John Scheber, Jr.
Engineering Technician

cc:file

Cody Rd./Upton Dr. proposed 8" water main extension ---- Cost Estimate

ITEM	QUANTITY	UNIT COST	TOTAL COST
8" DI Pipe & Fittings (High Pressures)	1950	LF	25.00
8" PVC Pipe & Fittings	1200	LF	20.00
8" Cast Iron Res. Seated Gate Valve & Box	3	EA	600.00
8"x8"x8" Ductile Iron Tee & Block	1	EA	350.00
8"x8"x6" Ductile Iron Anchoring Tee & Block	7	EA	250.00
8" Plug & Block	2	EA	150.00
Fire Hydrant Assembly	7	EA	1,600.00
Roadway Restoration	11	SY	40.00
Creek Crossing	3	CY	50.00
Driveway Restoration	11	SY	35.00
Restoration	1	LS	6,300.00
Sub-Total			\$95,425.00
20% Conting. (Eng, Etc.)			19,085.00
Total Cost			\$114,510.00

50' Participation Amount by District for each Customer	Customers # of connecting to main.	Total Customer Cost	Cost for each Customer
Average Cost/Foot \$36.35	1	\$112,692.38	###
\$1,817.62	2	\$110,874.76	\$55,437.38
	3	\$109,057.14	\$36,352.38
	4	\$107,239.52	\$26,809.88
	5	\$105,421.90	\$21,084.38
	6	\$103,604.29	\$17,267.38
	7	\$101,786.67	\$14,540.95
	8	\$99,969.05	\$12,496.13
	9	\$98,151.43	\$10,905.71
	10	\$96,333.81	\$9,633.38
	11	\$94,516.19	\$8,592.38
	12	\$92,698.57	\$7,724.88
	13	\$90,880.95	\$6,990.84
	14	\$89,063.33	\$6,361.67
	15	\$87,245.71	\$5,816.38
	16	\$85,428.10	\$5,339.26
	17	\$83,610.48	\$4,918.26
	18	\$81,792.86	\$4,544.05
	19	\$79,975.24	\$4,209.22
	20	\$78,157.62	\$3,907.88

**WATER MAIN EXTENSION AGREEMENT
FOR APPLICANT AT TIME OF EXTENSION CONSTRUCTION**

This Agreement is made and entered into this 3rd day of January, 2001, by and between Christopher and Carole Hahn, who resides at 82 Independence Station Rd. Ind., KY 41051, hereinafter referred to as "Customer," and the Northern Kentucky Water Service District, hereinafter referred to as the "District."

WHEREAS, Customer desires to participate in the construction of a water main extension pursuant to the District's Rates, Rules and Regulations; and

WHEREAS, the District desires to facilitate Customer's participation in the construction of the water main extension;

NOW, THEREFORE, Customer and the District hereby agree as follows:

- I. Customer agrees to participate in the construction of a water main extension along 82 Independence Station Rd. in accordance with the District's Rates, Rules and Regulations. The District shall determine the total cost (exclusive of the meter connection costs) and the total length of the water main extension and agrees to pay that portion of the total cost equal to fifty (50) feet for each applicant for service to the extension at the time of construction and for a period of five years after the extension is placed in service.
2. Customer understands that the total cost of the extension not covered by the District's contribution shall be paid, in equal shares, by all applicants desiring service on the extension at the time of construction and for a period of five years after the extension is placed in service. Customer agrees to pay its estimated contribution and actual share for the construction of the extension as outlined in paragraph 3 below. Customer also agrees to pay the District's approved "tap-on-fee" for a meter connection to the water main extension.
3. Based on the estimated costs for the water main extension, Customer's estimated contribution will be \$1545.⁰⁰. Customer agrees to pay this amount to the District by Jan. 8, 2001. In consideration of Customer's payment of this amount, the District will proceed with the water main extension. After the extension is completed, the actual cost of the project will be determined. Customer agrees to pay to the District, within thirty (30) days after receiving written notification, any amount by which its actual share of the cost of the extension exceeds its estimated contribution. The District shall refund to Customer any amount by which Customer's estimated contribution exceeds its actual share of the cost.
4. For a period of five years after the water main extension is placed in service, each new applicant for connection to the water main extension (but not to laterals or extensions therefrom) will be required to contribute to the cost of the extension based on a recomputation of the District's portion and each customer's/applicant's share of the actual cost. Each year, the District will refund to those customers/applicants that have previously contributed

to the cost of the extension that amount necessary to reduce their contribution to the currently calculated amount for each customer/applicant on the extension.

5. Customer shall keep the District informed at all times of its current address using the District's "Change of Address" form. Any refunds will be sent to the most current address provided by Customer.

6. Following the expiration of five years after the water main extension is placed in service, each new applicant for service on the extension will only be required to pay the District's "tap-on-fee."

ENTERED into the date first above written.

CUSTOMER

NORTHERN KENTUCKY WATER
SERVICE DISTRICT

Signature: Christopher A. Hahn
Carole Hahn

Signature: [Signature]

Printed Name: Christopher Hahn
Carole Hahn

Printed Name: RONALD J. BARNOW

Address: 82 Independence Station Rd.
Independence, Ky 41051

Title: Area GM

water/mainextagr

Independence Station Road proposed 8" water main extension ---- Cost Estimate

ITEM	QUANTITY	UNIT	TOTAL UNIT COST	COST
8" DIP Pipe & Fittings	123	LF	8.45	\$1,039.35
8" 11 1/4 Degree Bends	4	EA	74.11	\$296.44
8" 22 1/2 Degree Bends	1	EA	77.20	\$77.20
12" - 8" Reducer	1	EA	100.00	\$100.00
8" - 6" Reducer	1	EA	30.51	\$30.51
Fire Hydrant	1	EA	660.51	\$660.51
8" Plug	1	EA	35.27	\$35.27
8"X8"X6" MJ Tee	1	EA	87.17	\$87.17
6" Gate Valve	1	EA	225.66	\$225.66
8"X12" Anchoring Coupling	1	EA	53.19	\$53.19
Restoration	1	LS	128.50	\$128.50
Concrete Encasement	1	LS	331.50	\$331.50
Engineering	1	LS	1,767.00	\$1,767.00
Labor	1	LS	3,600.00	\$3,600.00
Sub-Total				\$8,432.30
Total Cost				\$8,432.30

20' additional footage, end of the pipe was not where it was supposed to be
 17' additional footage, creek crossing and extend pipe into R/W of Wayman Branch
 Total project length is 160'

Average Cost/Foot \$68.56

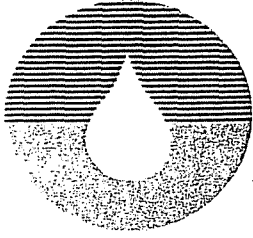
50' Participation Amount by District for each Customer \$3,427.76

of Customers connecting to main. 1

Total Customer Cost \$1,576.77

Amount Paid \$1,545.00

Final Amount Due **\$31.77**



**Northern Kentucky
Water District**

March 6, 2001

Ms. Mary Beth Linkugel
12 Enzweiler Road
Alexandria, Kentucky 41001

Re: Water Main Extension Cost Estimate along Mary Ingles Highway, Campbell County,
Kentucky

Dear Ms. Linkugel,

Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Enzweiler Road from the existing water main at #51. It is approx. 900 linear feet to extend the water main to your far property limits. Based on this distance, the estimated cost for an 8" water main, including fire hydrants, would be \$31,668.00. This estimate includes labor, materials, engineering and contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements by the City. This estimate also does not include tap fees of \$750.00 for each customer and the service line extension from the house to the meter setting.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. Under this policy, if there were 8 customers that connect to the new water main extension, then the approximate cost per customer would be \$2,199.17 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, an Kentucky Registered Engineer will be contracted by the District to prepare a engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the District. Should you have any questions or need additional information feel free to contact the Engineering office at 578-9898 ext. 3017.

Sincerely yours,

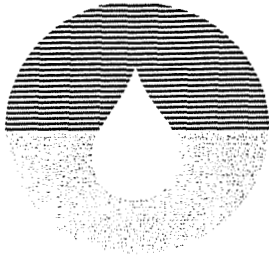
John Scheben, Jr.
Engineering Technician

cc file

Enzweiler road proposed 8" water main extension --- Cost Estimate

ITEM	QUANTITY	TOTAL UNIT COST	COST
8" PVC Pipe & Fittings	900	20.00	\$18,000.00
8" Cast Iron Res. Seated Gate Valve & Box	1	750.00	\$750.00
6" Cast Iron Res. Seated Gate Valve & Box	1	650.00	\$650.00
8"x8"x6" Ductile Iron Anchoring Tee & Block	2	250.00	\$500.00
8" Plug & Block	1	150.00	\$150.00
Fire Hydrant Assembly	2	1,600.00	\$3,200.00
Driveway Restoration	4	35.00	\$140.00
Restoration	1	3,000.00	\$3,000.00
Sub-Total			\$26,390.00
20% Conting. (Eng., Etc.)			5,278.00
Total Cost			\$31,668.00

50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$1,759.33	1	\$29,908.67	\$29,908.67
	2	\$28,149.33	\$14,074.67
	3	\$26,390.00	\$8,796.67
	4	\$24,630.67	\$6,157.67
	5	\$22,871.33	\$4,574.27
	6	\$21,112.00	\$3,518.67
	7	\$19,352.67	\$2,764.67
	8	\$17,593.33	\$2,199.17
	9	\$15,834.00	\$1,759.33
	10	\$14,074.67	\$1,407.47
	11	\$12,315.33	\$1,119.58
	12	\$10,556.00	\$879.67
	13	\$8,796.67	\$676.67
	14	\$7,037.33	\$502.67
	15	\$5,278.00	\$351.87
	16	\$3,518.67	\$219.92
	17	\$1,759.33	\$103.49
	18	\$0.00	\$0.00
	19	(\$1,759.33)	(\$92.60)
	20	(\$3,518.67)	(\$175.93)



Northern Kentucky
Water District

March 22, 2001

To the Residence of:

11274 Graven Road
11285 Graven Road
315 Wright Road
381 Wright Road
447 Wright Road

Re: Water Main Extension Cost Estimate along Graven Road and Wright Road; Kenton County, Kentucky

Ladies and Gentlemen:

The Northern Ky. Water District has received several requests from the residence along Graven and Wright Roads about extending the public water main for water service. The water main that is currently under construction is part of a large grant project. The remaining funds only permitted the extension along Graven Road to the current stopping point. This main can be extended to service the remaining portion of Graven Road and Wright Road. The District has prepared a "ball park" estimate, based on a total of 2,790 linear feet, which is from the existing end of the water main along Graven Road to Wright Road and west on Wright Road 750' and east on Wright Road 800', of \$86,472. This estimate includes labor, materials, fire hydrants, engineering and contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements by the Road Dept. This estimate also does not include tap fees of \$750.00 for each customer and the service line extension from the house to the meter setting.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of water main cost for each customer that connects to the extension. The remainder of the cost of the project is borne by the property owners that connect to the extension. Under this policy, if there would be 8 customers, then the approximate cost per customer would be \$9,259.32 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction.

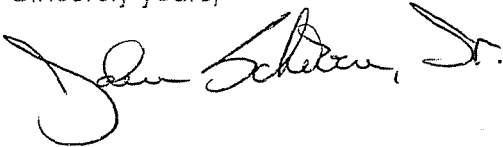
The existing water main extension along Graven Road is a Sub-District project which has a monthly surcharge (approx. \$30) attached to the water bill for everyone who connects to the water main. This surcharge pays back a low interest loan which helped pay for the extensions. The Ky. Public Service Commission requires that, any new water main extensions that are connected to these sub-district water mains, the new customers will have

pay the surcharge also. If the water main was extended along Graven and Wright Roads, all new customers that connect to the water main would have to pay the monthly surcharge and water bill along with the cost of the extension as referenced above.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses and phone numbers. The petition should state that the persons signing the petition understand that based on the estimated cost, they will be responsible for the portion of the water main construction cost not covered by the District's Extension Policy as referred to above. After the Water District receives this petition, a Kentucky Registered Engineer will be contracted by the District to prepare an engineer's construction estimate to firm up project cost and adjust the customer participation amount. The updated customer participation amount must be paid up-front, prior to the start of the project design.

Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the District. Should you have any questions or need additional information feel free to contact the Engineering office at 578-9898 ext. 3017.

Sincerely yours,

A handwritten signature in black ink that reads "John Scheben, Jr." The signature is written in a cursive style with a large, looping initial "J".

John Scheben, Jr.
Engineering Technician

cc:file

Graven Road Light Road proposed 8" water main extension --- Cost Estimate

ITEM	QUANTITY	UNIT COST	TOTAL COST
3" PVC Pipe & Fittings	1240	LF	\$24,800.00
8" Cast Iron Res. Seated Gate Valve & Box	3	EA	\$1,800.00
8"x8"x8" Ductile Iron Tee & Block	1	EA	\$350.00
8"x8"x6" Ductile Iron Anchoring Tee & Block	2	EA	\$500.00
8" Plug & Block	2	EA	\$300.00
Fire Hydrant Assembly	2	EA	\$3,200.00
Roadway Restoration	11	SY	\$440.00
Restoration	1	LS	\$1,000.00
Sub-Total			\$32,390.00
20% Conting. (Eng., Etc.)			6,478.00
Total Cost			\$38,868.00

Wright Road - West - proposed 8" water main extension --- Cost Estimate

8" PVC Pipe & Fittings	750	LF	20.00	\$15,000.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA	600.00	\$600.00
8"x8"x8" Ductile Iron Anchoring Tee & Block	1	EA	250.00	\$250.00
8" Plug & Block	1	EA	150.00	\$150.00
Fire Hydrant Assembly	7	EA	1,600.00	\$11,200.00
Roadway Restoration	4	SY	40.00	\$160.00
Restoration	1	LS	35.00	\$140.00
Sub-Total			500.00	\$500.00
Total Cost				\$18,520.00

Wright Road - East - proposed 8" water main extension --- Cost Estimate

8" PVC Pipe & Fittings	800	LF	20.00	\$16,000.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA	600.00	\$600.00
8"x8"x8" Ductile Iron Anchoring Tee & Block	2	EA	250.00	\$500.00
8" Plug & Block	1	EA	150.00	\$150.00
Fire Hydrant Assembly	2	EA	1,600.00	\$3,200.00
Roadway Restoration	5	SY	40.00	\$200.00
Restoration	1	LS	500.00	\$500.00
Sub-Total				\$21,150.00
Total Cost				\$72,060.00

Sub-Total of all 3 Sections
20% Conting. (Eng., Etc.)
Total

8000
7500
1240
272

122947.12

*As shown on drawing
of 1st phase
of proposed
water main extension
to be
for
proposed*

50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$1,549.68	1	\$84,922.32	\$84,922.32
	2	\$83,372.65	\$41,686.32
	3	\$81,822.97	\$27,274.32
	4	\$80,273.29	\$20,068.32
	5	\$78,723.61	\$15,744.72
	6	\$77,173.94	\$12,862.32
	7	\$75,624.26	\$10,803.47
	8	\$74,074.58	\$9,259.32
	9	\$72,524.90	\$8,058.32
	10	\$70,975.23	\$7,097.52
	11	\$69,425.55	\$6,311.41
	12	\$67,875.87	\$5,656.32
	13	\$66,326.19	\$5,102.01
	14	\$64,776.52	\$4,626.89

15	\$63,226.84	\$4,215.12
16	\$61,677.16	\$3,854.82
17	\$60,127.48	\$3,536.91
18	\$58,577.81	\$3,254.32
19	\$57,028.13	\$3,001.48
20	\$55,478.45	\$2,773.92



Kentucky
Water District

April 25, 2001

Ms. Peggy Bradley
5414 Cody Road
Independence, Kentucky 41051

Re: Water Main Extension Cost Estimate along Cody Road from Troopers Crossing Subdivision;
Independence, Kenton County, Kentucky

Dear Ms. Bradley,

I apologize for the delay in getting back with you on your request for a "ball park" estimate to extend the public water main along Cody Road from the existing water main at Troopers Crossing Subdivision. It is approx. 1,710 linear feet to extend the water main to your far property limits. Based on this distance, the estimated cost for an 8" water main, including fire hydrants, would be \$65,850.00. This estimate includes labor, materials, engineering and contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements by the City or County. This estimate also does not include tap fees of \$750.00 for each customer and the service line extension from the house to the meter setting.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. Under this policy, if there were 4 customers that connect to the new water main extension, then the approximate cost per customer would be \$14,537.00 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with their addresses. After the Water District receives this petition, an Kentucky Registered Engineer will be contracted by the District to prepare an engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the District. Should you have any questions or need additional information feel free to contact the Engineering office at 578-9898 ext. 3017.

Sincerely yours,

John Scheben, Jr.
Engineering Technician

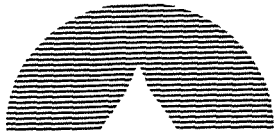
*See letter Lane
for map.*

cc:file

Cody Rd. proposed 8" water main extension ---- Cost Estimate

ITEM	QUANTITY	UNIT	TOTAL UNIT COST	COST
8" DI Pipe & Fittings (High Pressures)	1710	LF	25.00	\$42,750.00
8" Cast Iron Res. Seated Gate Valve & Box	3	EA	600.00	\$1,800.00
8"x8"x8" Ductile Iron Tee & Block	1	EA	350.00	\$350.00
8"x8"x6" Ductile Iron Anchoring Tee & Block	3	EA	250.00	\$750.00
8" Plug & Block	2	EA	150.00	\$300.00
Fire Hydrant Assembly	3	EA	1,600.00	\$4,800.00
Roadway Restoration	11	SY	40.00	\$440.00
Creek Crossing	6	CY	50.00	\$300.00
Driveway Restoration	11	SY	35.00	\$385.00
Restoration	1	LS	3,000.00	\$3,000.00
Sub-Total				\$54,875.00
20% Conting. (Eng, Etc.)				10,975.00
Total Cost				\$65,850.00

50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$1,925.44	1	\$63,924.56	\$63,924.56
	2	\$61,999.12	\$30,999.56
	3	\$60,073.68	\$20,024.56
	4	\$58,148.25	\$14,537.06
	5	\$56,222.81	\$11,244.56
	6	\$54,297.37	\$9,049.56
	7	\$52,371.93	\$7,481.70
	8	\$50,446.49	\$6,305.81
	9	\$48,521.05	\$5,391.23
	10	\$46,595.61	\$4,659.56
	11	\$44,670.18	\$4,060.93
	12	\$42,744.74	\$3,562.06
	13	\$40,819.30	\$3,139.95
	14	\$38,893.86	\$2,778.13
	15	\$36,968.42	\$2,464.56
	16	\$35,042.98	\$2,190.19
	17	\$33,117.54	\$1,948.09
	18	\$31,192.11	\$1,732.89
	19	\$29,266.67	\$1,540.35
	20	\$27,341.23	\$1,367.06



Water District

May 11, 2001

Mr. Doug Jeffries
4827 Far Hills Drive
Independence KY. 41051

Re: Water Main Extensions and Funding Available.

Dear Mr. Jeffries,

In response to your E-Mail question on the District's Web Site on May 3, 2001, the District has sent Engineering Department staff to look at your residence to examine the possibilities of water main extensions. There are a couple of possibilities to extend water to any unserved area within the District's boundaries. They are as follows:

1. Development extends water past resident's property.
 2. Hydraulic improvement/100' Method.
 3. 50' method.
 4. Grant/Surcharge Funded Subdistricts.
- Under the first method, a developer would bring water past the frontage of an existing residence. The developer would pay for the entire cost of extending water. If the resident would like to tap into the new line the developer is reimbursed for 50' of cost of the extension for that particular resident.
This method is subject to development and the District has no control as to where and when the type of extension occurs.
 - Under the second method, the District has established that either the existing infrastructure needs improvement for hydraulic needs of water quality needs. In some cases, these improvements will replace lines where customers already are served. In some cases, these improvements will install new lines on unserved roadways. If the later is the case, and a resident wishes to tap into the new line, he must past a portion of cost equal to the cost of the installation of 100' at whatever the actual cost of the project based on the District's minimum size water main.
As stated above, this type of method occurs as determined by the District's Hydraulic and Water Quality model.
 - Under this third method, residents contact the District to inquire about water main extensions. The District will then provide the resident with an estimate of cost based on the water main installation history we have. This cost is broken down into dollars per foot. The district will pay for each person that participates in this project an amount of 50' multiplied by the cost per foot. This amount is subtracted from the original construction cost and the remaining amount is equally divided between the participating customers as their share of the cost. Additionally the customer is responsible for the standard tap-in fee. The customer's share and the tap-fee must be paid up-front prior to the commencement of construction. So as you can see, that the more people that participate in the project the cheaper it will be for all the residents. (Because the District provides more financial support and the remaining portion is divide by more residents.)

This method is available to any resident at anytime. This method was examined and a breakdown of the costs for your street was sent out to you last year on two separate occasions.

- The last method of extending water is by way of Grant/Surcharge funded projects. Under these types of projects, State and Federal guidelines must be met. These guidelines consist of income eligibility (51% of the people benefiting from the project must qualify as low to moderate-income families). Also these families must meet cost per household guidelines. But most importantly, after the guidelines are met each project must compete against other project at the state level to receive an award of funding. And these funds alone do not entirely pay for the project. Each Sub District pays a monthly bill as opposed to the normal quarterly bill. Also attached to that bill is a monthly Surcharge. Our typical surcharge in a Sub District is an additional \$30.00 to each bill for thirty years. The present value of this surcharge is approximately \$5000.00.

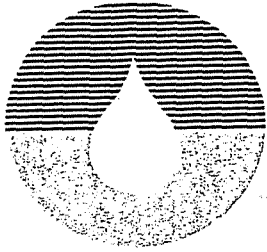
This method as noted has strict guidelines to meet and has a Surcharge attached.

I have attached the estimate that John Scheben prepared for you last winter. This clearly shows that you and the three neighbor's best option is a resident's 50' extension method. If you have any further questions relating to this, feel free to call either John Scheben or myself at the District office at 578-9898.

Sincerely,



Don Gibson
Engineering Manager
Northern Kentucky Water District



Northern Kentucky
Water Service District

July 12, 2001

Mr. Phil Lawrence
11912 Banklick Road
Walton, Kentucky 41094-8717

Re: Water Main Extension Cost Estimate along Banklick Road, Kenton County, Kentucky

Dear Mr. Lawrence,

Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Banklick Road from Ky. 16. It is approx. 300 linear feet to extend the water main to your far property limits. Based on this distance, the estimated cost for an 8" water main, including a fire hydrant, would be \$10,980.00. This estimate includes labor, materials, engineering and contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements by other agencies. This estimate also does not include tap fees of \$750.00 for each customer and the service line extension from the house to the meter setting.

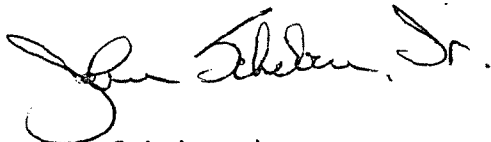
Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. Under this policy, if there is 1 customer that connect to the new water main extension, then the approximate cost would be \$9,150.00 based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of five years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, an Kentucky Registered Engineer will be contracted by the District to prepare a engineer's construction estimate to firm up project cost.

The District has reviewed the "Spider Line Agreement" for 11922 Banklick and the language in the document does not permit the District to assess this property owner per the District's current extension policy.

Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the District. Should you have any questions or need additional information feel free to contact the Engineering office at 426-2717.

Sincerely yours,

A handwritten signature in cursive script that reads "John Scheben, Jr." The signature is written in black ink and is positioned above the printed name.

John Scheben, Jr.
Engineering Technician

cc:file

Banklick Road proposed 8" water main extension ---- Cost Estimate

ITEM	QUANTITY	UNIT	TOTAL UNIT COST	COST
8" PVC Pipe & Fittings	300	LF	20.00	\$6,000.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA	750.00	\$750.00
8"x8"x6" Ductile Iron Anchoring Tee & Block	1	EA	250.00	\$250.00
8" Plug & Block	1	EA	150.00	\$150.00
Fire Hydrant Assembly	1	EA	1,600.00	\$1,600.00
Driveway Restoration	10	SY	20.00	\$200.00
Restoration	1	LS	200.00	\$200.00
Sub-Total				\$9,150.00
20% Conting. (Eng., Etc.)				1,830.00
Total Cost				\$10,980.00

Handwritten:
 11912 Banklick Rd
 H - 350-5594
 W - 746-5234
 Average Cost/Foot \$36.60

50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$1,830.00	1	\$9,150.00	\$9,150.00
	2	\$7,320.00	\$3,660.00
	3	\$5,490.00	\$1,830.00
	4	\$3,660.00	\$915.00
	5	\$1,830.00	\$366.00
	6	\$0.00	\$0.00
	7	(\$1,830.00)	(\$251.43)
	8	(\$3,660.00)	(\$457.50)
	9	(\$5,490.00)	(\$610.00)
	10	(\$7,320.00)	(\$732.00)
	11	(\$9,150.00)	(\$831.82)
	12	(\$10,980.00)	(\$915.00)
	13	(\$12,810.00)	(\$985.38)
	14	(\$14,640.00)	(\$1,045.71)
	15	(\$16,470.00)	(\$1,098.00)
	16	(\$18,300.00)	(\$1,143.75)
	17	(\$20,130.00)	(\$1,184.12)
	18	(\$21,960.00)	(\$1,220.00)
	19	(\$23,790.00)	(\$1,252.11)
	20	(\$25,620.00)	(\$1,281.00)

Campbell/Kenton

2020 Water Management Planning
Council

2001 Project Profiles Submittal Summaries

Campbell County Area

District F
 Northern Kentucky Water District
 Campbell County Unserved Streets
 Year Project HIGH PRIORITY

REET

COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Unincorporated	12	0.70	\$ 147,840.00	3696	40
Unincorporated	7	0.20	\$ 42,240.00	1056	40
Unincorporated	8	0.50	\$ 105,600.00	2640	40
Unincorporated	15	0.65	\$ 137,280.00	3432	40
Unincorporated	18	1.10	\$ 232,320.00	5808	40
Unincorporated	14	1.10	\$ 232,628.00	5808	40
Unincorporated	30	1.80	\$ 380,160.00	9504	40
Unincorporated	50	1.53	\$ 323,136.00	8078.4	40
Alexandria/Unincorporated	100	0.81	\$ 213,840.00	4276.8	50
Alexandria/Unincorporated	254	8.39	\$ 1,815,044.00	44299.2	

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Newport Water Works: Joint Improvement of Central Avenue
 Northern Kentucky Water District
 Campbell County Unserved Streets
 2 Year Project HIGH PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Central Avenue	Newport		0.89	\$ 1,050,000.00	4750	221.055

Newport

Central Avenue

Windleton County Water District
 2 Year Project HIGH PRIORITY

ESTIMATE
 NUMBER OF DISTANCE ESTIMATED FEET Est. \$
 UNSERVED (miles) PROJECT OF PER
 HOUSEHOLDS COST MAIN FOOT

COMMENTS

STREET

2" Main to County Line
 New Master Meter Vault
 50,000 gallon elevated water tank
 Booster Pumping Station
 " water main to serve 80 customers along Hissem, Aulick & Demossville Roads

\$ 2,719,350.00

District H
 Project Summary #1
 Northern Kentucky Water District
 Campbell County Unserved Streets
 10 year project MEDIUM PRIORITY

REET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Blangey Rd.	Brent	14	0.70	\$ 184,800.00	3696	50
Godsworth Ln.	Unincorporated	23	1.30	\$ 343,200.00	6864	50
Wander Rd.	Meilbourne	6	0.90	\$ 237,600.00	4752	50
Four Mile Pike (Meilbourne to Silver Grove)	Meilbourne	1	0.50	\$ 132,000.00	2640	50
Winkler Rd. Number 1	Meilbourne	8	0.60	\$ 158,400.00	3168	50
Winkler Rd. Number 2	Meilbourne	6	0.40	\$ 105,600.00	2112	50
Winkler Rd. Number 3 (From bottom of hill to line from ten mile creek Rd.)	Meilbourne	6	0.50	\$ 132,000.00	2640	50
Winkler Rd.	Alexandria	13	0.70	\$ 184,800.00	3696	50
Lower Tug Fork Rd.	Meilbourne	6	0.70	\$ 184,800.00	3696	50
Lower Tug Fork Rd.	Silver Grove	6	1.10	\$ 290,400.00	5808	50
Lower Tug Fork Rd.	Brent	10	0.60	\$ 158,400.00	3168	50
Lower Tug Fork Rd. to End of line from Ky-1998)	Ft. Thomas	5	2.30	\$ 607,200.00	12144	50
Lower Tug Fork Rd. to River Rd.)	Ft. Thomas	4	0.40	\$ 105,600.00	2112	50
Lower Tug Fork Rd. Ft Thomas	Alexandria	3	0.30	\$ 79,200.00	1584	50
Upper Tug Fork Rd. (From E.Alex Pk. To Heck Rd.)	Alexandria	3	0.20	\$ 52,800.00	1056	50
Upper Tug Fork Rd. (From Heck Rd. to Lower Tug Fork Rd.)	Alexandria	9	0.30	\$ 79,200.00	1584	50
Upper Tug Fork Rd. (From Lower Tug Fork to Reitman Rd.)	Alexandria	7	0.50	\$ 132,000.00	2640	50
Upper Tug Fork Rd. (From Reitman Rd. to Poplar Ridge Rd.)	Alexandria	7	0.50	\$ 132,000.00	2640	50
		130	12.00	\$ 3,168,000.00	63360	

District J
 Project Summary #2
 Northern Kentucky Water District
 Campbell County Unserved Streets
 10 year project MEDIUM PRIORITY

TREE	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
ieotz Rd		12	1.00	\$ 264,000.00	5280	50
icking Pike (From Alex-Licking Pike to Rifle-Range Rd.)	Unincorporated	26	1.70	\$ 448,800.00	8976	50
icking Pike (From Evergreen Subdivision to Ripple Cr. Rd)	Unincorporated	4	0.40	\$ 105,600.00	2112	50
icking Pike (From Poplar Thicket Rd. to Steffen Rd.)	Unincorporated	10	0.80	\$ 211,200.00	4224	50
icking Pike (From Rifle-Range Rd. to Poplar Thicket Rd.)	Unincorporated	5	0.60	\$ 158,400.00	3168	50
icking Pike (From Steffen Rd. to Rt.10)	Unincorporated	7	0.50	\$ 132,000.00	2640	50
ow Gap Rd (From end of line to Alex-Licking Pike)	Unincorporated	1	0.50	\$ 132,000.00	2640	50
oplar Thicket Rd.	Unincorporated	31	2.20	\$ 580,800.00	11616	50
Rifle Range Rd. (From First 26 Houses to end of road)	Unincorporated	16	1.70	\$ 448,800.00	8976	50
Rifle Range Rd. (From Licking Pike to First 26 Houses)	Unincorporated	26	0.80	\$ 211,200.00	4224	50
Steffen Rd.	Unincorporated	15	0.70	\$ 184,800.00	3696	50
West Main Street (Alex.)-(1/2 mile from city building towards L	Unincorporated	2	0.50	\$ 132,000.00	2640	50
West Main Street (Alex.)-(1/2 mile from Licking Pike towards A	Unincorporated	10	0.50	\$ 132,000.00	2640	50
		165	11.90	\$ 3,141,600.00	62832	

District L
 Project Summary #3
 Northern Kentucky Water District
 Campbell County Unserved Streets
 10 year project MEDIUM PRIORITY

TREE	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Indian Trace Rd. (From JoAnn to End of road)	Unincorporated	16	0.90	\$ 237,600.00	4752	50
Indian Trace Rd. (From Pond Cr. Rd to JoAnn)	Unincorporated	13	0.60	\$ 158,400.00	3168	50
JoAnn Rd.(off of Indian Tr. Rd)	Unincorporated	18	0.40	\$ 105,600.00	2112	50
Lees Road (From Pleasant Rdg. Rd. To Schmudde Tarvin Rd	Unincorporated	14	1.00	\$ 264,000.00	5280	50
Madrox Rd	Claryville	26	1.20	\$ 316,800.00	6336	50
Pleasant Rdg. Rd. (From Lees Rd. to Harrisburg Hill Rd.)	Unincorporated	15	1.10	\$ 290,400.00	5808	50
Pleasant Rdg. Rd. (From Visalia Rd to Lees Rd.)	Unincorporated	11	0.70	\$ 184,800.00	3696	50
Pond Creek Road (From Bridge to Visalia Rd.)	Unincorporated	14	1.00	\$ 264,000.00	5280	50
Pond Creek Road (From Indian Trace Rd. to Bridge)	Unincorporated -25 lot SubDiv.	19	0.50	\$ 132,000.00	2640	50
Pond Creek Road (From John Miller Rd. to Indian Trace Rd.)	Unincorporated	4	0.20	\$ 52,800.00	1056	50
Pond Creek Road (From Licking Pike to John Miller Rd.)	Unincorporated	11	1.60	\$ 422,400.00	8448	50
Schmudde Tarvin Rd. (From Lees Rd to Schmudde Phillips)	Unincorporated	1	0.50	\$ 132,000.00	2640	50
Schmudde Tarvin Rd. (From Schmudde Phillips to Licking Pike)	Unincorporated	3	0.70	\$ 184,800.00	3696	50
Visalia Road	Unincorporated	18	1.30	\$ 343,200.00	6864	50
West Main Street (Alex.)-(From Licking Pike to Pond Cr. Rd.)	Unincorporated	1	0.40	\$ 105,600.00	2112	50
		184	12.10	\$ 3,194,400.00	63888	

bdistrict N
 oject Summary #4
 orthern Kentucky Water District
 ampbell County Unserved Streets
 10 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
&12 Mile Rd. (Lower Lick Br. Rd. to Oneonta Rd.)	Unincorporated	1	1.50	\$ 396,000.00	7920	50
&12 Mile Rd. (End of 2" line to Lower Lick Br. Rd.)	Unincorporated	9	0.40	\$ 105,600.00	2112	50
&12 Mile Rd. (Oneonta Rd. to A.A. Hwy)	Unincorporated	4	0.60	\$ 158,400.00	3168	50
ower Lick Branch Rd.	Unincorporated	5	0.40	\$ 105,600.00	2112	50
Oneonta Rd.(From Rt.8 to Truesdale)	California/Unincorporated	11	0.80	\$ 211,200.00	4224	50
Oneonta Rd.(From Truesdale to Washington Tr. Rd.)	Unincorporated	6	0.70	\$ 184,800.00	3696	50
Oneonta Rd.(From Washington Tr. Rd. to 4&12 Mile Rd.)	Unincorporated	3	0.30	\$ 79,200.00	1584	50
Painter Rd (From Washington Tr. Rd to Route 8)	California/Unincorporated	8	1.50	\$ 396,000.00	7920	50
Route 8 (Oneonta to Painter Rd.)	California/Unincorporated	9	1.60	\$ 422,400.00	8448	50
Rt.8 (From end of line to Oneonta Rd.)	California/Unincorporated	6	0.40	\$ 105,600.00	2112	50
Truesdale Rd.	Melbourne	15	1.00	\$ 264,000.00	5280	50
Upper Lick Branch Rd.	Unincorporated	13	0.80	\$ 211,200.00	4224	50
Washington Tr. Rd (From Oneonta to Painter Rd.)	California/Unincorporated	10	0.70	\$ 184,800.00	3696	50
Washington Tr. Rd (Painter Rd. to End of 3' line on Wash. Tr.)	California/Unincorporated	16	0.80	\$ 211,200.00	4224	50
		116	11.50	\$ 3,036,000.00	60720	

District P
 Project Summary #5
 Northern Kentucky Water District
 Campbell County Unserved Streets
 10 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Bob-White Lane	Unincorporated	7	0.70	\$ 184,800.00	3696	50
California Cross Rds.(From Route 8 to Washington Tr.Rd.)	Calif.(Res srvd frm X-Cntry line)	15	1.50	\$ 396,000.00	7920	50
Daniels Rd. (From Schababerle Hill to Route 10)	Unincorporated	24	2.10	\$ 554,400.00	11088	50
Loehler Rd.(From Calif. Cr. Rds. to Route 10)	California/Unincorporated	6	0.90	\$ 237,600.00	4752	50
Route 10 (From A. A. Hwy. Connector to Daniels Road)	Unincorporated	1	0.50	\$ 132,000.00	2640	50
Route 10 (From Daniels Road to Pendelton Co. Line)	Unincorporated	4	0.60	\$ 158,400.00	3168	50
Route 10 (From Smith Rd. to A. A. Hwy. Connector)	Unincorporated	12	0.90	\$ 237,600.00	4752	50
Schababerle Hill(From Daniels Rd. to Route 10)	Unincorporated	4	1.40	\$ 369,600.00	7392	50
Wagner Rd (Dead Timber Rd. to end of Sub-Dist D on Wagne	California/Unincorporated	8	1.70	\$ 448,800.00	8976	50
Washington Tr.Rd. South End (End of 3" line to A.A. Hwy.)	California/Unincorporated	9	0.80	\$ 211,200.00	4224	50
		90	11.10	\$ 2,930,400.00	58608	

District S
 Project Summary #6
 Northern Kentucky Water District
 Campbell County Unserved Streets
 1-20 year project MEDIUM PRIORITY

TREET

COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Unincorporated	2	1.00	\$ 264,000.00	5280	50
Alexandria/Unincorporated	21	1.20	\$ 316,800.00	6336	50
Alexandria/Unincorporated	6	0.60	\$ 158,400.00	3168	50
California/Unincorporated	3	0.50	\$ 132,000.00	2640	50
Unincorporated	1	1.50	\$ 396,000.00	7920	50
Unincorporated	10	1.00	\$ 264,000.00	5280	50
Unincorporated	2	0.70	\$ 184,800.00	3696	50
Unincorporated	7	0.50	\$ 132,000.00	2640	50
Unincorporated	17	1.00	\$ 264,000.00	5280	50
California/Unincorporated	4	1.00	\$ 264,000.00	5280	50
California/Unincorporated	3	0.60	\$ 158,400.00	3168	50
Unincorporated	17	2.00	\$ 528,000.00	10560	50
Schmudde Phillips Cr. Rd.					
Shaw-Hess Rd (From end of line on Shaw Hess to Persimmon					
Siry Road (From Flatwoods Rd. to End of PCWD Line at Box 2	93	11.60	\$ 3,062,400.00	61248	

District U
 Project Summary #7
 Northern Kentucky Water District
 Campbell County Unserved Streets
 20 year project MEDIUM PRIORITY

PROJECT	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
	Unincorporated	13	1.00	\$ 264,000.00	5280	50
	Unincorporated	16	1.00	\$ 264,000.00	5280	50
	Unincorporated	26	2.00	\$ 528,000.00	10560	50
	California/Unincorporated	11	1.00	\$ 264,000.00	5280	50
	Unincorporated	1	0.25	\$ 66,000.00	1320	50
	Unincorporated	16	1.80	\$ 475,200.00	9504	50
	Unincorporated	11	1.10	\$ 290,400.00	5808	50
	Unincorporated	10	0.80	\$ 211,200.00	4224	50
	Unincorporated	12	1.80	\$ 475,200.00	9504	50
	Unincorporated	9	0.60	\$ 158,400.00	3168	50
	Unincorporated	125	11.35	\$ 2,996,400.00	59928	

Bezold Rd. (From Burns Rd to California Cr. Rds.)
 Burns Rd. (from Flatwoods Rd. to Bezold Rd.)
 Burns Rd. (From Flatwoods Rd. to St. Route 154)
 California Cross Rds. (From Shaw Goetz Rd. to Bezold Rd.)
 Fisher Rd (From Bezold Rd to Wish Rd.)
 Fisher Rd (From Haubner Rd. to end of road)
 Fisher Rd (From Wish Rd. to Haubner Rd.)
 Haubner Rd.
 Shaw Goetz Rd.. (From Reis Ridge Rd. to California Cross Rd.)
 Wish Rd.

District W
 Project Summary #8
 Northern Kentucky Water District
 Campbell County Unserved Streets
 -20 year project MEDIUM PRIORITY

TREE	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Harrisburg Hill	Unincorporated	21	1.10	\$ 290,400.00	5808	50
Kenton Station Rd. (From to Pleasant Rdg. Rd.)	Unincorporated	9	0.90	\$ 237,600.00	4752	50
Kenton Station Rd. (From Pleasant Rdg. Rd. to Pond Cr.Rd.)	Unincorporated	4	1.00	\$ 264,000.00	5280	50
Lees Road (From Harrisburg Hill Rd. to)	Unincorporated	4	0.40	\$ 105,600.00	2112	50
Lees Road (From Schmutde Tarvin Rd. to Harrisburg Hill Rd.)	Unincorporated	11	0.70	\$ 184,800.00	3696	50
Pleasant Rdg. Rd. (From Harrisburg Hill Rd. to Kenton Station	Unincorporated	4	1.10	\$ 290,400.00	5808	50
Pond Creek Road (From Visalia Rd. to Kenton station Rd.)	Unincorporated	26	3.10	\$ 818,400.00	16368	50
S. Harrisburg Hill	Unincorporated	10	0.50	\$ 132,000.00	2640	50
		89	8.80	\$ 2,323,200.00	46464	

Ward District X
Project Summary #9
Northwestern Kentucky Water District
Warren County Unserved Streets
1-20 year project MEDIUM PRIORITY

TREE	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Bakerfield Rd. (Off of Boone Smith Rd.)	Unincorporated	14	0.60	\$ 158,400.00	3168	50
Boone Smith Rd.(From Bakerfield Rd.to PCWD end of line)	Unincorporated	10	0.70	\$ 184,800.00	3696	50
Boone Smith Rd.(From Pleasant Rdg Rd to Bakerfield Rd)	Unincorporated	4	0.20	\$ 52,800.00	1056	50
Clay Rdg. Rd. (From Morningview Rd. Griffen Fords Rd.)	Unincorporated	5	0.70	\$ 184,800.00	3696	50
Clay Rdg. Rd. (From Pleasant Rdg Rd. to Morningview Rd)	Unincorporated	10	0.80	\$ 211,200.00	4224	50
Clay Rdg. Rd. (From Wolf Rd. to Pleasant Rdg Rd.)	Unincorporated	7	0.60	\$ 158,400.00	3168	50
Morningview Rd.	Unincorporated	16	1.80	\$ 475,200.00	9504	50
Pleasant Rdg. Rd. (From Boone Smith Road to Clay Rdg. Rd.)	Unincorporated	20	1.30	\$ 343,200.00	6864	50
Pleasant Rdg. Rd. (From Kenton Station Rd. to Boone Smith F	Unincorporated	6	0.60	\$ 158,400.00	3168	50
Wolf Road (From Clay Rdg. Rd. to end of road)	Unincorporated -24 Lot Subdivision	11	0.60	\$ 158,400.00	3168	50
Wolf Road (From Kenton Station Rd. to Clay Rdg. Rd.)	Unincorporated	8	1.40	\$ 369,600.00	7392	50
		111	9.30	\$ 2,455,200.00	49104	

District Y
 Project Summary #10
 Northern Kentucky Water District
 Campbell County Unserved Streets
 -20 year project MEDIUM PRIORITY

TREET

A.Hwy

COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Will/Cld Sprng/Alex/Cai/Ment	27	15.90	\$ 4,197,600.00	83952	50
	27	15.90	\$ 4,197,600.00	83952	

Project Summary #PCWD
 Northern Kentucky Water District
 Campbell County Unserved Streets

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
Winn Rd.	Unincorporated	13	0.70	\$ 184,800.00	3696	50
Magel Rd. (From Ridge View Estates to Hissem Rd.)	Unincorporated	7	0.70	\$ 184,800.00	3696	50
West Hissem Rd.	Unincorporated	9	0.90	\$ 237,600.00	4752	50
		29	2.30	\$ 607,200.00	12144	

Project Summary #0
 Northern Kentucky Water District
 Campbell County Unserved Streets

PROJECT	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT
	Winkle Rd. Number 3 (From end of line to bottom of hill)	0	0.50	\$ 132,000.00	2640	50
	Winking Pike (From end of line at Tiphphauer to Murman Rd)	0	0.50	\$ 132,000.00	2640	50
	Wood Creek Road (From U.S. 27 to Licking Pike)	0	0.80	\$ 211,200.00	4224	50
	Wrightman Rd.	0	0.30	\$ 79,200.00	1584	50
	Route 8 (Painter Rd. to End Line on Route 8 from Carthage Rd California/Unincorporated)	0	0.20	\$ 52,800.00	1056	50
	Route 8 (River Rd. to Blangey Rd.)	0	0.30	\$ 79,200.00	1584	50
	Route 8 (Tower Hill to Lester Ln.)	0	0.60	\$ 158,400.00	3168	50
	Wetzel Ridge (From Decker Rd. to end of road)	9	0.50	\$ 132,000.00	2640	50
	Wetzel Grandview Rd.	4	0.30	\$ 79,200.00	1584	50

Campbell/Kenton

2020 Water Management Planning
Council

2001 Project Profiles Submittal Summaries

Kenton County Area

Project Summary Subdistrict E
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bethel Grove Road	Vise's Trail to RR Tunnel	6	0.21	\$ 48,575.59	Visalia	1108.8	43.80915	28.57
Bethel Grove Road	RR Tunnel to RR Crossing	14	0.35	\$ 80,959.31	Visalia	1848	43.80915	40.00
Brandy Lane	Bethel Grove to Licking Station	5	0.08	\$ 18,504.99	Visalia	422.4	43.80915	62.50
Bromley-Cres. Springs	Amsterdam to end of Bromley's system	10	0.85	\$ 196,615.47	Crescent Spgs	4488	43.80915	11.76
Fiskburg Road	KY 17 to Goshorn	29	1.20	\$ 277,574.79	SKC	6336	43.80915	24.17
Hogrefee Road	Existing D.E. main to D.E. of road	27	1.20	\$ 277,574.79		6336	43.80915	22.50
Ishmail Road	Kenton Area	13	0.70	\$ 161,918.63	Kenton	3696	43.80915	18.57
Kenton Station Road	Rector to Conley	9	0.80	\$ 185,049.86		4224	43.80915	11.25
Kenton Station Road	Conley to Moffett	4	0.50	\$ 115,656.16		2640	43.80915	8.00
Kenton Station Road	Moffett to KY 177	5	0.30	\$ 69,393.70		1584	43.80915	16.67
KY 177	KY 10 North .35 Miles	8	0.35	\$ 80,959.31	Visalia	1848	43.80915	22.86
KY 177	KY 10 to Visalia Road	13	0.46	\$ 106,403.67	Visalia	2428.8	43.80915	16.67
KY 177	South .12 miles from Visalia Road	2	0.12	\$ 27,757.48	Visalia	633.6	43.80915	24.00
KY 177	Conley Road to Kenton Station	36	1.50	\$ 346,968.48	Kenton	7920	43.80915	28.26
Licking Station	Bethel Grove to D.E.	12	0.19	\$ 43,949.34		1003.2	43.80915	63.16
McDonald (See Whitaker)	Off old KY 17			\$ -		0	43.80915	#DIV/0!
Oliver Road	Stephens to Harris	30	1.00	\$ 231,312.32		5280	43.80915	30.00
Oliver Road	McCullum to Stephens	3	0.30	\$ 69,393.70		1584	43.80915	10.00
St Johns Road	Bromley Crs. Springs to D.E.	7	0.30	\$ 69,393.70		1584	43.80915	23.33
Vises's Trail	KY 177 to Visalia	5	0.35	\$ 80,959.31		1848	43.80915	14.29
Vises's Trail	Visalia Road, South .23 miles	8	0.23	\$ 53,201.83		1214.4	43.80915	34.78
Whitaker/McDonald	Off of Old KY 17	6	0.17	\$ 39,323.09		897.6	43.80915	35.29
		252	11.16	\$ 2,581,445.53		58924.8		

Project Summary: Fairview/Ryland Heights
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Decoursey	End of Sub-R (near Kaiser) to Wolf Road	21	0.80	\$ 184,168.50	Fairview	4224	43.6005	26.25
Decoursey	Wolf to Marshall	18	0.80	\$ 184,168.50	Ryland Heights	4224	43.6005	22.50
Porter Road		5	0.60	\$ 138,126.38		3168	43.6005	8.33
Tecumseh	Porter to D.E.	5	0.34	\$ 78,271.61		1795.2	43.6005	14.71
		49	2.54	\$ 584,735.00		13411.2		

Project Summary Taylor Mill Water District
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

<u>Street</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Taylor Mill Road	13	1.30	\$ 343,200.00		6864	50	10.00
Klette Road	18	0.22	\$ 58,080.00	Independence	1161.6	50	81.82
Rice Road #2	16	0.22	\$ 58,080.00	Independence	1161.6	50	72.73
	47	1.74	\$ 459,360.00		9187.2		

Comment:

Mason to Grand
 End of Taylor Mill's system to Rice.
 Off Klette Road

Project Summary Bullock Pen Water Line Extension Phase 6
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

<u>Street</u>	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bagby Road	US 25 to Parker Grove	36	2.40	\$ 194,328.92	SKC	12672	15.3353	15.00
Carlisle Road	KY 14 to Parker Grove	45	1.90	\$ 153,843.73	SKC	10032	15.3353	23.68
Parker Grove	KY 14 to Grant County Line	26	2.20	\$ 178,134.84		11616	15.3353	11.82
Peoples Cemetary	Bagby Rd to dead end	3	0.20	\$ 16,194.08		1056	15.3353	15.00
		110	6.70	\$ 542,501.57		35376		

Project Summary
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Banklick Road	Maheer to Independence	12	0.90	\$ 221,924.47	Independence	4752	46.70128	13.33
Bramlage Road	Banklick to Wilson	23	0.90	\$ 221,924.47	Independence	4752	46.70128	25.56
Cody Road	Flagstone to RR Tracks	9	0.50	\$ 123,291.37	Independence	2640	46.70128	18.00
Cody Road	RR Tracks to Webster	7	0.50	\$ 132,000.00	Independence	2640	50	14.00
Dixon Drive	Rich Road to D.E.	24	1.60	\$ 394,532.40	SKC	8448	46.70128	15.00
Elliot Road	KY 17 to D.E.	14	0.90	\$ 221,924.47	Independence	4752	46.70128	15.56
Fowler Creek Road	Pelly to Cox	23	1.30	\$ 320,557.57	Independence	6864	46.70128	17.69
Hempfling Road	Sub C D.E. to Navaho Road	25	1.50	\$ 369,874.12		7920	46.70128	16.67
Hempfling Road	Navaho to Oak Island	11	0.65	\$ 160,278.79		3432	46.70128	16.92
Klein Road	Visalia to D.E.	32	1.00	\$ 246,582.75	SKC	5280	46.70128	32.00
Petty Road	Marshall to End of Sub A	23	1.00	\$ 246,582.75		5280	46.70128	23.00
Pleasure Isle Drive	New KY 17 to D.E.	10	0.19	\$ 46,850.72		1003.2	46.70128	52.63
Upton Drive	Cody to D.E.	4	0.20	\$ 49,316.55		1056	46.70128	20.00
Webster Road	Off Cody Road	7	0.20	\$ 49,316.55		1056	46.70128	35.00
		224	11.34	\$ 2,804,957.00		59875.2		

Subdistrict ,
 Project Summary #1
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Amsterdam Road	12" CC to Sanitation Plant Entrance	3	0.65	\$ 171,600.00	Villa Hills	3432	50	4.62
Bullock Pen Road	Old Ky 17 to D.E.	22	0.85	\$ 196,615.47	Erlanger	4488	43,809.15	25.88
Coons Branch Road	Off KY 17, near Gribble	1	0.25	\$ 66,000.00	Covington	1320	50	4.00
Decoursey	Grand to I-275	2	0.60	\$ 158,400.00	Covington	3168	50	3.33
Erlanger Road	Hartman to Turfway	2	0.85	\$ 224,400.00	Erlanger	4488	50	2.35
Eubanks Road	Erlanger-Crs. Spgs. Road to D.E.	2	0.50	\$ 132,000.00	Crescent Spgs	2640	50	4.00
Forest View Lane		9	0.50	\$ 132,000.00		2640	50	18.00
Fuchs Road	Garvey Avenue to D.E.	2	0.10	\$ 26,400.00	Elsmere	528	50	20.00
Highwater Road	End of Bromley System to River Heights	5	0.50	\$ 132,000.00		2640	50	10.00
Horsebranch Road	Thomas More Parkway to Orphanage.	3	1.20	\$ 316,800.00		6336	50	2.50
Misty Lane	Off KY 17, North of Hands Pike	5	0.10	\$ 26,400.00		528	50	50.00
Montague Road	Fire Hydrant to Sleepy Hollow	4	0.70	\$ 184,800.00		3696	50	5.71
Route 8	Amsterdam to Chevron	14	1.80	\$ 475,200.00		9504	50	7.78
Route 8	Chevron to Bromley	12	0.70	\$ 184,800.00		3696	50	17.14
Wilson Road	Drogee to Madison	11	0.30	\$ 79,200.00		1584	50	36.67
Worthington Drive	Off KY 17, South of Hands Pike	4	0.25	\$ 66,000.00		1320	50	16.00
		101	9.85	\$ 2,572,615.47		52008		

Subdistrict . . .
 Project Summary #2
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Decoursey	I-275 to end of Sub-R near Locust Pike	10	0.90	\$ 237,600.00	Fairview	4752	50	11.11
Decoursey	Marshall to end of Sub-R	3	0.70	\$ 184,800.00	Ryland Heights	3696	50	4.29
Fowler Creek Road	Madison to Pelly	20	1.80	\$ 475,200.00		9504	50	11.11
Fowler Creek Road	Cox to Stephens	6	0.50	\$ 132,000.00	Independence	2640	50	12.00
Lambs Ferry Road	Whites Road to Whites Road	7	1.34	\$ 353,760.00		7075.2	50	5.22
Marshall Road	KY 177 to End of Dense Are	12	0.40	\$ 105,600.00		2112	50	30.00
Marshall Road	End of Dense Area to Klette	2	0.45	\$ 118,800.00		2376	50	4.44
Marshall Road	Klette to Stewart	7	1.40	\$ 369,600.00		7392	50	5.00
Marshall Road	KY 177 to D.E.	3	1.30	\$ 343,200.00		6864	50	2.31
Old Fowler Creek Road	Off KY 17	3	0.20	\$ 52,800.00	Covington	1056	50	15.00
Pelly Road	.15 would serve customers	3	0.30	\$ 79,200.00		1584	50	10.00
Scenic Drive	Off Pelly Road	8	0.30	\$ 79,200.00		1584	50	26.67
KY 177	Ryland Lakes C.C. to .35 N. or KY 10	6	1.30	\$ 343,200.00	SKC	6864	50	4.62
		90	10.89	\$ 2,874,960.00		57499.2		

Subdistrict -
 Project Summary #3
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Case Road	Steep Creek to KY 177	4	0.30	\$ 79,200.00	SKC	1584	50	13.33
Cherry	Off KY 17, North of Apple	6	0.20	\$ 52,800.00	Independence	1056	50	30.00
Cody Road	Independence to Jupiter	1	0.01	\$ 2,640.00	Independence	52.8	50	100.00
Far Hills Drive	20' ????? To D.E.	3	0.11	\$ 29,040.00	Independence	580.8	50	27.27
Independence Station Rd	Cody to R.R. Tracks	2	0.40	\$ 105,600.00		2112	50	5.00
Independence Station Rd	Justice to RR Tracks	3	0.30	\$ 79,200.00	Independence	1584	50	20.00
Justice Lane	Existing D.E. of 8" to D.E.	6	0.10	\$ 26,400.00		528	50	30.00
Lakeview Drive	Off Taylor Mill Road, South of Harris	3	0.03	\$ 7,920.00		158.4	50	33.33
Lily Drive	Off Turkeyfoot Road s. of Industrial	1	0.15	\$ 39,600.00		792	50	13.33
Locust Lane	Old Richardson Road to Far Hills	2	0.70	\$ 184,800.00		3696	50	4.29
Madsion Pike	Visalia to Steep Creek	3	1.50	\$ 52,800.00		1056	50	14.00
Mann Road	Richardson to Steep Creek	21	0.20	\$ 52,800.00		1056	50	10.00
McHugh Lane	Richardson to Thorntree	1	0.20	\$ 42,240.00		528	50	10.00
Narrows Road	Thorntree to Nelson	0	0.20	\$ 26,400.00		2112	50	15.00
Narrows Road	Nelson to D.E. at Erlanger Fire	1	0.10	\$ 105,600.00		580.8	50	9.09
Narrows Road	Narrows to Doe Run	6	0.40	\$ 29,040.00	Independence	1056	50	25.00
Nelson Road	Marshall to Petty	1	0.11	\$ 52,800.00		13200	50	14.00
Pruett	Off Mills Road	5	0.20	\$ 660,000.00		2112	50	2.50
Rice Road #1	Off Harris Pike	35	2.50	\$ 105,600.00		633.6	50	16.67
Stafford Heights Lane	Marshall to KY 177	1	0.40	\$ 31,680.00		528	50	30.00
Steep Creek	Don Victor to Oliver	2	0.12	\$ 26,400.00		2112	50	10.00
Stephens Drive	Harris to KY 16	3	0.10	\$ 105,600.00		3696	50	27.14
Tamarita Lane	North of Independence Station	4	0.40	\$ 184,800.00		1584	50	3.33
Webster Road	South of Independence Station	19	0.70	\$ 79,200.00		1161.6	50	31.82
Webster Road	Richardson Road to D.E.	1	0.30	\$ 58,080.00	Independence			
Webster Road	KY 16 to D.E.	7	0.22	\$				
Wehrman Road	Rice to Marshall		10.45	\$ 2,748,240.00				
Klette Road		143						

Subdistrict ~
 Project Summary #4
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Banklick Road	Independence to Bramlage	1	0.40	\$ 105,600.00	Independence	2112	50	2.50
Banklick Road	Bramlage to Walton-Nicholson	13	1.40	\$ 369,600.00	Independence	7392	50	9.29
Bird Road	D.E. near Wynewood to end of road	2	0.30	\$ 79,200.00	SKC	1584	50	6.67
Conley Road	Kenton Station to KY 177	12	1.10	\$ 290,400.00	SKC	5808	50	10.91
Gene Street	Off Walton Nicholson Road	4	0.25	\$ 66,000.00		1320	50	16.00
Hergott Drive	Off KY 17, Norther of Callant	4	0.60	\$ 158,400.00		3168	50	6.67
James Road	North of Moffett	1	0.10	\$ 26,400.00	SKC	528	50	10.00
James Road	South of Moffett	3	0.20	\$ 52,800.00	SKC	1056	50	15.00
Kenton Station Road	KY 177 to D.E.	5	0.20	\$ 52,800.00		1056	50	25.00
KY 177	End of Visalia project to Conley Road	17	1.70	\$ 448,800.00	Visalia	8976	50	10.00
North Lake Road	White Villa - Off Decoursey	25	0.80	\$ 211,200.00	SKC	4224	50	31.25
Rosanna Lane	Off of Callant	4	0.40	\$ 105,600.00	SKC	2112	50	10.00
Trace Run Road	Off of Moffett	8	0.80	\$ 211,200.00		4224	50	10.00
Wright Road	Graven to D.E.	4	0.10	\$ 26,400.00		528	50	40.00
Wright Road	Banklick to Graven	13	1.30	\$ 343,200.00		6864	50	10.00
		116	9.65	\$ 2,547,600.00		50952		

Subdistrict
 Project Summary #5
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Armstrong Road	Off Moffett	3	0.40	\$ 105,600.00	SKC	2112	50	7.50
Hempfling Road	Oak Island to Rich	12	1.30	\$ 343,200.00		6864	50	9.23
Kenton Station Road	Martin to Rector	19	1.80	\$ 475,200.00		9504	50	10.56
KY 177	Kenton Station to Rich Road	49	2.90	\$ 765,600.00	Kenton	15312	50	16.90
Moffett Road	Armstrong to Kenton Station	3	1.20	\$ 316,800.00		6336	50	2.50
Rich Road	Fiskburg to KY 177	8	0.60	\$ 158,400.00		3168	50	13.33
Rich Road	End of Sub C to Hempfling	7	0.88	\$ 232,320.00		4646.4	50	7.95
Rich Road	Hempfling to Little Cruises	2	0.40	\$ 105,600.00		2112	50	5.00
Rich Road	Little Cruises to Fiskburg	15	1.00	\$ 264,000.00		5280	50	15.00
Washboard Road	Off KY 177	3	0.10	\$ 26,400.00		528	50	30.00
		121	10.58	\$ 2,793,120.00		55862.4		

Subdistrict
 Project Summary #6
 Northern Kentucky Water District
 Kenton County Unserved Streets
 11-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Campbell Drive	US 25 to D.E.	3	0.14	\$ 36,960.00	SKC	739.2	50	21.43
Eads Road	US 25 to I-71/75	5	0.70	\$ 184,800.00	SKC	3696	50	7.14
Fiskburg Road	Alexander to Rich Road	3	0.70	\$ 184,800.00	SKC	3696	50	4.29
Gleason Road	KY 17 to D.E.	10	0.17	\$ 44,880.00		897.6	50	58.82
Jones Road	Walton to D.E.	34	1.40	\$ 369,600.00		7392	50	24.29
Kensington Road	Off Green Road	1	0.20	\$ 52,800.00	SKC	1056	50	5.00
KY 177	KY 14 to St. Marys	16	1.20	\$ 316,800.00	SKC	6336	50	13.33
KY 177	KY 14 to Alexander Road	8	1.00	\$ 264,000.00	SKC	5280	50	8.00
Little Cruises Creek Rd	KY 17 to Rich Road	31	2.60	\$ 686,400.00		13728	50	11.92
Navaho Road		1	0.30	\$ 79,200.00		1584	50	3.33
Northcut Road	Jones Road to D.E.	9	0.40	\$ 105,600.00		2112	50	22.50
Oak Island	Off of Moffett	2	0.80	\$ 211,200.00		4224	50	2.50
Sawgrass Road	Off Green Road	2	0.10	\$ 26,400.00		528	50	20.00
		125	9.71	\$ 2,563,440.00		51268.8		

Subdistrict
 Project Summary #7
 Northern Kentucky Water District
 Kenton County Unserved Streets
 11-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Alexander Road	Saint Marys Road to KY 177	33	3.10	\$ 818,400.00	SKC	16368	50	10.65
Alexander Road	KY 177 to D.E.	7	1.30	\$ 343,200.00	SKC	6864	50	5.38
Fiskburg Road	Goshorn to Pfanstiehl Road	1	0.20	\$ 52,800.00	SKC	1056	50	5.00
Fiskburg Road	Pfanstiehl to Alexander	6	0.60	\$ 158,400.00	SKC	3168	50	10.00
Goshorn Road	Fiskburg to D.E.	11	0.70	\$ 184,800.00		3696	50	15.71
Locust Pike	Feiser Road to # 9684	18	1.80	\$ 475,200.00		9504	50	10.00
Pfanstiehl Road	Fiskburg to D.E.	13	1.20	\$ 316,800.00		6336	50	10.83
Rouse	Off KY 177-	2	0.20	\$ 52,800.00	SKC	1056	50	10.00
Saint Marys Road	Fiskburg to KY 177	7	1.31	\$ 345,840.00		6916.8	50	5.34
		98	10.41	\$ 2,748,240.00		54964.8		

Bullock Pe, Water District Phase 9
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Anderson Road	Gardnersville to D.E.	11	0.90	\$ 68,835.00	SKC	4752	14.48	12.22
Courtney Road	Walton Veron Road to Boone County Line	27	1.25	\$ 92,105.00	SKC	6600	14	21.60
Eads Road	I-71/75 to Walton Verona Road	14	1.35	\$ 102,815.00	SKC	7128	14.4	10.37
Gardnersville Road	End of Sub C to Anderson Road	11	1.10	\$ 125,065.00	SKC	5808	22	10.00
Grassy Creek Road		15	1.10	\$ 73,015.00		5808	13	13.64
Paxton Road	End of Sub C to Parker Grove	6	0.80	\$ 50,750.00		4224	12	7.50
Lunsford Road	Off KY 14	14	0.70	\$ 57,445.00		3696	15.5	20.00
Carter Chappel Road		1	0.40	\$ 40,195.00		2112	19	2.50
Menifee Road		0	0.30	\$ 36,960.00		1584	23.33	0.00
Stephenson Road	Off KY 14	15	1.10	\$ 74,565.00		5808	13	13.64
Shady Lane		0	0.50	\$ 44,500.00		2640	16.85	0.00
		114	9.50	\$ 766,250.00		50160		

Project Summary #
 Northern Kentucky Water District
 Kenton County Unserved Streets

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
KY 177	Alexander Road to Pendleton County Line	0	0.30	\$ 79,200.00	SKC	1584	50	0.00
Locust Pike	#9684 To end of Sub R near Whites	0	0.50	\$ -				0.00
Fontanna	KY 177	9	0.50	\$ 132,000.00	SKC	2640	50	18.00
Graven Road	Maher to Wright Road	3	0.25	\$ 66,000.00		1320	50	12.00
Independence Road	Maher to Banklick	6	0.50	\$ 132,000.00		2640	50	12.00
Senour Road	End of Taylor Mill's system to Fowler Creel	10	0.40	\$ 84,480.00				25.00
Sleepy Hollow Road	Existing D.E. near Diamond Ct. to Ludlow	0	1.00	\$ 264,000.00		5280	50	0.00
Sugar Camp Road	End of Taylor Mill's system to Fowler Creel	10	0.30	\$ 63,360.00				33.33



January 16, 2002

Ms. Susan Muench
Morningview Riding Center
2941 Hempfling Road
Morningview, Kentucky 41063

Re: Water Main Extension Cost Estimate along Hempfling Road; Morningview, Kenton
County, Kentucky

Dear Ms. Muench,

In response to your inquiry about extending the public water main along Hempfling Road for water service to your property, the District provides the following information. The District has prepared a "ball park" estimate, based on a total of 7,400 linear feet, which is from the existing end of the water main along Hempfling Road to near the creek which runs next to Navaho Road, of \$323,000. This estimate includes labor, materials, fire hydrants, engineering and contingencies. This estimate does not include any special precautions for the existing utilities, additional requirements by the Road Dept and potential geotechnical issues (there are a couple of questionable areas). This estimate also does not include tap fees of \$750.00 for each customer and the service line extension from the house to the meter setting.

There are a couple of different methods for extending water mains. Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of water main cost for each customer that connects to the extension. The remainder of the cost of the project is split equally by the property owners that connect to the extension. Under this policy, if there would be 25 customers, then the approximate cost per customer would be \$10,730.00 based on the ball park estimate. There would also be a surcharge (approx. \$30.00/month) added to the water bill as outlined below. Any additional customers, per the District's Tariff, would reduce the cost to each customer for a period of five years after construction.

Another method of extending water mains is through sub-district type projects. The Kenton County Fiscal Court in conjunction with the District have work together to make application for grant monies. These grant monies along with a surcharge on the water bills help pay for the project. This is how the water main was extended along Hempfling Road and other streets in southern Kenton County. There are several factors that drive these types of projects, which include: number of customers per mile, request from property owners, etc. We currently have this section of Hempfling Road as part of Sub-District "G" which is planned for sometime within the next 5 years depending on a number of factors (grant monies availability, competitiveness of project against others across the state, etc.).

The existing water main extension along Hempfling Road is a Sub-District project which has a monthly surcharge (approx. \$30) attached to the water bill for everyone who connects to the water main. This surcharge pays back a low interest loan which helped pay for the extensions. The Ky. Public Service Commission requires that, any new water main extensions that are connected to these sub-district water mains, the new customers will have pay the surcharge also. If the water main was extended along Hempfling Road, all new customers that connect to the water main would have to pay the monthly surcharge and water bill along with the cost of the extension as referenced above.

If you would like to continue forward, the Water District will need a petition signed by everyone that is interested along with there addresses and phone numbers. The petition should state that the persons signing the petition understand that based on the estimated cost, they will be responsible for the portion of the water main construction cost not covered by the District's Extension Policy as referred to above. After the Water District receives this petition, a Kentucky Registered Engineer will be contracted by the District to prepare an engineer's construction estimate to firm up project cost and adjust the customer participation amount. The updated customer participation amount must be paid up-front, prior to the start of the project design.

Another alternate method to extending the water main is to privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the District. Should you have any questions or need additional information feel free to contact the Engineering office at 426-2717.

Sincerely yours,



John Scheben, Jr.
Design Supervisor

cc:file

Hemphling Road - proposed 8" water main extension ---- Cost Estimate

to Nevada Road

ITEM	QUANTITY	UNIT	TOTAL UNIT COST	COST
8" DI Pipe & Fittings	7400	LF	30.00	\$222,000.00
8" Cast Iron Res. Seated Gate Valve & Box	4	EA	650.00	\$2,600.00
8"x8"x6" Ductile Iron Anchoring Tee & Block	15	EA	250.00	\$3,750.00
8" Plug & Block	1	EA	160.00	\$160.00
Connect to existing water main	1	EA	400.00	\$400.00
Fire Hydrant Assembly	15	EA	2,100.00	\$31,500.00
Driveway Restoration	50	SY	25.00	\$1,250.00
Restoration	7300	SY	1.00	\$7,300.00
Sub-Total				\$268,960.00
20% Conting. (Eng, Etc.)				53,792.00
Total Cost				\$322,752.00

Average Cost/Foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$43.62	\$2,180.76	1	\$320,571.24	\$320,571.24
		2	\$318,390.49	\$159,195.24
		3	\$316,209.73	\$105,403.24
		4	\$314,028.97	\$78,507.24
		5	\$311,848.22	\$62,369.64
		6	\$309,667.46	\$51,611.24
		7	\$307,486.70	\$43,926.67
		8	\$305,305.95	\$38,163.24
		9	\$303,125.19	\$33,680.58
		10	\$300,944.43	\$30,094.44
		11	\$298,763.68	\$27,160.33
		12	\$296,582.92	\$24,715.24
		13	\$294,402.16	\$22,646.32
		14	\$292,221.41	\$20,872.96
		15	\$290,040.65	\$19,336.04
		16	\$287,859.89	\$17,991.24
		17	\$285,679.14	\$16,804.66
		18	\$283,498.38	\$15,749.91
		19	\$281,317.62	\$14,806.19
		20	\$279,136.86	\$13,956.84
		21	\$276,956.11	\$13,188.39
		22	\$274,775.35	\$12,489.79
		23	\$272,594.59	\$11,851.94
		24	\$270,413.84	\$11,267.24
		25	\$268,233.08	\$10,729.32

January 29, 2002

Melody Whitaker
79 Enzweiler Rd.
Alexandria, Ky. 41001

Re: Water Main Extension Cost Estimate on Enzweiler Rd., Campbell County

Melody,

I apologize for the delay in getting this information to you. Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Enzweiler Road from the existing water main at 51 Enzweiler Road. It is approximately 1300 linear feet to extend the property main to 124 Enzweiler Road. Based on this distance, the estimated cost for an 8" water main, including fire hydrants, would be \$51,372.00. This estimate includes labor, materials & contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements from the city. This estimate does not include tap fees of \$750.00 for each customer and the service line extension from the house to the meter. These fees are subject to change yearly based on the districts bidding process.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of the water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. Under this policy, if there were 10 customers that connected to the new water main extension, then the approximate cost per customer would be \$3,161.20 plus the tap & service line extensions based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of 5 years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contacted by the District to prepare an engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the district. Should you have any questions or need any additional information you can reach me at (859) 426-2720.

Cordially,

Greg Napier
Engineering Inspector

Enzweiler Road Proposed
8" Water Main Extension -
Cost Estimate

ITEM	QUANTITY	LF	EA	SY	LS	TOTAL UNIT COST	COST
8" PVC Pipe & Fittings	1300					\$25.00	\$32,500.00
8" Cast Iron Resil. Seat Gate Valve & Box	1					\$750.00	\$750.00
8" Cast Iron Resil. Seat Gate Valve & Box	1					\$650.00	\$650.00
8" Cast Iron Resil. Seat Gate Valve & Box	3					\$250.00	\$750.00
8" x 8" x 6" Ductile Iron Anchoring Tee & Block	1					\$1,600.00	\$1,600.00
8" Plug & Block	3					\$35.00	\$105.00
8" x 8" x 6" Ductile Iron Anchoring Tee & Block	6					\$3,000.00	\$18,000.00
Fire Hydrant Assembly	1						\$8,562.00
Driveway Restoration							\$51,372.00
Restoration							
Sub-Total							
20% Contingency (Eng., Etc)							
Total Cost							

Average Cost Per Foot
\$39.52

50' Participation by District for each Customer
\$1,976.00

Total # of Customers
10

District's Total Portion of Cost
\$19,760.00

Total Cost \$51,372.00
District's Total Portion of Cost \$19,760.00
Total \$31,612.00

# of Customers Connecting to Main	Total Customer Cost
1	\$49,396.00
2	\$47,420.00
3	\$45,444.00
4	\$43,468.00
5	\$41,492.00
6	\$39,516.00
7	\$37,540.00
8	\$35,564.00
9	\$33,588.00
10	\$31,612.00
11	\$29,636.00
12	\$25,684.00
13	\$23,708.00

Cost For Each Customer

\$49,396.00
\$23,710.00
\$15,148.00
\$10,867.00
\$8,298.40
\$6,586.00
\$5,362.86
\$4,445.50
\$3,732.00
\$3,161.20
\$2,694.18
\$2,140.33
\$1,823.69

Actual Sign Ups

Cost does not include \$750.00 Service Tap Fee for each house. (3/4 service tap) cost may change yearly

August 20, 2002

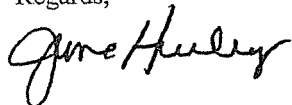
Mr. Greg Napier
Engineering Inspector
Northern Kentucky Water District
3049 Dixie Highway
Erlanger, KY 41018

Greg,

As we discussed on the phone, based on the cost estimates included with your enclosed letter and conversations we have had with the other signors of our original petition, we are interested in proceeding on the extension of the public water main along Bramlage Road.

Please let us know what steps we need to take next in this process.

Regards,



June & Philip Hurley
3519 Mary Street
Erlanger, KY 41018
859-727-2055

cc: Mr. John Schaeben

Average Cost Per Foot	50' Participation by District for each Customer	Total # of Customers	District's Total Portion of Project
\$42.17	\$2,108.54	11	\$23,193.94
Total Cost	\$54,822.00		
District's 50' Portion of Cost	\$2,108.54		
Total	\$52,713.46		
# of Customers Connecting to Main	Total Customer Cost	Cost For Each Customer	
1	\$52,713.46	\$52,713.46	
2	\$50,604.92	\$25,302.46	
3	\$48,496.38	\$16,165.46	
4	\$46,387.84	\$11,596.96	
5	\$44,279.30	\$8,855.86	
6	\$42,170.76	\$7,028.46	
7	\$40,062.22	\$5,723.17	
8	\$37,953.68	\$4,744.21	
9	\$35,845.14	\$3,982.79	Actual Sign Ups
10	\$33,736.60	\$3,373.66	
11	\$31,628.06	\$2,875.28	
12	\$29,519.52	\$2,459.96	
13	\$27,410.98	\$2,108.54	
14	\$25,302.44	\$1,807.32	
	(3/4 service tpd) cost may change yearly		
Cost does not include \$750.00 Service			
Tap Fee for each house.			

Northern Kentucky Water District

July 15, 2002

June Hurley
3519 Mary Street
Erlanger, Ky. 41018

Re: Water Main Extension Cost Estimate on Bramlage Road., Kenton County

Ms. Hurley,

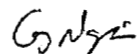
I apologize for the delay in getting this information to you. Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Bramlage Road from the existing water main at Wilson Road. It is approximately 1300 linear feet to extend the property main to 1308 Bramlage Road. Based on this distance, the estimated cost for an "water main, including fire hydrants, would be \$54,822.00. This estimate includes labor, materials & contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements from the city. This estimate does not include tap fees of \$750.00 for each customer and the service line extension from the house to the meter.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of the water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. For example, under this policy, if there were 11 customers that connected to the new water main extension, then the approximate cost per customer would be \$2,108.54 plus the tap & service line extensions based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of 5 years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contacted by the District to prepare an engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the district. Should you have any questions or need any additional information you can reach me at (859) 426-2720.

Cordially,


Greg Napier
Engineering Inspector

Northern Kentucky
Water District

May 9, 2002

Mr. Greg Jarvis
638 Madison Ave
Covington, Kentucky 41011

Re: Misty Lane waterline cost estimate

Dear Mr. Jarvis,

I have enclosed a preliminary cost estimate for the proposed Misty Lane water main extension. In a discussion that I had with Mr. Fred Wilson on May 2, Mr. Wilson requested that I send the City a copy of the estimate. Mr. Wilson referenced ongoing discussions with the City regarding this project and asked the District to contact the City on his behalf. I informed Mr. Wilson that the Northern Kentucky Water District could not comment on any discussions that the residents of Misty Lane have had with the City but I did agree to send the estimated costs for the 520-foot water main extension.

I briefly explained the District's extension procedure and informed Mr. Wilson that the amount of the District's contribution towards the project would be the cost of 50' of water line for each household that connects to the main. Based upon the estimated cost of \$19,987 for the extension and 5 households connecting, the District's contribution would be \$9,609.15. The remaining \$10,377.87 would need to be paid by the households that connected to the main. I believe Mr. Wilson's intention is to request that the City contribute the resident's portion of the extension. Please see the table that is listed at the bottom of the enclosed estimate for the relative costs if fewer households connect.

Please feel free to contact me at 578-5458 or e-mail me at rharr@nkywater.org if you have any questions.

Sincerely



Richard Harrison
Vice President of
Engineering and Distribution

11stly Lane proposed 8" water main extension --- Cost Estimate

ITEM	QUANTITY	TOTAL UNIT COST	COST
1" DI Pipe & Fittings	520	LF	\$13,000.00
3" Cast Iron Res. Seated Gate Valve & Box	1	EA	\$600.00
3"x8"x6" Ductile Iron Anchoring Tee & Block	1	EA	\$300.00
Fire Hydrant Assembly	1	EA	\$1,500.00
3" Plug & Block	1	EA	\$150.00
Roadway Restoration	6	SY	\$240.00
Driveway Restoration	8	SY	\$240.00
Creek Crossing	10	SY	\$350.00
Restoration	1	LS	\$1,000.00
Sub-Total			\$17,380.00
15% Conting. (Eng., Etc.)			2,607.00
Total Cost			\$19,987.00

50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$1,921.83	1	\$18,065.17	\$18,065.17
	2	\$16,143.35	\$8,071.67
	3	\$14,221.52	\$4,740.51
	4	\$12,299.69	\$3,074.92
	5	\$10,377.87	\$2,075.57

Average Cost/Foot \$38.44

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District E

Kenton County
184-078

Engineering Reports

Engineer's Preliminary Estimate

Final Estimate and Review of Bids

System Hydraulic Model

Project Map

Revenue Requirements

Project Specifications
(See Attached Specifications)

Case No. 200-_____
Exhibit **C**

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District E

Kenton County
184-078

Engineer's Preliminary Estimate



VIOX & VIOX, INC.

Consulting Engineers & Surveyors

**ENGINEER'S ESTIMATE
FOR
NKWD
SUB DISTRICT E-1
WHITAKER/MCDONALD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
# 1 Whitaker/ McDonald				
8" DIP Class 50 w/polywrap & fittings	900	LF	\$22.00	\$19,800.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	2	EA	\$250.00	\$500.00
8" X 8" X 8" Ductile-Iron Tee & Block	2	EA	\$225.00	\$450.00
Fire Hydrant Assembly (HIGH PRESSURE), Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	2	EA	\$1,900.00	\$3,800.00
Air Relief Valve	1	EA	\$300.00	\$300.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	5	EA	\$700.00	\$3,500.00
Water Services Short	3	EA	\$750.00	\$2,250.00
Water Services Long	3	EA	\$750.00	\$2,250.00
8" Pipe Plug & Block	2	EA	\$150.00	\$300.00
Road Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	30	SY	\$50.00	\$1,500.00
Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	80	SY	\$40.00	\$3,200.00
TOTAL CONTRACTOR				\$37,850.00

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 606-727-3293
Fax: 606-727-8452
e-mail: viox@nkol.net
8/10/01



VIOX & VIOX, INC.

Consulting Engineers & Surveyors

ENGINEER'S ESTIMATE
FOR
NKWD
SUB DISTRICT E-2
BROMLEY CRESCENT SPRINGS / ST. JOHNS

ITEM	QUANTITY	UNIT	UNIT COST	COST
#2 Bromley Crescent Springs/ St. John's				
8" DIP Class 50 w/polywrap & Fittings	5,050	LF	\$22.00	\$111,100.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	12	EA	\$250.00	\$3,000.00
12" X 12" X 8" Ductile-Iron Tee & Block Cut into Existing Main	1	EA	\$1,200.00	\$1,200.00
Fire Hydrant Assembly (HIGH PRESSURE), Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	12	EA	\$1,900.00	\$22,800.00
Air Relief Valve	4	EA	\$300.00	\$1,200.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	4	EA	\$1,300.00	\$5,200.00
12" Ductile-Iron Resilient Seated Gate Valve & Box	1	EA	\$800.00	\$800.00
12" Tapping Sleeve & Valve	1	EA	\$4,000.00	\$4,000.00
Water Services Short	11	EA	\$750.00	\$8,250.00
Water Services Long	11	EA	\$750.00	\$8,250.00
8" Pipe Plug & Block	2	EA	\$150.00	\$300.00
Concrete Encasement	50	LF	\$60.00	\$3,000.00
Road Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	1,275	SY	\$50.00	\$63,750.00
Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	295	SY	\$40.00	\$11,800.00
TOTAL CONTRACTOR				\$244,650.00

166 Erlanger Road
Erlanger, Kentucky 41018
BROMLEY#2
8/14/01

Tel: 606-727-3293
Fax: 606-727-8452
e-mail: viox@nkol.net



VIOX & VIOX, INC.

Consulting Engineers & Surveyors

ENGINEER'S ESTIMATE
FOR
NKWSD
SUB DISTRICT E-3
FISKBURG (KY 17 TO 1.2 MILES)

ITEM	QUANTITY	UNIT	UNIT COST	COST
#3 Fiskburg (KY 17 to 1.2 miles)				
8" PVC C-900 Water Main & Fittings	6,625	LF	\$21.00	\$139,125.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	15	EA	\$250.00	\$3,750.00
8" X 8" X 8" Ductile-Iron Tee & Block	1	EA	\$225.00	\$225.00
Fire Hydrant Assembly, Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	15	EA	\$1,850.00	\$27,750.00
Air Relief Valve	4	EA	\$300.00	\$1,200.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	5	EA	\$700.00	\$3,500.00
Water Services Short	15	EA	\$750.00	\$11,250.00
Water Services Long	14	EA	\$750.00	\$10,500.00
8" Pipe Plug & Block	2	EA	\$150.00	\$300.00
Remove 8" Pipe Plug & Block	1	EA	\$100.00	\$100.00
Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	200	SY	\$40.00	\$8,000.00
Road Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	50	SY	\$50.00	\$2,500.00
TOTAL CONTRACTOR				\$208,200.00

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 606-727-3293
Fax: 606-727-8452
e-mail: viox@nkol.net
8/13/01



VIOX & VIOX, INC.

Consulting Engineers & Surveyors

**ENGINEER'S ESTIMATE
FOR
NKWD
SUB DISTRICT E-4a
KY 177/ VISALIA**

ITEM	QUANTITY	UNIT	UNIT COST	COST
4a- KY 177/ Visalia				
8" DIP Class 50 w/polywrap & fittings	7,200	LF	\$22.00	\$158,400.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	15	EA	\$250.00	\$3,750.00
8" X 8" X 8" Ductile-Iron Tee & Block	2	EA	\$225.00	\$450.00
Fire Hydrant Assembly (HIGH PRESSURE), Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	15	EA	\$1,900.00	\$28,500.00
12"-8" Reducers	2	EA	\$250.00	\$500.00
Air Relief Valve	2	EA	\$300.00	\$600.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	8	EA	\$700.00	\$5,600.00
Water Services Short	17	EA	\$750.00	\$12,750.00
Water Services Long	18	EA	\$750.00	\$13,500.00
8" Pipe Plug & Block	4	EA	\$150.00	\$600.00
Remove 8" Pipe Plug & Block	2	EA	\$100.00	\$200.00
Highway Restoration (K.D.O.T.)	60	SY	\$60.00	\$3,600.00
Road Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	13	SY	\$50.00	\$650.00
Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	260	SY	\$40.00	\$10,400.00
TOTAL CONTRACTOR				\$239,500.00

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 606-727-3293
Fax: 606-727-8452
e-mail: viox@nkol.net



VIOX & VIOX, INC.

Consulting Engineers & Surveyors

**ENGINEER'S ESTIMATE
FOR
NKWD
SUB DISTRICT E-4b
12" UPGRADE- KY 177 (VISALIA RD. TO AL SCHNEIDER)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
#4b KY 177 (Visalia Rd to Al Schneider)				
12" Ductile Iron Class 50 w/polywrap & Fittings	2,400	LF	\$14.00	\$33,600.00
12" X 12" X 6" Ductile-Iron Anchoring Tee & Block	5	EA	\$100.00	\$500.00
12" X 12" x 8" Ductile-Iron Tee & Block	1	EA	\$200.00	\$200.00
12" X 12" X 12" Ductile-Iron Tee & Block	1	EA	\$300.00	\$300.00
12" Ductile-Iron Resilient Seated Gate Valves & Boxes	5	EA	\$500.00	\$2,500.00
12" Pipe Plug & Block	1	EA	\$100.00	\$100.00
TOTAL CONTRACTOR				\$37,200.00

66 Erlanger Road
Erlanger, Kentucky 41018

SCHNEIDER

1

Tel: 606-727-3293
Fax: 606-727-8452
e-mail: viox@nkol.net
8/10/01



VIOX & VIOX, INC.

Consulting Engineers & Surveyors

ENGINEER'S ESTIMATE
FOR
NKWD
SUB DISTRICT E-5
BETHEL GROVE

ITEM	QUANTITY	UNIT	UNIT COST	COST
#5 Bethel Grove				
8" DIP Class 50 w/polywrap & Fittings	2,700	LF	\$22.00	\$ 59,400.00
8" X 8" X 6" Ductile-Iron Anchoring Tee & Block	6	EA	\$250.00	\$ 1,500.00
8" X 8" X 8" Ductile-Iron Tee & Block	3	EA	\$225.00	\$ 675.00
Fire Hydrant Assembly (HIGH PRESSURE), Incl. 6" Ductile-Iron Resilient Seated Gate Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions.	6	EA	\$1,900.00	\$ 11,400.00
8" Ductile-Iron Resilient Seated Gate Valves & Boxes	11	EA	\$700.00	\$ 7,700.00
Water Services Short	10	EA	\$750.00	\$ 7,500.00
Water Services Long	10	EA	\$750.00	\$ 7,500.00
8" Pipe Plug & Block	5	EA	\$150.00	\$ 750.00
Remove 8" Pipe Plug & Block	1	EA	\$100.00	\$ 100.00
15" Steel Casing Pipe by Boring & Jacking	60	LF	\$300.00	\$ 18,000.00
Drive Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	100	SY	\$40.00	\$ 4,000.00
Road Restoration Conforming to Existing Materials and Thickness including any Culvert Replacement Necessary	40	SY	\$50.00	\$ 2,000.00
TOTAL CONTRACTOR				\$ 120,525.00

56 Erlanger Road
Erlanger, Kentucky 41018

Bethel

Tel: 606-727-3293
Fax: 606-727-8452
e-mail: viox@nkol.net
8/13/01



H2ONET Report - Sub E Kenton Station Ishmael Max Hour

		ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	┘	3649	21.17	886.00	1,033.74
2	┘	20242	0.00	570.00	1,028.92
3	┘	8066	0.00	560.00	1,028.92
4	┘	20240	98.99	500.00	1,026.35

H2ONET Report - Sub E Kenton Station Ishmael Max Hour

		ID	Pressure (psi)
1	┌	3649	64.05
2	┌	20242	198.94
3	┌	8066	203.28
4	┌	20240	228.17

H2ONET Report - Sub E Kenton Station Ishmael 2.5 fps flushing (max hr)

		ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	↓	3649	21.17	886.00	999.61
2	↓	20242	0.00	570.00	949.88
3	↓	8066	0.00	560.00	949.88
4	↓	20240	392.00	500.00	917.02

H2ONET Report - Sub E Kenton Station Ishmael 2.5 fps flushing (max hr)

		ID	Pressure (psi)
1	┘	3649	49.25
2	┘	20242	164.68
3	┘	8066	169.01
4	┘	20240	180.78

H2ONET Report - Kenton Station Ishmael 2.5 fps pipe info

	ID	From Node	To Node	Length (ft)	Diameter (in)	Flow (gpm)
1	4450	3654	3649	1,537.40	8.00	676.52
2	4446	3649	3650	8,015.70	8.00	413.18
3	7965	8064	8066	2,694.81	8.00	392.00
4	20244	20240	8066	8,700.00	8.00	-392.00
5	4452	3654	3656	3,614.70	8.00	-352.81
6	4451	3649	3655	11,360.60	8.00	242.17
7	20246	8066	20242	4,500.00	8.00	0.00

H2ONET Report - Kenton Station Ishmael 2.5 fps pipe info

		ID	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)	Roughnes
1	┘	4450	4.32	18.72	12.18	110.00
2	┘	4446	2.64	39.20	4.89	110.00
3	┘	7965	2.50	10.18	3.78	120.00
4	┘	20244	2.50	32.86	3.78	120.00
5	┘	4452	2.25	13.20	3.65	110.00
6	┘	4451	1.55	20.68	1.82	110.00
7	┘	20246	0.00	0.00	0.00	120.00

FIRE FLOW CERTIFICATION

Subdistrict E Whitakre/McDonald Kenton County, KY

I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using H2ONET, the program available from MWHSoft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

Subdistrict E Whitaker/McDonald Kenton County, KY

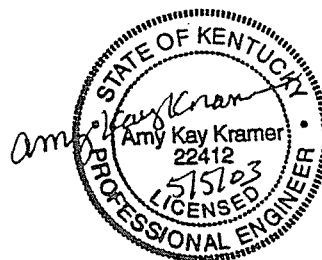
I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100 (under average day demand conditions). The maximum flow rate that can reliably be supplied to the street and meet 20 psi in the system is 500 gpm. At least 30 psi can be maintained under the peak domestic demand for the 6 customers added. The peak domestic demand using the D.R. Taylor formula for 6 customers is 24.49 gpm.

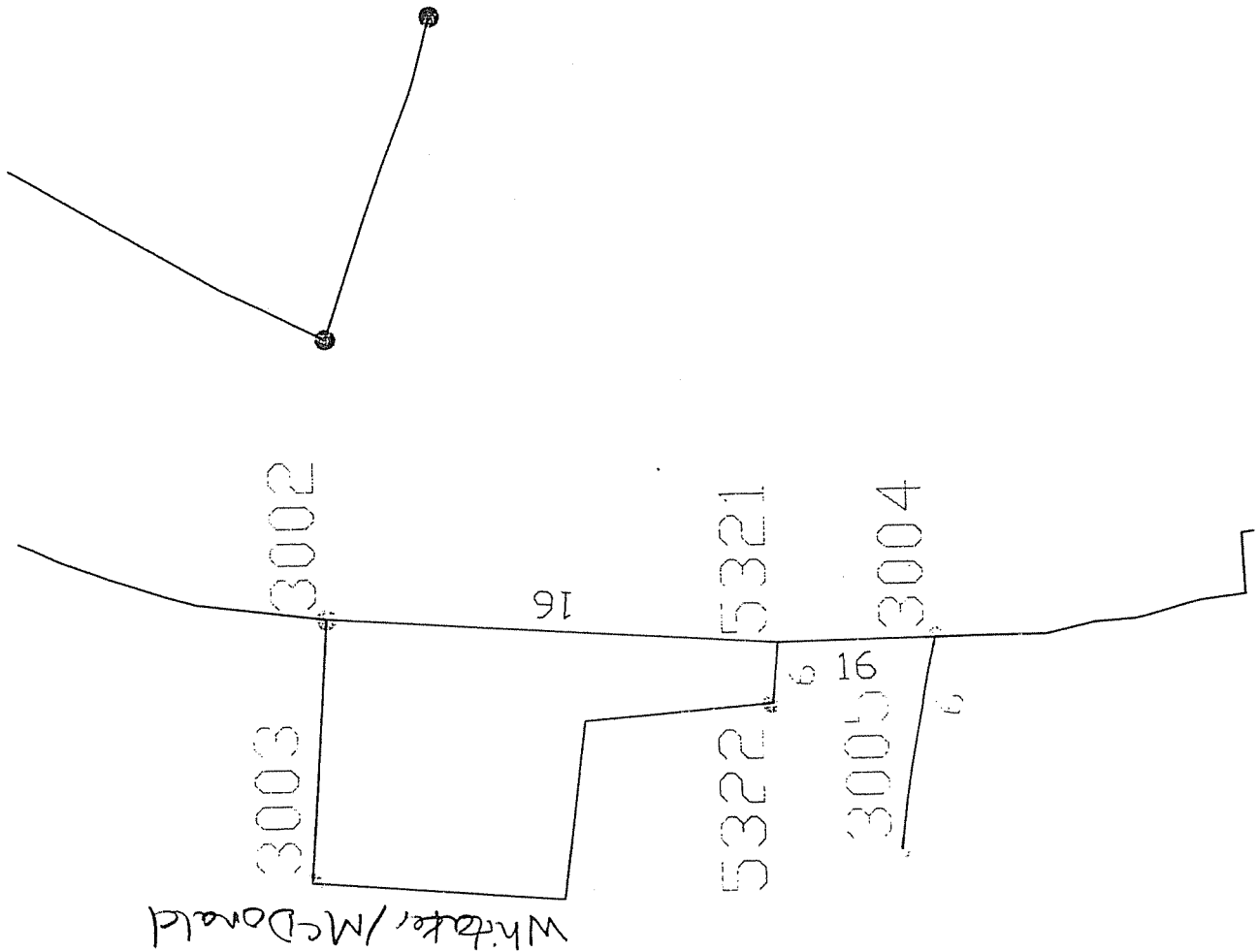
This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 8-inch diameter water main.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water level in the Independence Tank was one-half full.





H2ONET Report - Sub E Whitaker/McDonald Max Hour

		ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	┌	5321	4.80	517.00	716.05
2	┌	3005	4.80	513.00	712.19
3	┌	3004	4.80	513.00	712.19
4	┌	3003	4.80	522.00	723.17
5	┌	5322	29.29	504.00	716.23
6	┌	3002	4.80	501.00	728.74

H2ONET Report - Sub E Whitaker/McDonald Max Hour

		ID	Pressure (psi)
1	┘	5321	86.29
2	┘	3005	86.35
3	┘	3004	86.35
4	┘	3003	87.21
5	┘	5322	92.00
6	┘	3002	98.73

H2ONET Report - Sub E Whitaker/McDonald 2.5 fps (max hour)

	ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	5321	4.80	517.00	700.00
2	3005	4.80	513.00	696.34
3	3004	4.80	513.00	696.35
4	3003	4.80	522.00	712.39
5	5322	396.80	504.00	708.92
6	3002	4.80	501.00	715.20

H2ONET Report - Sub E Whitaker/McDonald 2.5 fps (max hour)

		ID	Pressure (psi)
1	┘	5321	79.33
2	┘	3005	79.48
3	┘	3004	79.48
4	┘	3003	82.53
5	┘	5322	88.83
6	┘	3002	92.86

H2ONET Report - Whitaker/McDonald 2.5 fps pipe information

		ID	From Node	To Node	Length (ft)	Diameter (in)	Flow (gpm)
1	└	3709	3002	5321	1,109.80	16.00	4,470.79
2	└	6485	5321	3004	267.30	16.00	4,465.99
3	└	3708	3002	3003	606.20	8.00	401.59
4	└	20232	3003	5322	900.00	8.00	396.80
5	└	3710	3004	3005	491.70	6.00	4.80
6	└	6486	5321	5322	5.30	6.00	0.00

H2ONET Report - Whitaker/McDonald 2.5 fps pipe information

		ID	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)	Roughnes
1	┘	3709	7.13	15.20	13.70	110.00
2	┘	6485	7.13	3.65	13.67	110.00
3	┘	3708	2.56	2.81	4.64	110.00
4	┘	20232	2.53	3.48	3.86	120.00
5	┘	3710	0.05	0.00	0.01	110.00
6	┘	6486	0.00	0.00	0.00	110.00

FIRE FLOW CERTIFICATION

**Subdistrict E
Fiskburg Road
Kenton County, KY**

I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using H2ONET, the program available from MWHSOFT. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

Subdistrict E Fiskburg Road Kenton County, KY

I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100 (under average day demand conditions). The maximum flow rate that can reliably be supplied to the street and meet 20 psi in the system is 700 gpm. At least 30 psi can be maintained under the peak domestic demand for the 29 customers added. The peak domestic demand using the D.R. Taylor formula for 29 customers is 53.85 gpm.

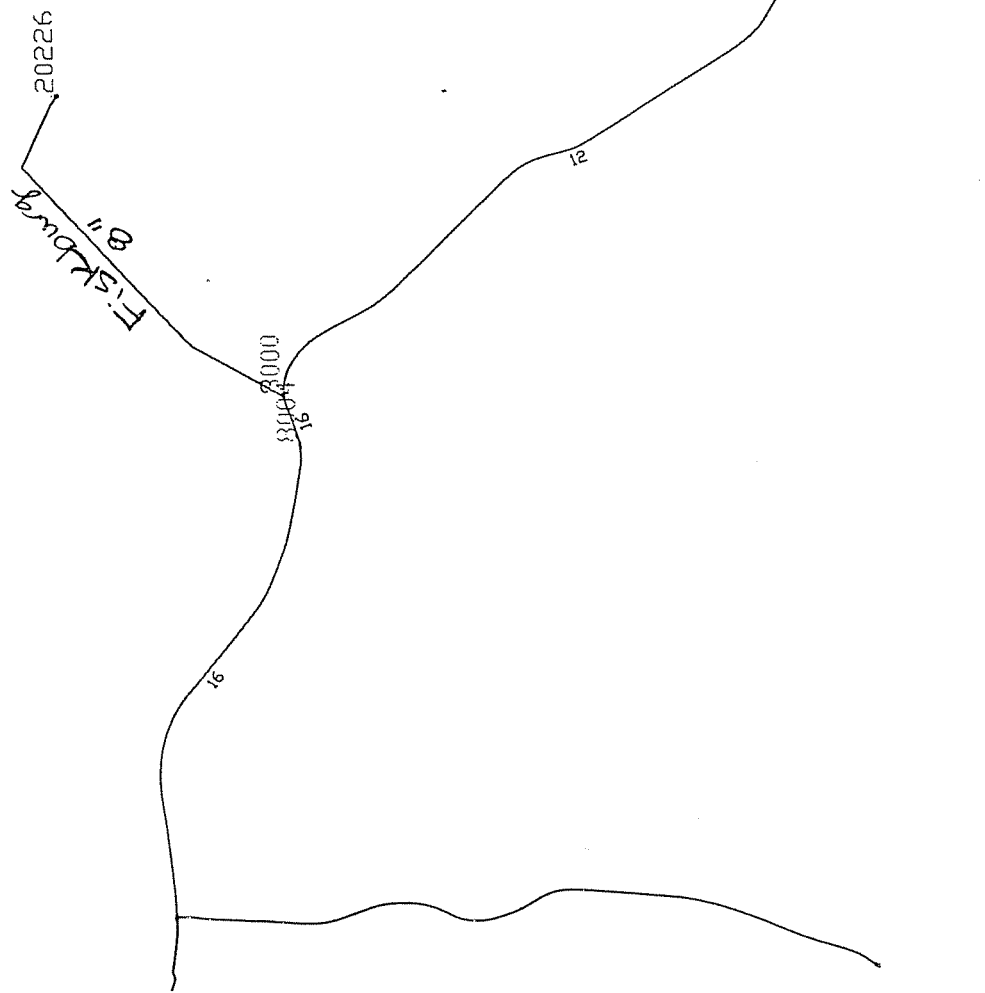
This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 8-inch diameter water main.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water level in the Independence Tank was one-half full.





H2ONET Report - Sub E Fiskburg Road Max Hour

	ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	3508	15.31	943.00	1,056.40
2	3537	13.75	942.00	1,059.14
3	3419	15.91	937.00	1,056.30
4	3539	13.75	937.00	1,058.80
5	3545	13.75	935.00	1,058.34
6	3420	15.31	932.00	1,056.27
7	3437	93.24	929.00	1,056.12
8	3538	13.75	931.00	1,058.37
9	3435	13.75	927.00	1,055.20
10	3434	13.75	926.00	1,055.23
11	3659	82.35	913.00	1,046.93
12	3600	13.75	918.00	1,055.14
13	3670	15.31	912.00	1,052.53
14	3669	15.31	910.00	1,052.56
15	3653	21.17	907.00	1,052.39
16	3668	15.31	909.00	1,054.51
17	3606	13.75	905.00	1,055.24
18	3607	13.75	905.00	1,055.30
19	3546	13.75	903.00	1,055.10
20	3540	13.75	905.00	1,058.75
21	3657	21.17	897.00	1,051.00
22	8004	0.00	885.00	1,044.56
23	3660	172.22	885.00	1,045.12
24	3548	4.21	895.00	1,055.22
25	3541	13.75	895.00	1,058.74
26	20226	53.85	880.00	1,043.92
27	3436	13.75	891.00	1,055.14
28	8000	0.00	880.00	1,044.53
29	8006	0.00	880.00	1,044.80
30	3651	13.75	885.00	1,050.76
31	8060	0.00	880.00	1,046.93
32	3603	13.75	888.00	1,055.10
33	3630	13.75	883.00	1,055.11
34	3658	21.17	878.00	1,050.82
35	3547	13.75	881.00	1,055.19
36	8056	0.00	870.00	1,050.87
37	8058	0.00	870.00	1,050.87
38	8002	256.25	860.00	1,043.23
39	8090	0.00	870.00	1,054.51
40	8010	0.00	860.00	1,044.80
41	8014	0.00	860.00	1,045.12

H2ONET Report - Sub E Fiskburg Road Max Hour

	ID	Pressure (psi)
1	3508	49.16
2	3537	50.78
3	3419	51.72
4	3539	52.80
5	3545	53.47
6	3420	53.87
7	3437	55.11
8	3538	55.21
9	3435	55.58
10	3434	56.02
11	3659	58.06
12	3600	59.45
13	3670	60.92
14	3669	61.80
15	3653	63.03
16	3668	63.08
17	3606	65.13
18	3607	65.15
19	3546	65.94
20	3540	66.65
21	3657	66.76
22	8004	69.17
23	3660	69.41
24	3548	69.46
25	3541	70.98
26	20226	71.06
27	3436	71.16
28	8000	71.32
29	8006	71.44
30	3651	71.86
31	8060	72.37
32	3603	72.44
33	3630	74.61
34	3658	74.92
35	3547	75.51
36	8056	78.41
37	8058	78.41
38	8002	79.43
39	8090	79.99
40	8010	80.11
41	8014	80.25

H2ONET Report - Sub E Fiskburg Road 2.5 fps (under max hour)

	ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	3508	15.31	943.00	1,054.67
2	3537	13.75	942.00	1,058.58
3	3419	15.91	937.00	1,054.60
4	3539	13.75	937.00	1,058.24
5	3659	82.35	913.00	1,034.61
6	3545	13.75	935.00	1,057.49
7	3420	15.31	932.00	1,054.56
8	20226	392.00	880.00	1,003.30
9	3437	93.24	929.00	1,054.35
10	3538	13.75	931.00	1,057.52
11	3435	13.75	927.00	1,053.76
12	3434	13.75	926.00	1,053.78
13	3670	15.31	912.00	1,047.75
14	3600	13.75	918.00	1,053.75
15	3669	15.31	910.00	1,047.78
16	3653	21.17	907.00	1,047.46
17	3668	15.31	909.00	1,051.32
18	8004	0.00	885.00	1,027.57
19	3660	172.22	885.00	1,029.76
20	3657	21.17	897.00	1,044.32
21	8000	0.00	880.00	1,027.47
22	8006	0.00	880.00	1,028.52
23	3606	13.75	905.00	1,054.00
24	3607	13.75	905.00	1,054.12
25	3546	13.75	903.00	1,052.39
26	3540	13.75	905.00	1,058.19
27	8060	0.00	880.00	1,034.61
28	3548	4.21	895.00	1,053.78
29	3651	13.75	885.00	1,046.26
30	3436	13.75	891.00	1,053.75
31	3541	13.75	895.00	1,058.18
32	3603	13.75	888.00	1,053.70
33	3658	21.17	878.00	1,044.13
34	8002	256.25	860.00	1,026.17
35	8010	0.00	860.00	1,028.52
36	8014	0.00	860.00	1,029.76
37	3630	13.75	883.00	1,053.71
38	3547	13.75	881.00	1,053.75
39	8056	0.00	870.00	1,043.99
40	8058	0.00	870.00	1,043.99
41	8090	0.00	870.00	1,051.32

H2ONET Report - Sub E Fiskburg Road 2.5 fps (under max hour)

	ID	Pressure (psi)
1	3508	48.41
2	3537	50.54
3	3419	50.98
4	3539	52.56
5	3659	52.72
6	3545	53.10
7	3420	53.13
8	20226	53.45
9	3437	54.34
10	3538	54.84
11	3435	54.95
12	3434	55.39
13	3670	58.85
14	3600	58.85
15	3669	59.73
16	3653	60.89
17	3668	61.70
18	8004	61.80
19	3660	62.75
20	3657	63.86
21	8000	63.93
22	8006	64.38
23	3606	64.59
24	3607	64.64
25	3546	64.76
26	3540	66.41
27	8060	67.03
28	3548	68.83
29	3651	69.91
30	3436	70.55
31	3541	70.74
32	3603	71.83
33	3658	72.02
34	8002	72.03
35	8010	73.05
36	8014	73.59
37	3630	74.00
38	3547	74.89
39	8056	75.42
40	8058	75.42
41	8090	78.60

H2ONET Report Sub E Fiskburg Road 2.5 fps flushing

	ID	From Node	To Node	Length (ft)	Diameter (in)	Flow (gpm)
1	20226	8000	20226	6,400.00	8.00	392.00
2	4301	3508	3437	117.90	8.00	300.80
3	4462	3546	3668	1,125.70	16.00	1,150.62
4	4461	3668	3669	3,836.90	16.00	1,135.31
5	4464	3669	3653	361.50	16.00	1,104.69
6	4745	3508	3546	3,000.00	16.00	1,022.22
7	4467	3653	3657	4,782.30	16.00	945.17
8	7172	3657	8056	539.08	16.00	902.82
9	4465	8056	3659	15,508.12	16.00	902.82
10	4302	3537	3538	696.40	8.00	220.16
11	4454	3659	3660	9,582.90	16.00	820.47
12	4304	3538	3508	2,385.30	8.00	192.65
13	8209	8008	8006	1,524.07	16.00	648.25
14	8207	3660	8008	2,259.39	16.00	648.25
15	8045	8006	8004	2,905.34	16.00	648.25
16	8046	8004	8000	289.02	16.00	648.25
17	4315	3437	3546	2,887.50	8.00	142.15
18	4448	3653	3651	1,864.40	8.00	138.35
19	8248	8000	8002	5,466.90	12.00	256.25
20	4263	3508	3419	1,013.70	16.00	293.78
21	4305	3537	3539	1,218.80	6.00	41.26
22	4189	3437	3434	2,980.60	8.00	65.41
23	4410	3606	3607	666.60	8.00	-61.47
24	4187	3434	3435	125.70	8.00	47.44
25	4395	3600	3606	2,819.60	8.00	-43.50
26	4177	3419	3420	718.30	6.00	15.31
27	4314	3538	3545	701.70	6.00	13.75
28	4423	3436	3630	988.70	6.00	13.75
29	4306	3539	3540	1,397.90	6.00	13.75
30	4307	3539	3541	1,639.50	6.00	13.75
31	4392	3600	3603	2,073.90	8.00	22.18
32	4453	3657	3658	10,951.70	8.00	21.17
33	4188	3435	3436	832.50	8.00	19.94
34	4463	3669	3670	3,013.30	8.00	15.31
35	4447	3651	3652	1,914.50	8.00	13.75
36	4316	3435	3547	1,115.10	8.00	13.75
37	4389	3436	3600	607.90	8.00	-7.57
38	4393	3603	3604	2,414.70	8.00	4.21
39	4317	3434	3548	1,550.70	8.00	4.21
40	4413	3607	3623	1,750.80	8.00	4.21
41	8044	8006	8010	4,103.72	8.00	0.00

H2ONET Report Sub E Fiskburg Road 2.5 fps flushing

	ID	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)	Roughnes
1	20226	2.50	24.17	3.78	120.00
2	4301	1.92	0.32	2.72	110.00
3	4462	1.84	1.07	0.95	120.00
4	4461	1.81	3.54	0.92	120.00
5	4464	1.76	0.32	0.88	120.00
6	4745	1.63	2.28	0.76	120.00
7	4467	1.51	3.15	0.66	120.00
8	7172	1.44	0.33	0.60	120.00
9	4465	1.44	9.38	0.60	120.00
10	4302	1.41	1.06	1.53	110.00
11	4454	1.31	4.85	0.51	120.00
12	4304	1.23	2.84	1.19	110.00
13	8209	1.03	0.50	0.33	120.00
14	8207	1.03	0.74	0.33	120.00
15	8045	1.03	0.95	0.33	120.00
16	8046	1.03	0.09	0.33	120.00
17	4315	0.91	1.96	0.68	110.00
18	4448	0.88	1.20	0.65	110.00
19	8248	0.73	1.31	0.24	120.00
20	4263	0.47	0.08	0.08	120.00
21	4305	0.47	0.34	0.28	110.00
22	4189	0.42	0.57	0.19	100.00
23	4410	0.39	0.11	0.17	100.00
24	4187	0.30	0.01	0.11	100.00
25	4395	0.28	0.26	0.09	100.00
26	4177	0.17	0.03	0.04	110.00
27	4314	0.16	0.03	0.04	110.00
28	4423	0.16	0.04	0.04	110.00
29	4306	0.16	0.05	0.04	110.00
30	4307	0.16	0.06	0.04	110.00
31	4392	0.14	0.05	0.02	110.00
32	4453	0.14	0.19	0.02	120.00
33	4188	0.13	0.02	0.02	100.00
34	4463	0.10	0.03	0.01	110.00
35	4447	0.09	0.02	0.01	110.00
36	4316	0.09	0.01	0.01	110.00
37	4389	0.05	0.00	0.00	100.00
38	4393	0.03	0.00	0.00	110.00
39	4317	0.03	0.00	0.00	110.00
40	4413	0.03	0.00	0.00	110.00
41	8044	0.00	0.00	0.00	120.00

FIRE FLOW CERTIFICATION

Subdistrict E

**Visalia (KY 177, Bethel Grove, Brandy Lane, Vice's Trail, Licking Sta. Road)
Kenton County, KY**

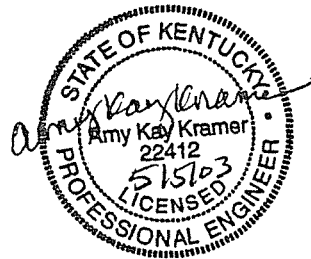
I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

Subdistrict E

**Visalia (KY 177, Bethel Grove, Brandy Lane, Vice's Trail, Licking Sta. Road)
Kenton County, KY**

I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100 (under average day demand conditions). The maximum flow rate that can reliably be supplied to the street and meet 20 psi in the system is 1,800 gpm. At least 30 psi can be maintained under the peak domestic demand for the 87 customers added. The peak domestic demand using the D.R. Taylor formula for 87 customers is 93.27 gpm.

This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 8-inch diameter water main.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water level in the Barrington Tank was one-half full.



20232

Jisalia
Area

20228 20230

20226

20160
20158

20236

20238

20234

12

12

12

H2ONET Report - Sub E Visalia area Maximum Hour

		ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	┘	20232	10.88	540.00	1,051.11
2	┘	20230	10.88	536.00	1,051.12
3	┘	20228	10.88	538.00	1,051.12
4	┘	20226	10.88	535.00	1,051.13
5	┘	8088	10.88	540.00	1,051.16
6	┘	20234	10.88	533.00	1,051.13
7	┘	20238	10.88	525.00	1,051.12
8	┘	20236	10.88	535.00	1,051.12

H2ONET Report - Sub E Visalia area Maximum Hour

		ID	Pressure (psi)
1	┘	20232	221.57
2	┘	20230	223.31
3	┘	20228	222.44
4	┘	20226	223.74
5	┘	8088	221.59
6	┘	20234	224.61
7	┘	20238	228.07
8	┘	20236	223.74

H2ONET Report - Sub E Visalia area 2.5 fps flushing (max hour)

		ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	┘	20232	392.00	540.00	1,014.79
2	┘	20228	10.88	538.00	1,022.35
3	┘	8088	10.88	540.00	1,024.89
4	┘	20230	10.88	536.00	1,023.29
5	┘	20226	10.88	535.00	1,024.34
6	┘	20236	10.88	535.00	1,024.36
7	┘	20234	10.88	533.00	1,024.58
8	┘	20238	10.88	525.00	1,024.35

H2ONET Report - Sub E Visalia area 2.5 fps flushing (max hour)

		ID	Pressure (psi)
1	┘	20232	205.82
2	┘	20228	209.97
3	┘	8088	210.20
4	┘	20230	211.24
5	┘	20226	212.13
6	┘	20236	212.14
7	┘	20234	213.10
8	┘	20238	216.47

H2ONET Report - 2.5 fps flushing pipe information

		ID	From Node	To Node	Length (ft)	Diameter (in)	Flow (gpm)
1	┘	20234	20228	20232	2,000.00	8.00	392.00
2	┘	20228	8088	20228	2,000.00	8.00	217.62
3	┘	20230	20230	20226	1,000.00	8.00	-196.14
4	┘	20232	20228	20230	1,000.00	8.00	-185.26
5	┘	20226	8088	20226	600.00	8.00	182.29
6	┘	20236	8088	20234	2,864.00	8.00	57.38
7	┘	20240	20236	20234	3,100.00	8.00	-46.50
8	┘	20238	20226	20236	600.00	8.00	-24.74
9	┘	20242	20236	20238	1,000.00	8.00	10.88

H2ONET Report - 2.5 fps flushing pipe information

		ID	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)	Roughnes
1	└	20234	2.50	7.55	3.78	120.00
2	└	20228	1.39	2.54	1.27	120.00
3	└	20230	1.25	1.05	1.05	120.00
4	└	20232	1.18	0.94	0.94	120.00
5	└	20226	1.16	0.55	0.92	120.00
6	└	20236	0.37	0.31	0.11	120.00
7	└	20240	0.30	0.23	0.07	120.00
8	└	20238	0.16	0.01	0.02	120.00
9	└	20242	0.07	0.00	0.00	120.00

FIRE FLOW CERTIFICATION

Subdistrict E Bromley Crescent Springs/St. Johns Kenton County, KY

I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using H2ONET, the program available from MWHSOFT. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

Subdistrict E Bromley Crescent Springs/St. Johns Kenton County, KY

I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100 (under average day demand conditions). The maximum flow rate that can reliably be supplied to the street and meet 20 psi in the system is 2,300 gpm. At least 30 psi can be maintained under the peak domestic demand for the 22 customers added. The peak domestic demand using the D.R. Taylor formula for 22 customers is 46.9 gpm.

This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSoft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 8-inch diameter water main.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water level in the Barrington Tank was one-half full.



Browley Crescent Springs

CU232

CU230



H2ONET Report - Sub E Bromley Crescent Springs Max Hour

	ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	558	4.19	911.00	1,037.97
2	557	4.19	911.00	1,037.98
3	496	11.63	905.00	1,038.39
4	556	4.19	903.00	1,037.74
5	559	4.19	902.00	1,037.76
6	659	4.19	901.00	1,038.54
7	555	4.19	900.00	1,037.74
8	800	4.19	895.00	1,036.23
9	797	4.19	892.00	1,039.10
10	5300	4.19	892.00	1,039.10
11	544	4.19	889.00	1,037.73
12	655	4.19	883.00	1,033.04
13	8716	0.00	885.00	1,037.74
14	796	4.19	886.00	1,039.09
15	537	4.19	886.00	1,040.03
16	538	4.19	886.00	1,040.15
17	804	4.19	884.00	1,039.14
18	535	4.19	884.00	1,039.14
19	798	4.19	883.00	1,038.68
20	795	4.19	883.00	1,039.10
21	5303	4.19	882.00	1,038.68
22	533	4.19	877.00	1,034.00
23	442	4.19	880.00	1,037.25
24	5302	4.19	881.00	1,038.68
25	5301	4.19	881.00	1,038.68
26	540	4.19	881.00	1,038.69
27	536	4.19	881.00	1,038.71
28	8718	0.00	880.00	1,037.74
29	799	4.19	879.00	1,038.68
30	541	4.19	879.00	1,038.68
31	543	4.19	877.00	1,037.74
32	546	4.19	877.00	1,037.74
33	539	4.19	877.00	1,039.34
34	560	4.19	874.00	1,037.96
35	545	4.19	862.00	1,037.67
36	549	4.19	861.00	1,037.65
37	504	4.19	860.00	1,038.43
38	532	4.19	844.00	1,034.00
39	801	4.19	845.00	1,036.24
40	463	7.79	845.00	1,036.24
41	464	7.79	845.00	1,036.31

H2ONET Report - Sub E Bromley Crescent Springs Max Hour

		ID	Demand (gpm)	Elevation (ft)	Grade (ft)
42	┘	802	4.19	845.00	1,036.32
43	┘	550	4.19	840.00	1,037.63
44	┘	8712	0.00	830.00	1,037.62
45	┘	529	4.19	826.00	1,034.03
46	┘	528	4.19	826.00	1,034.13
47	┘	551	4.19	826.00	1,037.63
48	┘	530	4.19	818.00	1,033.81
49	┘	524	7.79	818.00	1,034.76
50	┘	552	4.19	820.00	1,037.60
51	┘	553	4.19	816.00	1,037.60
52	┘	554	4.19	816.00	1,037.66
53	┘	8714	0.00	815.00	1,037.62
54	┘	580	7.79	801.00	1,034.67
55	┘	699	4.19	797.00	1,037.60
56	┘	579	7.79	782.00	1,034.68
57	┘	1385	4.27	756.00	1,022.83
58	┘	1386	4.27	710.00	1,022.83
59	┘	20230	0.00	520.00	1,026.41
60	┘	20232	46.90	500.00	1,026.10

H2ONET Report - Sub E Bromley Crescent Springs Max Hour

	ID	Pressure (psi)
1	558	55.04
2	557	55.05
3	496	57.82
4	556	58.41
5	559	58.85
6	659	59.62
7	555	59.71
8	800	61.22
9	797	63.77
10	5300	63.77
11	544	64.48
12	655	65.04
13	8716	66.21
14	796	66.37
15	537	66.77
16	538	66.82
17	804	67.25
18	535	67.25
19	798	67.49
20	795	67.67
21	5303	67.92
22	533	68.06
23	442	68.17
24	5302	68.35
25	5301	68.35
26	540	68.36
27	536	68.37
28	8718	68.38
29	799	69.22
30	541	69.22
31	543	69.68
32	546	69.68
33	539	70.37
34	560	71.08
35	545	76.15
36	549	76.58
37	504	77.35
38	532	82.37
39	801	82.90
40	463	82.90
41	464	82.93

H2ONET Report - Sub E Bromley Crescent Springs Max Hour

		ID	Pressure (psi)
42	┘	802	82.94
43	┘	550	85.67
44	┘	8712	90.00
45	┘	529	90.18
46	┘	528	90.22
47	┘	551	91.74
48	┘	530	93.55
49	┘	524	93.96
50	┘	552	94.33
51	┘	553	96.06
52	┘	554	96.09
53	┘	8714	96.50
54	┘	580	101.30
55	┘	699	104.30
56	┘	579	109.54
57	┘	1385	115.67
58	┘	1386	135.61
59	┘	20230	219.53
60	┘	20232	228.06

H2ONET Report - Sub E Bromley Crescent Springs 2.5 fps (max hr)

	ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	558	4.19	911.00	1,023.23
2	557	4.19	911.00	1,023.23
3	496	11.63	905.00	1,023.05
4	556	4.19	903.00	1,023.23
5	559	4.19	902.00	1,023.19
6	659	4.19	901.00	1,023.20
7	555	4.19	900.00	1,023.23
8	800	4.19	895.00	1,020.59
9	797	4.19	892.00	1,023.58
10	5300	4.19	892.00	1,023.58
11	544	4.19	889.00	1,023.18
12	655	4.19	883.00	1,017.55
13	796	4.19	886.00	1,023.58
14	8716	0.00	885.00	1,023.22
15	537	4.19	886.00	1,024.47
16	538	4.19	886.00	1,024.56
17	804	4.19	884.00	1,023.62
18	535	4.19	884.00	1,023.62
19	798	4.19	883.00	1,023.16
20	795	4.19	883.00	1,023.58
21	5303	4.19	882.00	1,023.16
22	533	4.19	877.00	1,018.51
23	442	4.19	880.00	1,021.91
24	5302	4.19	881.00	1,023.16
25	5301	4.19	881.00	1,023.16
26	536	4.19	881.00	1,023.25
27	540	4.19	881.00	1,023.34
28	8718	0.00	880.00	1,023.22
29	799	4.19	879.00	1,023.16
30	541	4.19	879.00	1,023.16
31	546	4.19	877.00	1,023.24
32	543	4.19	877.00	1,023.24
33	539	4.19	877.00	1,024.02
34	560	4.19	874.00	1,023.22
35	545	4.19	862.00	1,023.12
36	549	4.19	861.00	1,023.09
37	504	4.19	860.00	1,023.64
38	532	4.19	844.00	1,018.51
39	801	4.19	845.00	1,020.60
40	463	7.79	845.00	1,020.60
41	464	7.79	845.00	1,020.67

H2ONET Report - Sub E Bromley Crescent Springs 2.5 fps (max hr)

		ID	Demand (gpm)	Elevation (ft)	Grade (ft)
42	┘	802	4.19	845.00	1,020.68
43	┘	550	4.19	840.00	1,023.08
44	┘	529	4.19	826.00	1,018.53
45	┘	528	4.19	826.00	1,018.63
46	┘	8712	0.00	830.00	1,023.07
47	┘	551	4.19	826.00	1,023.08
48	┘	530	4.19	818.00	1,018.31
49	┘	524	7.79	818.00	1,019.16
50	┘	552	4.19	820.00	1,023.05
51	┘	553	4.19	816.00	1,023.05
52	┘	554	4.19	816.00	1,023.11
53	┘	8714	0.00	815.00	1,023.07
54	┘	580	7.79	801.00	1,019.07
55	┘	699	4.19	797.00	1,023.04
56	┘	579	7.79	782.00	1,019.08
57	┘	1385	4.27	756.00	1,009.17
58	┘	1386	4.27	710.00	1,009.16
59	┘	20230	0.00	520.00	1,010.02
60	┘	20232	392.00	500.00	994.16

H2ONET Report - Sub E Bromley Crescent Springs 2.5 fps (max hr)

		ID	Pressure (psi)
1	┘	558	48.65
2	┘	557	48.65
3	┘	496	51.18
4	┘	556	52.12
5	┘	559	52.53
6	┘	659	52.97
7	┘	555	53.42
8	┘	800	54.45
9	┘	797	57.04
10	┘	5300	57.04
11	┘	544	58.17
12	┘	655	58.33
13	┘	796	59.64
14	┘	8716	59.92
15	┘	537	60.03
16	┘	538	60.07
17	┘	804	60.52
18	┘	535	60.52
19	┘	798	60.76
20	┘	795	60.94
21	┘	5303	61.19
22	┘	533	61.34
23	┘	442	61.52
24	┘	5302	61.63
25	┘	5301	61.63
26	┘	536	61.66
27	┘	540	61.70
28	┘	8718	62.08
29	┘	799	62.49
30	┘	541	62.49
31	┘	546	63.39
32	┘	543	63.39
33	┘	539	63.73
34	┘	560	64.68
35	┘	545	69.84
36	┘	549	70.27
37	┘	504	70.94
38	┘	532	75.65
39	┘	801	76.12
40	┘	463	76.12
41	┘	464	76.15

H2ONET Report - Sub E Bromley Crescent Springs 2.5 fps (max hr)

		ID	Pressure (psi)
42	┘	802	76.16
43	┘	550	79.36
44	┘	529	83.46
45	┘	528	83.51
46	┘	8712	83.69
47	┘	551	85.43
48	┘	530	86.83
49	┘	524	87.20
50	┘	552	88.02
51	┘	553	89.75
52	┘	554	89.78
53	┘	8714	90.20
54	┘	580	94.53
55	┘	699	97.99
56	┘	579	102.77
57	┘	1385	109.75
58	┘	1386	129.69
59	┘	20230	212.42
60	┘	20232	214.22

H2ONET Report - Sub E Bromley Crescent Springs 2.5 fps pipe info

	ID	From Node	To Node	Length (ft)	Diameter (in)	Flow (gpm)
1	6335	HARRINGTON	538	200.00	16.00	2,584.67
2	660	537	538	14.50	16.00	-2,355.90
3	20236	20232	20230	4,200.00	8.00	-392.00
4	582	464	463	11.70	6.00	216.20
5	659	535	536	66.70	6.00	206.86
6	991	802	20230	4,208.33	12.00	765.36
7	1075	536	528	1,046.40	6.00	183.27
8	661	539	537	235.70	16.00	-1,256.60
9	994	804	795	38.30	16.00	1,104.46
10	992	537	804	990.00	16.00	1,095.12
11	995	541	802	2,281.80	16.00	1,032.51
12	651	528	529	34.10	6.00	144.47
13	987	795	541	393.10	16.00	1,025.96
14	793	442	496	891.50	16.00	-1,017.52
15	794	496	659	142.80	16.00	-906.77
16	795	659	539	818.50	16.00	-891.56
17	988	538	535	979.20	10.00	224.58
18	647	463	524	1,630.90	6.00	77.07
19	1066	539	504	778.50	12.00	283.00
20	652	529	530	322.90	6.00	67.55
21	990	802	464	22.30	12.00	262.97
22	6420	5300	540	405.90	6.00	61.75
23	1010	524	579	283.20	6.00	41.17
24	682	557	559	152.10	4.00	15.85
25	654	528	532	607.20	6.00	34.62
26	666	544	545	344.40	6.00	33.51
27	662	5301	540	1,048.30	6.00	-31.69
28	665	8716	544	302.37	6.00	26.04
29	7238	543	8716	183.43	6.00	26.04
30	683	540	557	939.90	6.00	25.87
31	669	545	549	193.30	6.00	25.13
32	847	659	536	689.70	6.00	-19.40
33	6423	5301	5302	30.00	6.00	16.75
34	667	546	543	16.10	6.00	-15.11
35	993	535	804	26.20	6.00	13.53
36	679	557	558	11.20	4.00	5.84
37	7236	550	8712	380.34	6.00	12.57
38	673	8712	552	589.57	6.00	12.57
39	672	549	550	642.60	6.00	11.66
40	681	559	544	130.20	6.00	11.66
41	6422	5301	541	28.90	6.00	10.75

H2ONET Report - Sub E Bromley Crescent Springs 2.5 fps pipe info

		ID	From Node	To Node	Length (ft)	Diameter (in)	Flow (gpm)
42	┘	984	795	5300	271.00	16.00	74.31
43	┘	684	558	560	556.30	4.00	4.19
44	┘	670	549	550	980.70	6.00	9.28
45	┘	676	546	555	341.80	6.00	8.40
46	┘	6421	5300	797	21.10	6.00	8.38
47	┘	6424	5302	799	11.20	6.00	8.38
48	┘	6426	463	801	51.60	6.00	8.38
49	┘	698	579	580	567.50	6.00	7.79
50	┘	680	558	555	490.90	4.00	-2.54
51	┘	678	546	556	534.00	4.00	2.52
52	┘	6425	5302	5303	172.50	6.00	4.19
53	┘	986	798	799	347.20	6.00	-4.19
54	┘	989	800	801	2,256.00	6.00	-4.19
55	┘	985	796	797	797.30	6.00	-4.19
56	┘	655	532	533	408.00	6.00	4.19
57	┘	848	552	699	720.70	6.00	4.19
58	┘	675	545	554	1,317.00	6.00	4.19
59	┘	674	552	553	381.50	6.00	4.19
60	┘	671	550	551	407.00	6.00	4.19
61	┘	677	555	556	203.80	6.00	1.67
62	┘	8424	8712	8714	701.72	0.75	0.00
63	┘	8400	8716	8718	250.23	6.00	0.00

H2ONET Report - Sub E Bromley Crescent Springs 2.5 fps pipe info

	ID	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)	Roughnes
1	6335	4.12	1.44	7.21	90.00
2	660	3.76	0.09	6.07	90.00
3	20236	2.50	15.86	3.78	120.00
4	582	2.45	0.07	5.99	110.00
5	659	2.35	0.37	5.52	110.00
6	991	2.17	10.66	2.53	100.00
7	1075	2.08	4.62	4.41	110.00
8	661	2.01	0.45	1.90	90.00
9	994	1.76	0.03	0.88	120.00
10	992	1.75	0.86	0.86	120.00
11	995	1.65	2.48	1.09	100.00
12	651	1.64	0.10	2.84	110.00
13	987	1.64	0.42	1.07	100.00
14	793	1.62	1.14	1.28	90.00
15	794	1.45	0.15	1.04	90.00
16	795	1.42	0.82	1.01	90.00
17	988	0.92	0.94	0.96	80.00
18	647	0.87	1.45	0.89	110.00
19	1066	0.80	0.38	0.49	90.00
20	652	0.77	0.22	0.70	110.00
21	990	0.75	0.01	0.35	100.00
22	6420	0.70	0.24	0.59	110.00
23	1010	0.47	0.08	0.28	110.00
24	682	0.40	0.04	0.29	120.00
25	654	0.39	0.12	0.20	110.00
26	666	0.38	0.07	0.19	110.00
27	662	0.36	0.18	0.17	110.00
28	665	0.30	0.04	0.12	110.00
29	7238	0.30	0.02	0.12	110.00
30	683	0.29	0.11	0.12	110.00
31	669	0.29	0.02	0.11	110.00
32	847	0.22	0.05	0.07	110.00
33	6423	0.19	0.00	0.05	110.00
34	667	0.17	0.00	0.04	110.00
35	993	0.15	0.00	0.04	110.00
36	679	0.15	0.00	0.05	120.00
37	7236	0.14	0.01	0.03	110.00
38	673	0.14	0.02	0.03	110.00
39	672	0.13	0.02	0.03	110.00
40	681	0.13	0.00	0.03	110.00
41	6422	0.12	0.00	0.02	110.00

H2ONET Report - Sub E Bromley Crescent Springs 2.5 fps pipe info

		ID	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)	Roughnes
42	┘	984	0.12	0.00	0.01	110.00
43	┘	684	0.11	0.01	0.02	120.00
44	┘	670	0.11	0.02	0.02	110.00
45	┘	676	0.10	0.01	0.01	110.00
46	┘	6421	0.10	0.00	0.01	110.00
47	┘	6424	0.10	0.00	0.01	110.00
48	┘	6426	0.10	0.00	0.01	110.00
49	┘	698	0.09	0.01	0.01	110.00
50	┘	680	0.06	0.00	0.01	120.00
51	┘	678	0.06	0.01	0.01	120.00
52	┘	6425	0.05	0.00	0.00	110.00
53	┘	986	0.05	0.00	0.00	110.00
54	┘	989	0.05	0.01	0.00	110.00
55	┘	985	0.05	0.00	0.00	110.00
56	┘	655	0.05	0.00	0.00	110.00
57	┘	848	0.05	0.00	0.00	110.00
58	┘	675	0.05	0.01	0.00	110.00
59	┘	674	0.05	0.00	0.00	110.00
60	┘	671	0.05	0.00	0.00	110.00
61	┘	677	0.02	0.00	0.00	110.00
62	┘	8424	0.00	0.00	0.00	120.00
63	┘	8400	0.00	0.00	0.00	120.00

FIRE FLOW CERTIFICATION

Subdistrict E Oliver Road-McCullum to Harris Kenton County, KY

I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using H2ONET, the program available from MWHSoft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

Subdistrict E Oliver Road-McCullum to Harris Kenton County, KY

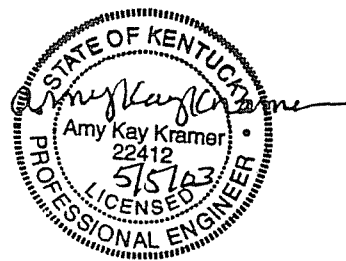
I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100 (under average day demand conditions). The maximum flow rate that can reliably be supplied to the street and meet 20 psi in the system is 2,300 gpm. At least 30 psi can be maintained under the peak domestic demand for the 33 customers added. The peak domestic demand using the D.R. Taylor formula for 33 customers is 57.44 gpm.

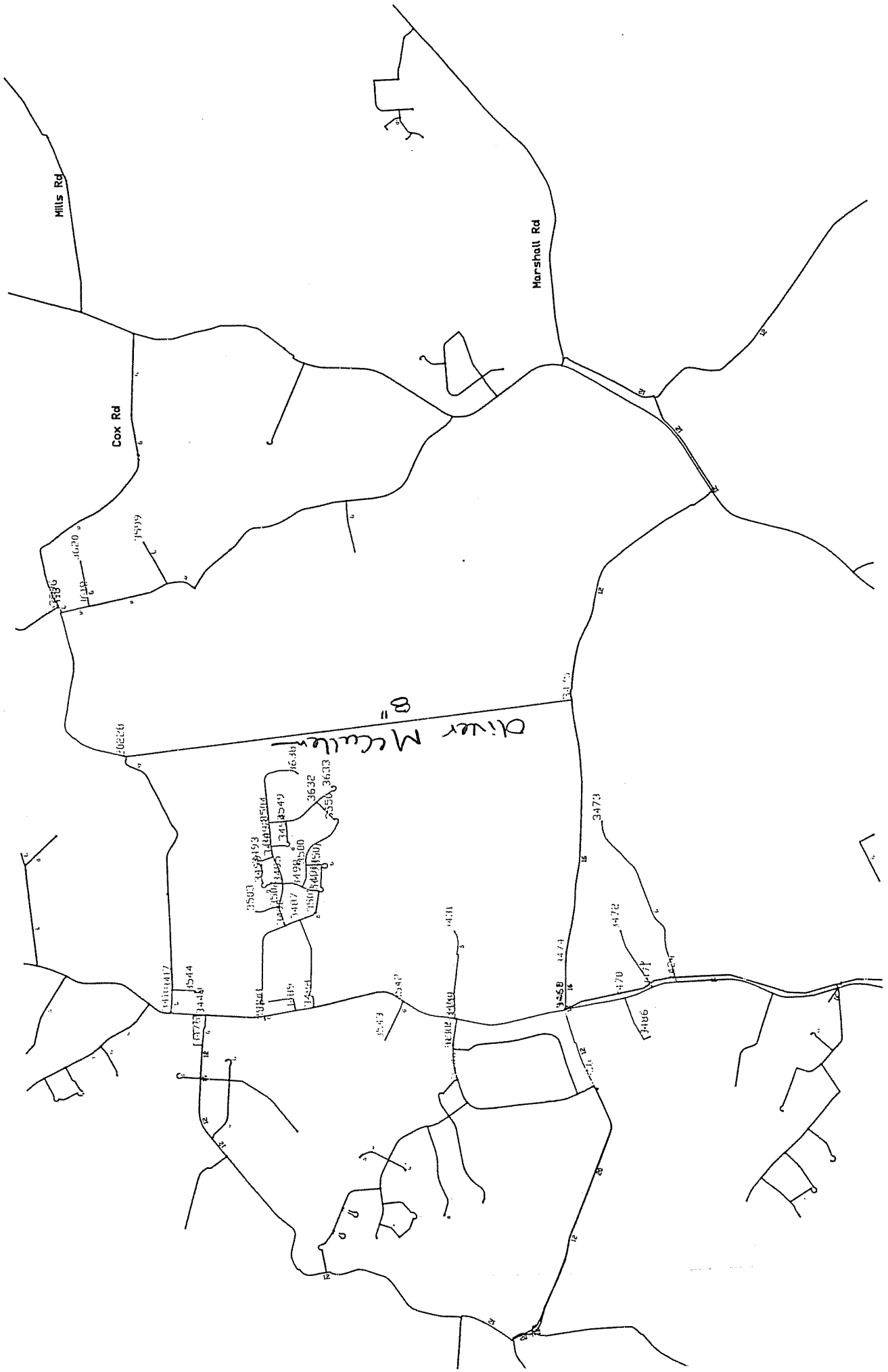
This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 8-inch diameter water main.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water level in the Independence Tank was one-half full.





Mills Rd

Marshall Rd

Cox Rd

Oliver McCullen Rd
B

34886

1620

7599

10226

3450

3503 3481 3453

3443 3431 3400

372 3549

3632

3530 3633

1620

348417

1544

3446

34841

1105

15424

1547

4411

34812

4430

3459

1474

1472

3473

1470

3477

3486

1424

H2ONET Report - Sub E Oliver McCullum Max Hour

		ID	Demand (gpm)	Elevation (ft)	Grade (ft)
42	┘	3487	7.95	857.00	1,060.28
43	┘	3494	7.95	855.00	1,059.90
44	┘	3431	7.95	848.00	1,061.67
45	┘	3501	7.95	846.00	1,059.94
46	┘	3549	7.95	845.00	1,059.89
47	┘	3505	7.95	844.00	1,060.22
48	┘	3497	7.95	842.00	1,059.95
49	┘	3496	7.95	842.00	1,059.96
50	┘	3638	7.95	838.00	1,059.89
51	┘	3473	14.57	838.00	1,060.42
52	┘	3475	65.40	831.00	1,059.17
53	┘	3633	7.95	829.00	1,059.89
54	┘	3632	7.95	826.00	1,059.89
55	┘	3599	7.95	818.00	1,052.84
56	┘	3620	7.95	817.00	1,053.37
57	┘	3550	7.95	813.00	1,059.93
58	┘	20228	0.00	0.00	1,058.91

H2ONET Report - Sub E Oliver McCullum Max Hour

		ID	Pressure (psi)
42	┘	3487	88.12
43	┘	3494	88.82
44	┘	3431	92.63
45	┘	3501	92.74
46	┘	3549	93.16
47	┘	3505	93.73
48	┘	3497	94.48
49	┘	3496	94.48
50	┘	3638	96.19
51	┘	3473	96.42
52	┘	3475	98.91
53	┘	3633	100.09
54	┘	3632	101.39
55	┘	3599	101.81
56	┘	3620	102.47
57	┘	3550	107.04
58	┘	20228	459.04

H2ONET Report - Sub E Oliver McCullum 2.5 fps (max hour)

	ID	Demand (gpm)	Elevation (ft)	Grade (ft)
1	3618	7.95	871.00	987.45
2	3418	7.95	863.00	987.21
3	3475	399.95	831.00	956.43
4	3424	14.57	935.00	1,060.77
5	3596	7.95	859.00	987.24
6	3631	7.95	858.00	987.24
7	3486	14.57	928.00	1,060.89
8	3471	14.57	926.00	1,060.81
9	3469	7.95	925.00	1,061.30
10	3468	14.57	925.00	1,061.31
11	3467	4.75	925.00	1,061.31
12	5324	4.75	913.00	1,057.33
13	5323	4.75	913.00	1,057.34
14	3558	4.75	916.00	1,063.00
15	3470	14.57	913.00	1,060.92
16	3544	7.95	902.00	1,050.88
17	3488	7.95	908.00	1,057.43
18	3430	7.95	910.00	1,061.26
19	3559	4.75	910.00	1,061.31
20	3542	4.75	908.00	1,059.77
21	3489	7.95	902.00	1,057.34
22	3449	4.75	898.00	1,057.34
23	3503	7.95	895.00	1,056.77
24	8306	0.00	900.00	1,061.79
25	8272	0.00	900.00	1,061.85
26	3416	7.95	893.00	1,057.32
27	3493	7.95	892.00	1,056.58
28	3499	7.95	892.00	1,056.61
29	3474	7.95	895.00	1,061.30
30	3417	7.95	882.00	1,050.89
31	3476	4.75	888.00	1,057.46
32	3599	7.95	818.00	988.38
33	3620	7.95	817.00	987.44
34	3491	7.95	885.00	1,056.58
35	8288	0.00	890.00	1,062.01
36	3495	7.95	880.00	1,056.63
37	3472	14.57	883.00	1,060.77
38	3502	7.95	876.00	1,056.77
39	3490	7.95	874.00	1,056.92
40	3543	4.75	876.00	1,059.77
41	3500	7.95	872.00	1,056.60

H2ONET Report Sub E 2.5 fps pipe information Oliver McCullum

	ID	From Node	To Node	Length (ft)	Diameter (in)	Flow (gpm)
1	8000	8280	3558	28.40	8.00	1,427.79
2	4175	3416	3417	327.20	6.00	336.30
3	20230	20228	3475	6,900.00	8.00	399.95
4	4339	3558	3467	1,222.90	12.00	606.31
5	4341	3430	3559	32.40	8.00	-215.46
6	7827	3559	8306	393.62	8.00	-212.62
7	7828	8306	8272	52.16	8.00	-212.62
8	4309	3542	3430	808.20	8.00	-199.56
9	20228	20228	3418	2,734.03	6.00	-79.54
10	4223	3468	3469	17.20	8.00	127.82
11	4257	3490	3502	285.00	8.00	122.81
12	4322	3496	3505	319.00	4.00	-28.21
13	4224	3469	3470	877.10	8.00	111.92
14	7830	8272	8288	457.27	8.00	-106.98
15	4258	3502	3495	356.70	8.00	106.91
16	4244	3487	3488	1,367.60	8.00	-99.74
17	4404	3618	3418	410.70	6.00	50.25
18	4225	3470	3471	429.90	8.00	82.79
19	4311	3489	3488	253.90	8.00	-82.39
20	4245	3489	3490	2,006.10	8.00	75.12
21	4231	3476	3449	445.90	6.00	40.26
22	4424	3418	3596	93.30	6.00	-37.24
23	4261	3487	3505	262.30	6.00	36.16
24	4222	3467	3468	10.40	12.00	142.39
25	4246	3490	3487	230.60	8.00	-55.63
26	4250	3495	3491	417.40	8.00	53.66
27	4226	3471	3424	362.80	8.00	53.65
28	4247	3491	3492	151.80	8.00	46.34
29	4430	3550	3632	360.50	4.00	9.30
30	4319	3499	3493	283.00	4.00	8.57
31	4254	3495	3499	393.00	6.00	16.52
32	4252	3495	3498	296.00	8.00	28.78
33	4256	3498	3500	332.20	8.00	27.86
34	4260	3492	3504	347.00	8.00	27.34
35	4243	3470	3486	754.30	6.00	14.57
36	4228	3424	3473	2,656.80	6.00	14.57
37	4227	3471	3472	955.10	6.00	14.57
38	4199	3416	3449	515.60	8.00	-25.34
39	4323	3501	3497	297.30	4.00	-5.28
40	4249	3492	3494	345.70	6.00	11.06
41	4324	3500	3550	944.90	8.00	17.25

H2ONET Report - Sub E Oliver McCullum 2.5 fps (max hour)

	ID	Pressure (psi)
1	3618	50.48
2	3418	53.85
3	3475	54.37
4	3424	54.52
5	3596	55.59
6	3631	56.03
7	3486	57.61
8	3471	58.44
9	3469	59.09
10	3468	59.09
11	3467	59.09
12	5324	62.57
13	5323	62.57
14	3558	63.73
15	3470	64.12
16	3544	64.54
17	3488	64.78
18	3430	65.57
19	3559	65.59
20	3542	65.79
21	3489	67.34
22	3449	69.07
23	3503	70.13
24	8306	70.13
25	8272	70.16
26	3416	71.23
27	3493	71.35
28	3499	71.36
29	3474	72.09
30	3417	73.21
31	3476	73.46
32	3599	73.86
33	3620	73.89
34	3491	74.38
35	8288	74.56
36	3495	76.57
37	3472	77.06
38	3502	78.36
39	3490	79.29
40	3543	79.66
41	3500	80.03

H2ONET Report Sub E 2.5 fps pipe information Oliver McCullum

	ID	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)	Roughnes
1	8000	9.11	1.17	41.28	120.00
2	4175	3.82	6.43	19.66	90.00
3	20230	2.55	27.05	3.92	120.00
4	4339	1.72	1.69	1.38	110.00
5	4341	1.38	0.05	1.47	110.00
6	7827	1.36	0.48	1.22	120.00
7	7828	1.36	0.06	1.22	120.00
8	4309	1.27	1.49	1.84	90.00
9	20228	0.90	3.73	1.37	90.00
10	4223	0.82	0.01	0.56	110.00
11	4257	0.78	0.15	0.52	110.00
12	4322	0.72	0.27	0.85	120.00
13	4224	0.71	0.38	0.44	110.00
14	7830	0.68	0.16	0.34	120.00
15	4258	0.68	0.14	0.40	110.00
16	4244	0.64	0.48	0.35	110.00
17	4404	0.57	0.24	0.58	90.00
18	4225	0.53	0.11	0.25	110.00
19	4311	0.53	0.09	0.36	90.00
20	4245	0.48	0.42	0.21	110.00
21	4231	0.46	0.12	0.27	110.00
22	4424	0.42	0.03	0.34	90.00
23	4261	0.41	0.06	0.22	110.00
24	4222	0.40	0.00	0.09	110.00
25	4246	0.36	0.03	0.12	110.00
26	4250	0.34	0.05	0.11	110.00
27	4226	0.34	0.04	0.11	110.00
28	4247	0.30	0.01	0.09	110.00
29	4430	0.24	0.04	0.11	120.00
30	4319	0.22	0.03	0.09	120.00
31	4254	0.19	0.02	0.05	110.00
32	4252	0.18	0.01	0.04	110.00
33	4256	0.18	0.01	0.03	110.00
34	4260	0.17	0.01	0.03	110.00
35	4243	0.17	0.03	0.04	110.00
36	4228	0.17	0.11	0.04	110.00
37	4227	0.17	0.04	0.04	110.00
38	4199	0.16	0.02	0.04	90.00
39	4323	0.13	0.01	0.04	120.00
40	4249	0.13	0.01	0.02	110.00
41	4324	0.11	0.01	0.01	110.00

Case No. 200-_____
Exhibit **C**

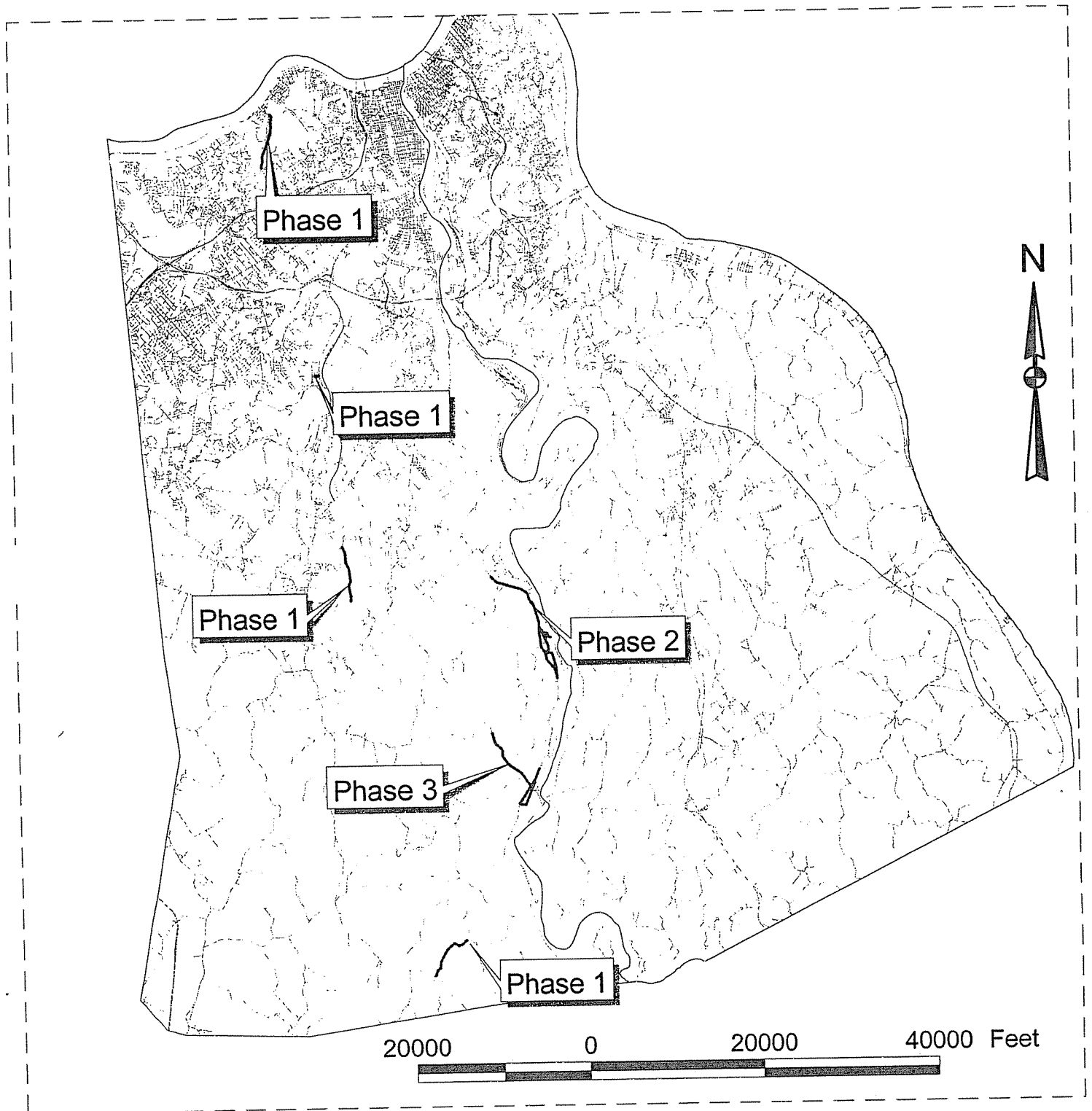
NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District E

Kenton County
184-078

Project Map

Northern Kentucky Water District Kenton County Service Area



 CDBG Grant - Current Proposed Project

Sub District E
Project Funding

Case No. 200-_____
Exhibit **C**

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District E

Kenton County
184-078

Revenue Requirements

**REVENUE REQUIREMENTS
SUB-DISTRICT E WATER MAIN PROJECT**

NORTHERN KENTUCKY WATER DISTRICT \$1,163,506 BAN (to become future bond issue reimbursed by the surcharge)

SURCHARGE PROJECTION

- 164 initial users paying the \$30 monthly surcharge
- \$1,163,506 BAN (to become a future 30 year bond issue)
- Future Bond issue will be for 30 years at an estimated 5 percent interest rate

Estimated annual debt service including interest for future bond issue of \$1,163,506 is \$75,883

Initial surcharge annual contribution is $164 * 12 * \$30 = \$59,040$

The Northern Kentucky Water District is anticipating 47 additional users within 5 years which will increase the surcharge revenue to 211 projected users * 12 * \$30 = \$75,960 which will meet the \$75,883 projected revenue requirements. There are 275 households available to connect to the new main, and so the initial 164 customers are anticipated to grow by at least 47 over 5 years.

Campbell/Kenton

2020 Water Management
Planning Council

2002 Project Profiles Submittal Summaries

Campbell County Area

Subdistrict F
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 Year Project HIGH PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Upper Tug Fork Rd. (From Lower Tug Fork to Reitman Rd.)	Alexandria	10	0.30	\$ 87,120.00	1584	55	33.33
Race Trace Rd.(From Old State Rd. #4 to Flatwoods Rd.)	California/Unincorporated	19	1.00	\$ 290,400.00	5280	55	19.00
Licking Pike (From Evergreen Subdivision to Ripple Cr.Rd)	Unincorporated	7	0.40	\$ 95,040.00	2112	45	17.50
Grandview Rd. (Including Amy Lou Dr.)	Alexandria/Unincorporated	50	1.70	\$ 403,920.00	8976	45	29.41
Heck Rd.	Alexandria	14	0.70	\$ 166,320.00	3696	45	20.00
Race Trace Rd.(From Flatwoods to end of 3" line on Racetra	California/Unincorporated	7	0.50	\$ 145,200.00	2640	55	14.00
Upper Tug Fork Rd. (From E.Alex Pk. To Heck Rd.)	Alexandria	3	0.30	\$ 87,120.00	1584	55	10.00
Upper Tug Fork Rd. (From Heck Rd. to Lower Tug Fork Rd.)	Alexandria	3	0.20	\$ 58,080.00	1056	55	15.00
Upper Tug Fork Rd. (From Reitman Rd. to Poplar Ridge Rd.	Alexandria	10	0.60	\$ 142,560.00	3168	45	16.67
		123	5.70	\$ 1,475,760.00	30096		

**Pendleton County Water District
0-2 Year Project HIGH PRIORITY**

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
12" Main to County Line New Master Meter Vault 250,000 gallon elevated water tank Booster Pumping Station 6" water main to serve 80 customers along Hissem, Aulick & Demossville Roads				\$ 2,719,350.00			

Subdistrict H
 Project Summary #1
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-10 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Blangey Rd.	Brent	10	0.60	\$ 142,560.00	3168	45	16.67
Dodsworth Ln.	Unincorporated	23	1.30	\$ 308,880.00	6864	45	17.69
Fender Rd.	Melbourne	8	0.90	\$ 213,840.00	4752	45	8.89
Four Mile Pike (Melbourne to Silver Grove)	Melbourne	1	0.50	\$ 118,800.00	2640	45	2.00
Four Mile Road (Nelson to Woodrun Dr.)	Alexandria/Unincorporated	6	1	\$ 237,600.00	5280	45	6.00
Gunkle Rd. Number 1	Melbourne	7	0.60	\$ 142,560.00	3168	45	11.67
Gunkle Rd. Number 2	Melbourne	8	0.40	\$ 95,040.00	2112	45	20.00
Gunkle Rd. Number 3 (From bottom of hill to line from ten mil	Melbourne	6	0.50	\$ 118,800.00	2640	45	12.00
Lower Tug Fork Rd.	Melbourne	6	0.80	\$ 190,080.00	4224	45	7.50
Owl Creek Rd.	Silver Grove	7	1.20	\$ 285,120.00	6336	45	5.83
Reitman Rd.	Alexandria	1	0.30	\$ 71,280.00	1584	45	3.33
Rt.8 (Blangey Rd. to End of line from Ky-1998)	Brent	10	0.60	\$ 142,560.00	3168	45	16.67
Rt.8 (Lester Ln. to River Rd.)	Ft. Thomas	3	2.30	\$ 546,480.00	12144	45	1.30
Tower Hill Rd. Ft Thomas	Ft. Thomas	4	0.30	\$ 71,280.00	1584	45	13.33
		100	11.30	\$ 2,684,880.00	59664		

Subdistrict J
 Project Summary #2
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-10 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Geotz Rd	Unincorporated	12	1.00	\$ 237,600.00	5280	45	12.00
Licking Pike (From Alex-Licking Pike to Rifle-Range Rd.)	Unincorporated	31	1.70	\$ 403,920.00	8976	45	18.24
Licking Pike (From Rifle-Range Rd. to Poplar Thicket Rd.)	Unincorporated	5	0.60	\$ 142,560.00	3168	45	8.33
Low Gap Rd (From end of line to Alex-Licking Pike)	Unincorporated	2	0.50	\$ 118,800.00	2640	45	4.00
Poplar Thicket Rd.	Unincorporated	31	2.20	\$ 522,720.00	11616	45	14.09
Rifle Range Rd. (From First 26 Houses to end of road)	Unincorporated	16	1.70	\$ 403,920.00	8976	45	9.41
Rifle Range Rd. (From Licking Pike to First 27 Houses)	Unincorporated	27	0.80	\$ 190,080.00	4224	45	33.75
Steffen Rd.	Unincorporated	11	0.50	\$ 118,800.00	2640	45	22.00
West Main Street (Alex.)-(1/2 mile from city building towards	Unincorporated	2	0.50	\$ 118,800.00	2640	45	4.00
West Main Street (Alex.)-(1/2 mile from Licking Pike towards	Unincorporated	10	0.50	\$ 118,800.00	2640	45	20.00
		147	10.00	\$ 2,376,000.00	52800		

Subdistrict L
 Project Summary #3
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-10 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Indian Trace Rd. (From JoAnn to End of road)	Unincorporated	18	0.90	\$ 213,840.00	4752	45	20.00
Indian Trace Rd. (From Pond Cr. Rd to JoAnn)	Unincorporated	15	0.60	\$ 142,560.00	3168	45	25.00
JoAnn Rd.(off of Indian Tr. Rd)	Unincorporated	20	0.40	\$ 95,040.00	2112	45	50.00
Lees Road (From Pleasant Rdg. Rd. To Schmutde Tarvin R Maddox Rd	Unincorporated	14	1.00	\$ 237,600.00	5280	45	14.00
	Claryville	26	1.20	\$ 285,120.00	6336	45	21.67
Pleasant Rdg. Rd. (From Lees Rd. to Harrisburg Hill Rd.)	Unincorporated	15	1.10	\$ 261,360.00	5808	45	13.64
Pleasant Rdg. Rd. (From Visalia Rd to Lees Rd.)	Unincorporated	11	0.70	\$ 166,320.00	3696	45	15.71
Pond Creek Road (From Bridge to Visalia Rd.)	Unincorporated	15	1.00	\$ 237,600.00	5280	45	15.00
Pond Creek Road (From Indian Trace Rd. to Bridge)	Unincorporated -25 lot SubDiv.	19	0.50	\$ 118,800.00	2640	45	38.00
Pond Creek Road (From John Miller Rd. to Indian Trace Rd.)	Unincorporated	6	0.20	\$ 47,520.00	1056	45	30.00
Pond Creek Road (From Licking Pike to John Miller Rd.)	Unincorporated	11	1.60	\$ 380,160.00	8448	45	6.88
Schmutde Tarvin Rd. (From Lees Rd to Schmutde Phillips)	Unincorporated	1	0.50	\$ 118,800.00	2640	45	2.00
Schmutde Tarvin Rd. (From Schmutde Phillips to Licking Pil	Unincorporated	3	0.70	\$ 166,320.00	3696	45	4.29
Visalia Road	Unincorporated	19	1.30	\$ 308,880.00	6864	45	14.62
West Main Street (Alex.)-(From Licking Pike to Pond Cr. Rd.)	Unincorporated	1	0.40	\$ 95,040.00	2112	45	2.50
		194	12.10	\$ 2,874,960.00	63888		

Subdistrict N
 Project Summary #4
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-10 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
4&12 Mile Rd. (Lower Lick Br. Rd. to Oneonta Rd.)	Unincorporated	1	0.20	\$ 47,520.00	1056	45	5.00
4&12 Mile Rd. (End of 2" line to Lower Lick Br. Rd.)	Unincorporated	9	0.40	\$ 95,040.00	2112	45	22.50
4&12 Mile Rd. (Oneonta Rd. to A.A. Hwy)	Unincorporated	5	0.60	\$ 142,560.00	3168	45	8.33
Lower Grandview Rd.	Unincorporated	5	0.30	\$ 71,280.00	1584	45	16.67
Lower Lick Branch Rd.	Unincorporated	6	0.80	\$ 190,080.00	4224	45	7.50
Oneonta Rd.(From Rt.8 to Truesdale)	California/Unincorporated	12	0.80	\$ 190,080.00	4224	45	15.00
Oneonta Rd.(From Truesdale to Washington Tr. Rd.)	Unincorporated	7	0.70	\$ 166,320.00	3696	45	10.00
Oneonta Rd.(From Washington Tr. Rd. to 4&12 Mile Rd.)	Unincorporated	3	0.30	\$ 71,280.00	1584	45	10.00
Painter Rd (From Washington Tr. Rd to Route 8)	California/Unincorporated	8	1.50	\$ 356,400.00	7920	45	5.33
Route 8 (Oneonta to Painter Rd.)	California/Unincorporated	9	1.60	\$ 380,160.00	8448	45	5.63
Rt.8 (From end of line to Oneonta Rd.)	California/Unincorporated	6	0.40	\$ 95,040.00	2112	45	15.00
Truesdale Rd.	Melbourne	15	1.00	\$ 237,600.00	5280	45	15.00
Upper Lick Branch Rd.	Unincorporated	13	0.80	\$ 190,080.00	4224	45	16.25
Washington Tr. Rd (From Oneonta to Painter Rd.)	California/Unincorporated	10	0.70	\$ 166,320.00	3696	45	14.29
Washington Tr. Rd (Painter Rd. to End of 3' line on Wash. Tr	California/Unincorporated	16	0.80	\$ 190,080.00	4224	45	20.00
		125	10.90	\$ 2,589,840.00	57552		

Subdistrict P
 Project Summary #5
 Northern Kentucky Water District
 Campbell County Unserved Streets
 11-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Bob-White Lane	Unincorporated	7	0.70	\$ 166,320.00	3696	45	10.00
California Cross Rds.(From Route 8 to Washington Tr.Rd.)	Calif.(Res srvd frm X-Cntry lne)	14	1.10	\$ 261,360.00	5808	45	12.73
Daniels Rd. (From Schababerle Hill to Route 10)	Unincorporated	24	2.10	\$ 498,960.00	11088	45	11.43
Koehler Rd(From Calif. Cr. Rds. to Route 10)	California/Unincorporated	6	0.90	\$ 213,840.00	4752	45	6.67
Route 10 (From A. A. Hwy. Connector to Daniels Road)	Unincorporated	1	0.50	\$ 118,800.00	2640	45	2.00
Route 10 (From Daniels Road to Pendelton Co. Line)	Unincorporated	4	0.60	\$ 142,560.00	3168	45	6.67
Route 10 (From Smith Rd. to A. A. Hwy. Connector)	Unincorporated	12	0.90	\$ 213,840.00	4752	45	13.33
Schababerle Hill(From Daniels Rd. to Route 10)	Unincorporated	4	1.40	\$ 332,640.00	7392	45	2.86
Wagner Rd (Dead Timber Rd. to end of Sub-Dist D on Wagn	California/Unincorporated	8	1.70	\$ 403,920.00	8976	45	4.71
Washington Tr.Rd. South End (End of 3" line to A.A. Hwy.)	California/Unincorporated	9	0.80	\$ 190,080.00	4224	45	11.25
		89	10.70	\$ 2,542,320.00	56496		

Subdistrict S
 Project Summary #6
 Northern Kentucky Water District
 Campbell County Unserved Streets
 11-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
4&12 Mile Rd. (A.A. Hwy. to Route 10)	Unincorporated	11	0.90	\$ 213,840.00	4752	45	12.22
Barrs Branch Rd.(From End of line on Barrs Br. To Rt 10)	Alexandria/Unincorporated	19	1.20	\$ 285,120.00	6336	45	15.83
Dead Timber Rd. (from end of line To Wagner Rd.)	Alexandria/Unincorporated	7	0.60	\$ 142,560.00	3168	45	11.67
Dead Timber Rd. (from Wagner Rd. To end of road)	California/Unincorporated	3	0.60	\$ 142,560.00	3168	45	5.00
Flatwoods Rd (From Race Track Rd. to Burns Rd)	Unincorporated	2	1.50	\$ 356,400.00	7920	45	1.33
Ky. State Route 154 (From Burns to PCWD Service area.)	Unincorporated	10	1.00	\$ 237,600.00	5280	45	10.00
Losey Rd.	Unincorporated	2	0.70	\$ 166,320.00	3696	45	2.86
Schmudde Phillips Cr. Rd.	Unincorporated	4	1.00	\$ 237,600.00	5280	45	4.00
Shaw-Hess Rd (From end of line on Shaw Hess to Persimmc Unincorporated	Unincorporated	2	0.60	\$ 142,560.00	3168	45	3.33
Siry Road (From Flatwoods Rd. to End of PCWD Line at Box Unincorporated	Unincorporated	19	2.00	\$ 475,200.00	10560	45	9.50
		79	10.10	\$ 2,399,760.00	53328		

Subdistrict U
 Project Summary #7
 Northern Kentucky Water District
 Campbell County Unserved Streets
 11-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Bezold Rd. (From Burns Rd to California Cr. Rds.)	Unincorporated	13	1.00	\$ 237,600.00	5280	45	13.00
Burns Rd. (from Flatwoods Rd. to Bezold Rd.)	Unincorporated	17	1.20	\$ 285,120.00	6336	45	14.17
Burns Rd. (From Flatwoods Rd. to St. Route 154)	Unincorporated	30	2.00	\$ 475,200.00	10560	45	15.00
California Cross Rds.(From Shaw Goetz Rd. to Bezold Rd)	California/Unincorporated	11	1.00	\$ 237,600.00	5280	45	11.00
Fisher Rd (From Bezold Rd to Wish Rd.)	Unincorporated	1	0.25	\$ 59,400.00	1320	45	4.00
Fisher Rd (From Haubner Rd. to end of road)	Unincorporated	18	1.80	\$ 427,680.00	9504	45	10.00
Fisher Rd (From Wish Rd. to Haubner Rd.)	Unincorporated	11	1.10	\$ 261,360.00	5808	45	10.00
Haubner Rd.	Unincorporated	11	0.80	\$ 190,080.00	4224	45	13.75
Shaw Goetz Rd..(From Reis Ridge Rd. to California Cross Rd)	Unincorporated	12	1.80	\$ 427,680.00	9504	45	6.67
Wish Rd.	Unincorporated	9	0.60	\$ 142,560.00	3168	45	15.00
		133	11.55	\$ 2,744,280.00	60984		

Subdistrict W
 Project Summary #8
 Northern Kentucky Water District
 Campbell County Unserved Streets
 11-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Harrisburg Hill	Unincorporated	21	1.10	\$ 261,360.00	5808	45	19.09
Kenton Station Rd. (From to Pleasant Rdg. Rd.)	Unincorporated	9	0.90	\$ 213,840.00	4752	45	10.00
Kenton Station Rd. (From Pleasant Rdg. Rd. to Pond Cr.Rd.)	Unincorporated	4	1.00	\$ 237,600.00	5280	45	4.00
Lees Road (From Harrisburg Hill Rd. to)	Unincorporated	4	0.40	\$ 95,040.00	2112	45	10.00
Lees Road (From Schmudde Tarvin Rd. to Harrisburg Hill Rd)	Unincorporated	11	0.70	\$ 166,320.00	3696	45	15.71
Pleasant Rdg. Rd. (From Harrisburg Hill Rd. to Kenton Station	Unincorporated	4	1.10	\$ 261,360.00	5808	45	3.64
Pond Creek Road (From Visalia Rd. to Kenton station Rd.)	Unincorporated	29	3.10	\$ 736,560.00	16368	45	9.35
S. Harrisburg Hill	Unincorporated	10	0.50	\$ 118,800.00	2640	45	20.00
		92	8.80	\$ 2,090,880.00	46464		

Subdistrict X
 Project Summary #9
 Northern Kentucky Water District
 Campbell County Unserved Streets
 11-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Bakerfield Rd. (Off of Boone Smith Rd.)	Unincorporated	14	0.60	\$ 142,560.00	3168	45	23.33
Boone Smith Rd.(From Bakerfield Rd.to PCWD end of line)	Unincorporated	10	0.70	\$ 166,320.00	3696	45	14.29
Boone Smith Rd.(From Pleasant Rdg Rd to Bakerfield Rd)	Unincorporated	4	0.20	\$ 47,520.00	1056	45	20.00
Clay Rdg. Rd. (From Morningview Rd. Griffen Fords Rd.)	Unincorporated	5	0.20	\$ 47,520.00	1056	45	25.00
Clay Rdg. Rd. (From Pleasant Rdg Rd. to Morningview Rd)	Unincorporated	10	0.80	\$ 190,080.00	4224	45	12.50
Clay Rdg. Rd. (From Wolf Rd. to Pleasant Rdg Rd.)	Unincorporated	8	0.60	\$ 142,560.00	3168	45	13.33
Morningview Rd.	Unincorporated	16	1.80	\$ 427,680.00	9504	45	8.89
Pleasant Rdg. Rd. (From Boone Smith Road to Clay Rdg. Rd)	Unincorporated	20	1.30	\$ 308,880.00	6864	45	15.38
Pleasant Rdg. Rd. (From Kenton Station Rd. to Boone Smith	Unincorporated	6	0.60	\$ 142,560.00	3168	45	10.00
Wolf Road (From Clay Rdg. Rd. to end of road)	Unincorporated -24 Lot Subdivis	10	0.60	\$ 142,560.00	3168	45	16.67
Wolf Road (From Kenton Station Rd. to Clay Rdg. Rd.)	Unincorporated	9	1.40	\$ 332,640.00	7392	45	6.43
		112	8.80	\$ 2,090,880.00	46464		

Subdistrict Y
 Project Summary #10
 Northern Kentucky Water District
 Campbell County Unserved Streets
 11-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN FOOT	Est. \$ PER FOOT	Customers Per Mile
A.A.Hwy	Will/Cld Sprng/Alex/Cal/Ment	27	15.90	\$ 3,777,840.00	83952	45	1.70

Subdistrict Z
 Project Summary #11
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-10 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Baynum Hill Rd.	Unincorporated	12	0.70	\$ 166,320.00	3696	45	17.14
Decker Rd.	Unincorporated	8	0.30	\$ 71,280.00	1584	45	26.67
Reis Ridge (From Shaw Goetz to Decker Rd.)	Unincorporated	8	0.50	\$ 118,800.00	2640	45	16.00
Reis Ridge (From Decker Rd. to end of road)	Unincorporated	9	0.60	\$ 142,560.00	3168	45	15.00
Schababerle Hill(From Wesley Chapel Rd. to Daniels Rd.)	Unincorporated	15	0.65	\$ 154,440.00	3432	45	23.08
Shaw Goetz Rd..(From Route 10 to Reis Ridge Rd.)	Unincorporated	19	1.10	\$ 261,360.00	5808	45	17.27
Wesley Chapel Rd.(From Calif. Cr.Rds. To Schababerle Hill)	Unincorporated	18	1.10	\$ 232,628.00	5808	45	16.36
Wesley Chapel Rd.(From Schababerle Hill to Rout 10)	Unincorporated	33	1.80	\$ 427,680.00	9504	45	18.33
		122	6.75	\$ 1,575,068.00	35640		

Project Summary #PCWD
 Northern Kentucky Water District
 Campbell County Unserved Streets

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Muinn Rd.	Unincorporated	15	0.70	\$ 166,320.00	3696	45	21.43
Nagel Rd. (From Ridge View Estates to Hissem Rd.)	Unincorporated	9	0.70	\$ 166,320.00	3696	45	12.86
West Hissem Rd.	Unincorporated	9	0.90	\$ 213,840.00	4752	45	10.00
		33	2.30	\$ 546,480.00	12144		

Project Summary #0
 Northern Kentucky Water District
 Campbell County Unserved Streets

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Gunkle Rd. Number 3 (From end of line to bottom of hill)	Melbourne	0	0.50	\$ 118,800.00	2640	45	0.00
Licking Pike (From end of line at Tiphauer to Murman Rd)	Unincorporated	0	0.50	\$ 118,800.00	2640	45	0.00
KY Rt. 536 (From U.S. 27 to Licking Pike)	Unincorporated	0	0.80	\$ 190,080.00	4224	45	0.00
Route 8 (Painter Rd. to End Line on Route 8 from Carthage R California/Unincorporated)	Brent	0	0.20	\$ 47,520.00	1056	45	0.00
Rt.8 (River Rd. to Blangey Rd.)	Ft. Thomas	0	0.30	\$ 71,280.00	1584	45	0.00
Rt.8 (Tower Hill to Lester Ln.)		0	0.60	\$ 142,560.00	3168	45	0.00
<u>Projects with no home</u>							
Aulick Rd. (From End of PCWD service Area to Muinn Rd.)	Unincorporated	8	0.7	\$ 166,320.00	3696	45	11.43
Aulick Rd. (From Muinn Rd. to Demossville Rd.)	Unincorporated	4	0.4	\$ 95,040.00	2112	45	10.00

Subdistrict D Phase V
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 Year Project FUNDED

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Licking Pike (from Walker Dr. to Poplar Thicket or #4006)		18	1.46	\$ 364,133.00	7700	47.29	12.33
Steffen Road (From Licking Pike to 1050 feet)		6	0.2	\$ 49,654.50	1050	47.29	30.00
		24	1.66	\$ 413,787.50	8750		

Campbell/Kenton

2020 Water Management
Planning Council

2002 Project Profiles Submittal Summaries

Kenton County Area

Project Summary
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Banklick Road	Maher to Independence	14	0.90	\$ 213,840.00	Independence	4752	45	15.56
Bramlage Road	Banklick to Wilson	23	0.90	\$ 213,840.00	Independence	4752	45	25.56
Bullock Pen Road	Old Ky 17 to D.E.	20	0.70	\$ 166,320.00	Erlanger	3696	45	28.57
Cody Road	Flagstone to RR Tracks	7	0.56	\$ 133,056.00	Independence	2956.8	45	12.50
Cody Road	RR Tracks to Troopers Crossing	6	0.50	\$ 118,800.00	Independence	2640	45	12.00
Dixon Drive	Rich Road to D.E.	23	1.60	\$ 380,160.00	SKC	8448	45	14.38
Elliot Road	KY 17 to D.E.	14	0.90	\$ 213,840.00		4752	45	15.56
Fowler Creek Road	Pelly to Cox	26	1.30	\$ 308,880.00	Independence	6864	45	20.00
Hempfling Road	Sub C D.E. to Navaho Road	25	1.50	\$ 356,400.00		7920	45	16.67
Hempfling Road	Navaho to Oak Island	11	0.65	\$ 154,440.00		3432	45	16.92
Klein Road	Visalia to D.E.	32	1.00	\$ 237,600.00	SKC	5280	45	32.00
Petty Road	Marshall to End of Sub A	26	1.00	\$ 237,600.00		5280	45	26.00
Pleasure Isle Drive	New KY 17 to D.E.	10	0.19	\$ 45,144.00		1003.2	45	52.63
Upton Drive	Cody to D.E.	4	0.25	\$ 59,400.00		1320	45	16.00
Webster Road	Off Cody Road	6	0.20	\$ 47,520.00		1056	45	30.00
		247	12.15	\$ 2,886,840.00		64152		

Project Primary Bullock Pen Water Line Extension Phase 6
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bagby Road	US 25 to Parker Grove	34	2.40	\$ 570,240.00	SKC	12672	45	14.17
Carlisle Road	KY 14 to Parker Grove	45	1.90	\$ 451,440.00	SKC	10032	45	23.68
Parker Grove	KY 14 to Grant County Line	34	2.20	\$ 522,720.00		11616	45	15.45
Peoples Cemetary	Bagby Rd to dead end	3	0.20	\$ 47,520.00		1056	45	15.00
		116	6.70	\$ 1,591,920.00		35376		

Bullock . . . n Water District Phase 9
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Anderson Road	Gardnersville to D.E.	10	0.90	\$ 68,835.00	SKC	4752	45	11.11
Courtney Road	Walton Veron Road to Boone County Line	26	0.70	\$ 92,105.00	SKC	3696	45	37.14
Eads Road	I-71/75 to Walton Verona Road	13	1.20	\$ 102,815.00	SKC	6336	45	10.83
Gardnersville Road	End of Sub C to Anderson Road	3	0.60	\$ 125,065.00	SKC	3168	45	5.00
Grassy Creek Road	Gardnersville to D.E.	17	1.20	\$ 73,015.00		6336	45	14.17
Paxton Road	End of Sub C to Parker Grove	9	1.50	\$ 50,750.00		7920	45	6.00
Lunsford Road	Off KY 14	11	0.70	\$ 57,445.00		3696	45	15.71
Carter Chappel Road		1	0.40	\$ 40,195.00		2112	45	2.50
Menifee Road		0	0.30	\$ 36,960.00		1584	45	0.00
Stephenson Road	Off KY 14	17	1.10	\$ 74,565.00		5808	45	15.45
Shady Lane		0	0.50	\$ 44,500.00		2640	45	0.00
Old Lexington Road	US 25 to D.E.	6	0.50	\$ 118,800.00		2640	45	12.00
		113	9.60	\$ 885,050.00		50688		

Subdistrict
 Project Summary #1
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bromley-Cres. Springs	End of Sub E to Bromleys system	1	0.40	\$ 95,040.00	Crescent Spgs	2112	45	2.50
Coons Branch Road	Off KY 17, near Gribble	1	0.25	\$ 59,400.00	Covington	1320	45	4.00
Decoursey	Grand to I-275	2	0.70	\$ 166,320.00	Covington	3696	45	2.86
Erlanger Road	Hartman to Turfway	2	0.85	\$ 201,960.00	Erlanger	4488	45	2.35
Eubanks Road	Erlanger-Crs.Spgs. Road to D.E.	10	0.50	\$ 118,800.00	Crescent Spgs	2640	45	20.00
Forest View Lane		3	0.10	\$ 23,760.00		528	45	30.00
Fuchs Road	Garvey Avenue to D.E.	1	0.10	\$ 23,760.00	Elsmere	528	45	10.00
Highwater Road	End of Bromley System to River Heights	5	0.50	\$ 118,800.00		2640	45	10.00
Horsebranch Road	From Orphanage 0.5 miles toward Thomas	3	0.50	\$ 118,800.00		2640	45	6.00
Locust Pike	#9684 To end of Sub R near Whites	3	0.50	\$ 118,800.00		2640	45	6.00
Misty Lane	Off KY 17, North of Hands Pike	5	0.10	\$ 23,760.00		528	45	50.00
Montague Road	Fire Hydrant to Sleepy Hollow	4	0.70	\$ 166,320.00		3696	45	5.71
Pin Oak Lane	Erlanger showcase cinema drive to D.E. (g	1	0.5	\$ 118,800.00	Erlanger	2640	45	2.00
Route 8	Amsterdam to Chevron	12	1.90	\$ 451,440.00		10032	45	6.32
Route 8	Chevron to Bromley	9	0.90	\$ 213,840.00		4752	45	10.00
Wilson Road	Drogee to Mason	8	0.30	\$ 71,280.00		1584	45	26.67
Worthington Drive	Off KY 17, South of Hands Pike	4	0.25	\$ 59,400.00		1320	45	16.00
Taylor Mill Road	#4860 to Grand	6	0.40	\$ 95,040.00		2112	45	15.00
		769	45.35	\$ 10,775,160.00		239448		

Subdistrict K
 Project Summary #2
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Decoursey	I-275 to end of Sub-R near Locust Pike	10	0.90	\$ 213,840.00	Fairview	4752	45	11.11
Decoursey	Marshall to end of Sub-R	3	0.70	\$ 166,320.00	Ryland Heights	3696	45	4.29
Fowler Creek Road	Madison to Pelly	20	1.80	\$ 427,680.00		9504	45	11.11
Fowler Creek Road	Cox to Stephens	5	0.50	\$ 118,800.00	Independence	2640	45	10.00
Lambs Ferry Road	Whites Road to Whites Road	10	1.80	\$ 427,680.00		9504	45	5.56
Marshall Road	KY 177 to Klette	14	0.80	\$ 190,080.00		4224	45	17.50
Marshall Road	Coleman to Stewart	1	0.80	\$ 190,080.00		4224	45	1.25
Old Fowler Creek Road	Off KY 17	3	0.20	\$ 47,520.00	Covington	1056	45	15.00
Pelly Road	.15 would serve customers	3	0.30	\$ 71,280.00		1584	45	10.00
Scenic Drive	Off Pelly Road	8	0.30	\$ 71,280.00		1584	45	26.67
Senour Road	From #2890 to Fowler Creek	13	0.40	\$ 95,040.00		2112	45	32.50
Sugar Camp Road	From #6558 to Fowler Creek	9	0.40	\$ 95,040.00		2112	45	22.50
KY 177	Ryland Lakes C.C. to .35 N. or KY 536	6	1.20	\$ 285,120.00	SKC	6336	45	5.00
		105	10.10	\$ 2,399,760.00		53328		

Subdistrict #11
 Project Summary #3
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-10 year project MEDIUM PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bethel Grove Road	#12104 to RR Crossing @ Vices Trail	6	0.62	\$ 147,312.00	Visalia	3273.6	45	9.68
Case Road	Steep Creek to KY 177	5	0.30	\$ 71,280.00	SKC	1584	45	16.67
Cherry	Off KY 17, North of Apple	6	0.20	\$ 47,520.00	Independence	1056	45	30.00
Cody Road	Independence to Jupiter	1	0.10	\$ 23,760.00	Independence	528	45	10.00
Far Hills Drive	From end of 16" to D.E.	3	0.11	\$ 26,136.00	Independence	580.8	45	27.27
Independence Station Rd	Cody to R.R. Tracks	2	0.40	\$ 95,040.00		2112	45	5.00
Independence Station Rd	Justice to RR Tracks	3	0.30	\$ 71,280.00	Independence	1584	45	10.00
Justice Lane	Existing D.E. of 8" to D.E.	6	0.30	\$ 71,280.00		1584	45	20.00
Lakeview Drive	Off Taylor Mill Road, South of Harris	2	0.10	\$ 23,760.00		528	45	20.00
Lily Drive	Off Turkeyfoot Road s. of Industrial	1	0.03	\$ 7,128.00		158.4	45	33.33
Locust Lane	KY 17 to D.E.	2	0.15	\$ 35,640.00		792	45	13.33
Madison Pike	Old Richardson Road to Far Hills	3	0.70	\$ 166,320.00		3696	45	4.29
Mann Road	Visalia to Steep Creek	21	1.50	\$ 356,400.00		7920	45	14.00
McHugh Lane		2	0.20	\$ 47,520.00		1056	45	10.00
Narrows Road	Richardson to Thortree	0	0.20	\$ 47,520.00		1056	45	0.00
Narrows Road	Thortree to Nelson	1	0.20	\$ 47,520.00		1056	45	5.00
Narrows Road	Nelson to D.E. at Erlanger Fire	0	0.20	\$ -		1056	45	0.00
Nelson Road	Narrows to Doe Run	1	0.10	\$ 23,760.00		528	45	10.00
Pruett	Marshall to Petty	6	0.40	\$ 95,040.00		2112	45	15.00
Rice Road #1	Off Mills Road	0	0.11	\$ 26,136.00	Independence	580.8	45	0.00
Stafford Heights Lane	Off Harris Pike	5	0.20	\$ 47,520.00		1056	45	25.00
Steep Creek	Marshall to KY 177	37	2.60	\$ 617,760.00		13728	45	14.23
Stephens Drive	Don Victor to Oliver	1	0.40	\$ 95,040.00		2112	45	2.50
Tamarita Lane	Harris to KY 16	3	0.12	\$ 28,512.00		633.6	45	25.00
Vises's Trail	From KY177 go North 0.77 miles(south end)	6	0.77	\$ 182,952.00		4065.6	45	7.79
Webster Road	North of Independence Station	3	0.20	\$ 47,520.00		1056	45	15.00
Webster Road	South of Independence Station	5	0.40	\$ 95,040.00		2112	45	12.50
Webster Road	Richardson Road to D.E.	19	0.70	\$ 166,320.00		3696	45	27.14
Wehrman Road	KY 16 to D.E.	1	0.30	\$ 71,280.00		1584	45	3.33

145 11.29 \$ 2,634,984.00 59611.2

Subdist. . . .
 Project Summary #4
 Northern Kentucky Water District
 Kenton County Unserved Streets
 11-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Banklick Road	Independence to Bramlage	1	0.40	\$ 95,040.00	Independence	2112	45	2.50
Banklick Road	Bramlage to Walton-Nicholson	15	1.40	\$ 332,640.00	Independence	7392	45	10.71
Bird Road	D.E. near Wynewood to end of road	2	0.30	\$ 71,280.00	SKC	1584	45	6.67
Conley Road	Kenton Station to KY 177	14	1.30	\$ 308,880.00	SKC	6864	45	10.77
Gene Street	Off Walton Nicholson Road	4	0.25	\$ 59,400.00		1320	45	16.00
Graven Road	End of Sub C to Wright Road	3	0.25	\$ 59,400.00		1320	45	12.00
Hergott Drive	Off KY 17, Norther of Callant	4	0.60	\$ 142,560.00		3168	45	6.67
Independence Road	End of Sub C to Banklick	6	0.50	\$ 118,800.00		2640	45	12.00
James Road	North of Moffett	1	0.10	\$ 23,760.00	SKC	528	45	10.00
James Road	South of Moffett	3	0.20	\$ 47,520.00	SKC	1056	45	15.00
Kenton Station Road	KY 177 to D.E.	5	0.20	\$ 47,520.00		1056	45	25.00
KY 177	End of Visalia project to Conley Road	14	0.78	\$ 185,328.00	Visalia	4118.4	45	17.95
North Lake Road	White Villa - Off Decoursey	27	1.10	\$ 261,360.00	SKC	5808	45	24.55
Rosanna Lane	Off of Callant	4	0.40	\$ 95,040.00	SKC	2112	45	10.00
Spruce View Drive	Walton Nicholson to D.E.	2	0.20	\$ 47,520.00		1056	45	10.00
Trace Run Road	Off of Moffett	9	0.80	\$ 190,080.00		4224	45	11.25
Wright Road	Graven to D.E.	4	0.10	\$ 23,760.00		528	45	40.00
Wright Road	Banklick to Graven	13	1.20	\$ 285,120.00		6336	45	10.83
		131	10.08	\$ 2,395,008.00		53222.4		

Subdistrict Q
 Project Summary #5
 Northern Kentucky Water District
 Kenton County Unserved Streets
 11-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Armstrong Road	Off Moffett	3	0.40	\$ 95,040.00	SKC	2112	45	7.50
Fontanna	KY 177	16	0.60	\$ 142,560.00	SKC	3168	45	26.67
Hempfling Road	Oak Island to Rich	12	1.30	\$ 308,880.00		6864	45	9.23
Kenton Station Road	Martin to Rector	20	1.80	\$ 427,680.00		9504	45	11.11
KY 177	#14443 south of Kenton Station to Rich Ro	17	2.30	\$ 546,480.00	Kenton	12144	45	7.39
Moffett Road	Armstrong to Kenton Station	3	1.20	\$ 285,120.00		6336	45	2.50
Rich Road	Fiskburg to KY 177	9	0.60	\$ 142,560.00		3168	45	15.00
Rich Road	End of Sub C to Hempfling	7	0.70	\$ 166,320.00		3696	45	10.00
Rich Road	Hempfling to Little Cruises	2	0.40	\$ 95,040.00		2112	45	5.00
Rich Road	Little Cruises to Fiskburg	16	1.00	\$ 237,600.00		5280	45	16.00
Washboard Road	Off KY 177	4	0.10	\$ 23,760.00		528	45	40.00
		109	10.40	\$ 2,471,040.00		54912		

Subdistrict
 Project Summary #6
 Northern Kentucky Water District
 Kenton County Unserved Streets
 11-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Campbell Drive	US 25 to D.E.	3	0.14	\$ 33,264.00	SKC	739.2	45	21.43
Eads Road	US 25 to I-71/75	5	0.70	\$ 166,320.00	SKC	3696	45	7.14
Fiskburg Road	Alexander to Rich Road	4	0.60	\$ 142,560.00	SKC	3168	45	6.67
Gleason Road	KY 17 to D.E.	6	0.17	\$ 40,392.00		897.6	45	35.29
Jones Road	Walton to D.E.	35	1.40	\$ 332,640.00		7392	45	25.00
Kensington Road	Off Green Road	1	0.20	\$ 47,520.00	SKC	1056	45	5.00
KY 177	KY 14 to St. Marys	16	1.20	\$ 285,120.00	SKC	6336	45	13.33
KY 177	St. Mary Rd to Alexander Road	9	1.30	\$ 308,880.00	SKC	6864	45	6.92
Little Cruises Creek Rd	KY 17 to Rich Road	32	2.50	\$ 594,000.00		13200	45	12.80
Navaho Road	Hemping to D.E.	1	0.40	\$ 95,040.00		2112	45	2.50
Northcut Road	Jones Road to D.E.	10	0.40	\$ 95,040.00		2112	45	25.00
Oak Island	Off of Moffett	2	0.80	\$ 190,080.00		4224	45	2.50
Sawgrass Road	Off Green Road	2	0.10	\$ 23,760.00		528	45	20.00
		126	9.91	\$ 2,354,616.00		52324.8		

Subdistrict #7
 Project Summary #7
 Northern Kentucky Water District
 Kenton County Unserved Streets
 11-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Alexander Road	Saint Marys Road to KY 177	39	3.10	\$ 736,560.00	SKC	16368	45	12.58
Alexander Road	KY 177 to D.E.	9	1.40	\$ 332,640.00	SKC	7392	45	6.43
Fiskburg Road	Goshorn to Pfanstiehl Road	1	0.10	\$ 23,760.00	SKC	528	45	10.00
Fiskburg Road	Pfanstiehl to Alexander	7	0.50	\$ 118,800.00	SKC	2640	45	14.00
Goshorn Road	Fiskburg to D.E.	13	0.80	\$ 190,080.00		4224	45	16.25
Holly Hock	Wolf to D.E.	5	0.10	\$ 23,760.00		528	45	50.00
Lawnmower Rd	Locust to D. E.	3	0.10	\$ 23,760.00		528	45	30.00
Locust Pike	Feiser Road to # 9684	20	2.40	\$ 570,240.00		12672	45	8.33
Pfanstiehl Road	Fiskburg to D.E.	13	1.40	\$ 332,640.00		7392	45	9.29
Rouse	Off KY 177-	2	0.20	\$ 47,520.00	SKC	1056	45	10.00
Saint Marys Road	Fiskburg to KY 177	7	0.80	\$ 190,080.00		4224	45	8.75
Wolf	Holly Hock to D.E.	8	0.40	\$ 95,040.00		2112	45	20.00
		127	10.90	\$ 2,684,880.00		59664		

Project Summary #
Northern Kentucky Water District
Kenton County Unserved Streets

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
KY 177	Alexander Road to Pendleton County Line	0	0.30	\$ 71,280.00	SKC	1584	45	0.00
Sleepy Hollow Road	Existing D.E. near Diamond Ct. to Ludlow	0	1.00	\$ 237,600.00		5280	45	0.00
Streets not assigned to a project								
Garvey Avenue	Fuchs to bridge near Ripple Creek Drive	7	0.60	\$ 142,560.00		3168	45	11.67
Key West Road	US 25 to D.E.	2	0.20	\$ 47,520.00		1056	45	10.00

Project Summary Subdistrict E
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bethel Grove Road	Vise's Trail to #12104	20	0.49	\$ 123,098.98	Visalia	2587.2	47.58	40.82
Brandy Lane	Bethel Grove to Licking Station	5	0.08	\$ 20,097.79	Visalia	422.4	47.58	62.50
Bromley-Cres. Springs	Amsterdam to north 0.53 miles toward Bromley	17	0.53	\$ 133,147.87	Crescent Spgs	2798.4	47.58	32.08
Fiskburg Road	KY 17 to Goshorn (KY17 to 1.2 miles)	29	1.21	\$ 303,979.10	SKC	6388.8	47.58	23.97
Hogrefee Road	Existing D.E. main to just past #502	16	0.68	\$ 170,831.23		3590.4	47.58	23.53
Ishmail Road	Kenton Area	7	0.20	\$ 50,244.48	Kenton	1056	47.58	35.00
Kenton Station Road	Rector to Conley	10	0.77	\$ 193,441.25		4065.6	47.58	12.99
Kenton Station Road	Conley to Moffett	6	0.50	\$ 125,611.20		2640	47.58	12.00
Kenton Station Road	Moffett to KY 177	5	0.28	\$ 70,342.27		1478.4	47.58	17.86
KY 177	KY 536 North to #11282	8	0.36	\$ 90,440.06	Visalia	1900.8	47.58	22.22
KY 177	KY 536 to Visalia Road	13	0.45	\$ 113,050.08	Visalia	2376	47.58	28.89
KY 177	Visalia Road south to #12246	16	0.44	\$ 110,537.86	Visalia	2323.2	47.58	36.36
KY 177	Kenton Station south to #14443	34	1.03	\$ 258,759.07	Kenton	5438.4	47.58	33.01
KY 177	Kenton Station north to #13361	36	1.34	\$ 336,638.02	Kenton	7075.2	47.58	26.87
Licking Station	Bethel Grove to D.E.	12	0.19	\$ 47,732.26		1003.2	47.58	63.16
Oliver Road	Stephens to Harris	30	0.95	\$ 238,661.28		5016	47.58	31.58
Oliver Road	McCullum to Stephens	3	0.34	\$ 85,415.62		1795.2	47.58	8.82
St Johns Road	Bromley Cfs. Springs to 0.37 miles	5	0.37	\$ 92,952.29		1953.6	47.58	13.51
Vise's Trail	KY 177 to Visalia Rd. to South .23 miles(nc)	13	0.40	\$ 100,488.96		2112	47.58	32.50
Whitaker/McDonald	Off of Old KY 17	6	0.13	\$ 32,658.91		686.4	47.58	46.15
		291	10.74	\$ 2,698,128.58		56707.2		

Project Summary Subdistrict R (Fairview/Ryland Heights)
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
KY 177	End of Sub-R (near Kaiser) to Wolf Road	22	0.76	\$ 182,863.30	Fairview	4012.8	45.57	28.95
KY 177	Wolf to Marshall (bridge)	18	0.92	\$ 221,360.83	Ryland Heights	4857.6	45.57	19.57
KY 177	910' to short marshall, 500' short marshall	2	0.27	\$ 64,964.59		1425.6	45.57	7.41
Porter Road		2	0.13	\$ 31,279.25		686.4	45.57	15.38
Tecumseh	Porter to D.E.	8	0.35	\$ 84,213.36		1848	45.57	22.86
		52	2.43	\$ 584,681.33		12830.4		

Project Summary
 Primary Klette Road Project
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT

<u>Street</u>	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Klette Road	#3335 to Rice Road	15	1.00	\$ 323,188.80	Independence	5280	61.21	15.00
Klette Road	Rice to Marshall	7	0.60	\$ 193,913.28	Independence	3168	61.21	11.67
Rice Road #2	Off Klette Road	18	0.45	\$ 145,434.96	Independence	2376	61.21	40.00
Marshall Road	Klette to Coleman	7	0.61	\$ 197,145.17		3220.8	61.21	11.48
		47	2.66	\$ 859,682.21		14044.8		

John Scheben

From: "Richard Harrison" <rharr@nkywater.org>
To: "John Scheben" <JSCHEBEN@nkywater.org>
Cc: "Amy Kramer" <akramer@nkywater.org>
Sent: Tuesday, July 29, 2003 3:29 PM
Subject: Apple Lane Water

Hi John, I received a call from Mike Wayman of Apple Lane in Independence. Please call Mr. Wayman at 358-4378 (home) or 746-4828 (work) to discuss his particulars. Apparently, there are 3 houses in about 200 feet and one has an old spider line. He remembers talking to someone about 8 years ago and I told him we have a 50 foot rule now that may be of benefit in this situation.

Thanks

Richard

Apple Lane Extension

ITEM	QUANTITY	TOTAL UNIT COST	COST
8" C-900 & Fittings	253	LF 30.00	\$7,590.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA 600.00	\$600.00
6" x 6" Tapping Sleeve & Valve	1	EA 3,000.00	\$3,000.00
8" - 6" Reducer	1	EA 150.00	\$150.00
8"x8"x6" Ductile Iron Anchoring Tee & Block	1	EA 400.00	\$400.00
Fire Hydrant Assembly	1	EA 2,100.00	\$2,100.00
Driveway Restoration	10	SY 30.00	\$300.00
Road Restoration	10	SY 35.00	\$350.00
General Restoration	1	LS 100.00	\$100.00
Sub-Total			\$14,590.00
20% Conting. (Eng., Etc.)			\$2,918.00
Total Cost			\$17,508.00

Good life
2/10/03
amounts are cost

Average Cost/Foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$69.20	\$3,460.08	1	\$14,047.92	\$14,047.92
		2	\$10,587.84	\$5,293.92
		3	\$7,127.76	\$2,375.92
		4	\$3,667.68	\$916.92
		5	\$207.60	\$41.52
		6	(\$3,252.47)	(\$542.08)

\$6,920.16
 \$10,587.84

Campbell/Kenton

2020 Water Management
Planning Council

2003 Project Profiles Submittal Summaries

Kenton County Area

Project: Primary Subdistrict G
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bramiage Road	Banklick to Wilson	23	0.90	\$ 213,840.00	Independence	4752	45	25.56
Bullock Pen Road	Old Ky 17 to D.E.	20	0.70	\$ 166,320.00	Erlanger	3696	45	28.57
Fowler Creek Road	Pelly to Cox	26	1.30	\$ 308,880.00	Independence	6864	45	20.00
Klein Road	Visalia to D.E.	32	1.00	\$ 237,600.00	SKC	5280	45	32.00
Petty Road	Marshall to End of Sub A	26	1.00	\$ 237,600.00		5280	45	26.00
Pleasure Isle Drive	New KY 17 to D.E.	10	0.19	\$ 45,144.00		1003.2	45	52.63
		137	5.09	\$ 1,209,384.00		26875.2		

Project: Primary Bullock Pen Water Line Extension Phase 6
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bagby Road	US 25 to Parker Grove	34	2.40	\$ 570,240.00	SKC	12672	45	14.17
Carlisle Road	KY 14 to Parker Grove	45	1.90	\$ 451,440.00	SKC	10032	45	23.68
Parker Grove	KY 14 to Grant County Line	34	2.20	\$ 522,720.00		11616	45	15.45
Peoples Cemetary	Bagby Rd to dead end	3	0.20	\$ 47,520.00		1056	45	15.00
		116	6.70	\$ 1,591,920.00		35376		

Project: Primary Taylor Mill
City of Taylor Mill Water
0-2 Year High Priority

\$ 1,700,000.00

1,000,000 gallon elevated storage tank

**Bullock Run Water District Phase 9
Northern Kentucky Water District
Kenton County Unserved Streets
3-20 year project MEDIUM PRIORITY**

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Anderson Road	Gardnersville to D.E.	11	0.90	\$ 68,835.00	SKC	4752	45	12.22
Courtney Road	Walton Veron Road to Boone County Line	26	0.70	\$ 92,105.00	SKC	3696	45	37.14
Eads Road	I-71/75 to Walton Verona Road	13	1.20	\$ 102,815.00	SKC	6336	45	10.83
Gardnersville Road	End of Sub C to Anderson Road	3	0.60	\$ 125,065.00	SKC	3168	45	5.00
Grassy Creek Road	Gardnersville to D.E.	17	1.20	\$ 73,015.00		6336	45	14.17
Paxton Road	End of Sub C to Parker Grove	9	1.50	\$ 50,750.00		7920	45	6.00
Lunsford Road	Off KY 14	13	0.70	\$ 57,445.00		3696	45	18.57
Carter Chappel Road		1	0.40	\$ 40,195.00		2112	45	2.50
Menifee Road		0	0.30	\$ 36,960.00		1584	45	0.00
Stephenson Road	Off KY 14	17	1.10	\$ 74,565.00		5808	45	15.45
Shady Lane		0	0.50	\$ 44,500.00		2640	45	0.00
Old Lexington Road	US 25 to D.E.	6	0.50	\$ 118,800.00		2640	45	12.00
		116	9.60	\$ 885,050.00		50688		

Subd. 001
 Project Summary #1
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Coons Branch Road	Off KY 17, near Gribble	1	0.20	\$ 47,520.00	Covington	1056	45	5.00
Decoursey	Grand to I-275	2	0.60	\$ 142,560.00	Covington	3168	45	3.33
Erlanger Road	Hartman to Turfway	2	0.85	\$ 201,960.00	Erlanger	4488	45	2.35
Eubanks Road	Erlanger-Crs. Spgs. Road to D.E.	10	0.40	\$ 95,040.00	Crescent Spgs	2112	45	25.00
Forest View Lane		3	0.10	\$ 23,760.00		528	45	30.00
Fuchs Road	Garvey Avenue to D.E.	1	0.10	\$ 23,760.00	Elsmere	528	45	10.00
Highwater Road	End of Bromley System to River Heights	5	0.50	\$ 118,800.00		2640	45	10.00
Horsebranch Road	From Orphanage 0.5 miles toward Thomas	3	0.50	\$ 118,800.00		2640	45	6.00
Locust Pike	#9684 To end of Sub R near Whites	3	0.50	\$ 118,800.00		2640	45	6.00
Misty Lane	Off KY 17, North of Hands Pike	5	0.10	\$ 23,760.00		528	45	50.00
Montague Road	Fire Hydrant to Sleepy Hollow	4	0.70	\$ 166,320.00		3696	45	5.71
Pin Oak Lane	Erlanger showcase cinema drive to D.E. (g	1	0.5	\$ 118,800.00	Erlanger	2640	45	2.00
Porter Road	Tecumseh to existing water line							
Route 8	Amsterdam to Chevron	12	1.90	\$ 451,440.00		10032	45	6.32
Route 8	Chevron to Bromley	9	0.90	\$ 213,840.00		4752	45	10.00
Wilson Road	Drogee to Mason	8	0.30	\$ 71,280.00		1584	45	26.67
Worthington Drive	Off KY 17, South of Hands Pike	4	0.25	\$ 59,400.00		1320	45	16.00
Taylor Mill Road	#4860 to Grand	6	0.40	\$ 95,040.00		2112	45	15.00
		562	31.48	\$ 9,179,648.00		166214.4		

Subproject K
 Project Summary #2
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Decoursey	I-275 to end of Sub-R near Locust Pike	10	0.90	\$ 213,840.00	Fairview	4752	45	11.11
Decoursey	Marshall to end of Sub-R	3	0.70	\$ 166,320.00	Ryland Heights	3696	45	4.29
Fowler Creek Road	Madison to Pelly	20	1.80	\$ 427,680.00		9504	45	11.11
Fowler Creek Road	Cox to Stephens	5	0.50	\$ 118,800.00	Independence	2640	45	10.00
Lambs Ferry Road	Whites Road to Whites Road	10	1.80	\$ 427,680.00		9504	45	5.56
Marshall Road	KY 177 to Klette	14	0.80	\$ 190,080.00		4224	45	17.50
Marshall Road	Coleman to Stewart	1	0.80	\$ 190,080.00		4224	45	1.25
Old Fowler Creek Road	Off KY 17	3	0.20	\$ 47,520.00	Covington	1056	45	15.00
Pelly Road	.15 would serve customers	3	0.30	\$ 71,280.00		1584	45	10.00
Scenic Drive	Off Pelly Road	8	0.30	\$ 71,280.00		1584	45	26.67
Senour Road	From #2890 to Fowler Creek	13	0.40	\$ 95,040.00		2112	45	32.50
Sugar Camp Road	From #6558 to Fowler Creek	9	0.40	\$ 95,040.00		2112	45	22.50
KY 177	Ryland Lakes C.C. to .35 N. or KY 536	6	1.20	\$ 285,120.00	SKC	6336	45	5.00
		105	10.10	\$ 2,399,760.00		53328		

Subdis. . MI
 Project Summary #3
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bethel Grove Road	#12104 to RR Crossing @ Vices Trail	13	0.30	\$	71,280.00	1584	45	43.33
Case Road	Steep Creek to KY 177	5	0.30	\$	71,280.00	1584	45	16.67
Cherry	Off KY 17, North of Apple	6	0.20	\$	47,520.00	1056	45	30.00
Cody Road	Independence to Jupiter	1	0.10	\$	23,760.00	528	45	10.00
Cody Road	Flagstone to RR Tracks	7	0.56	\$	133,056.00	2956.8	45	12.50
Cody Road	RR Tracks to Webster	7	0.50	\$	118,800.00	2640	45.00	14.00
Cody Road	RR Tracks to Troopers Crossing	6	0.60	\$	142,560.00	3168	45	10.00
Cody Road	From end of 16" to D.E.	3	0.11	\$	26,136.00	580.8	45	27.27
Far Hills Drive	Cody to R.R. Tracks	3	0.40	\$	95,040.00	2112	45	7.50
Independence Station Rd	Justice to RR Tracks	3	0.30	\$	71,280.00	1584	45	10.00
Independence Station Rd	Existing D.E. of 8" to D.E.	6	0.30	\$	71,280.00	1584	45	20.00
Justice Lane	Off Taylor Mill Road, South of Harris	4	0.10	\$	23,760.00	528	45	40.00
Lakeview Drive	Off Turkeyfoot Road s. of Industrial	3	0.03	\$	7,128.00	158.4	45	100.00
Lily Drive	KY 17 to D.E.	2	0.15	\$	35,640.00	792	45	13.33
Locust Lane	Old Richardson Road to Far Hills	3	0.70	\$	166,320.00	3696	45	4.29
Madison Pike	Visalia to Steep Creek	21	1.50	\$	356,400.00	7920	45	14.00
Mann Road	Richardson to Thorntree	2	0.30	\$	71,280.00	1584	45	6.67
McHugh Lane	Thorntree to Nelson	0	0.20	\$	47,520.00	1056	45	0.00
Narrows Road	Nelson to D.E. at Erlanger Fire	1	0.10	\$	23,760.00	528	45	10.00
Narrows Road	Narrows to Doe Run	6	0.40	\$	95,040.00	2112	45	15.00
Nelson Road	Marshalls to Petty	0	0.11	\$	26,136.00	580.8	45	0.00
Pruett	Off Mills Road	5	0.20	\$	47,520.00	1056	45	25.00
Rice Road #1	Off Harris Pike	37	2.60	\$	617,760.00	13728	45	14.23
Stafford Heights Lane	Marshall to KY 177	1	0.40	\$	95,040.00	2112	45	2.50
Steep Creek	Don Victor to Oliver	3	0.12	\$	28,512.00	633.6	45	25.00
Stephens Drive	Harris to KY 16	6	0.77	\$	182,952.00	4065.6	45	7.79
Tamarita Lane	From KY177 go North 0.77 miles(south end	4	0.25	\$	59,400.00	1320	45	16.00
Vices's Trail	Cody to D.E.	6	0.20	\$	47,520.00	1056	45	30.00
Upton Drive	Off Cody Road	3	0.20	\$	47,520.00	1056	45	15.00
Webster Road	North of Independence Station	5	0.40	\$	95,040.00	2112	45	12.50
Webster Road	South of Independence Station	19	0.70	\$	166,320.00	3696	45	27.14
Webster Road	Richardson Road to D.E.	1	0.30	\$	71,280.00	1584	45	3.33
Wehrman Road	KY 16 to D.E.	193	13.80	\$	3,231,360.00	72864	45	

Subdivision O
 Project Summary #4
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Banklick Road		17	0.90	\$ 213,840.00	Independence	4752	45	18.89
Banklick Road	Maheer to Independence	1	0.40	\$ 95,040.00	Independence	2112	45	2.50
Banklick Road	Independence to Bramlage	15	1.40	\$ 332,640.00	Independence	7392	45	10.71
Bird Road	Bramlage to Walton-Nicholson	2	0.30	\$ 71,280.00	SKC	1584	45	6.67
Conley Road	D.E. near Wynewood to end of road	15	1.30	\$ 308,880.00	SKC	6864	45	11.54
Gene Street	Kenton Station to KY 177	4	0.25	\$ 59,400.00		1320	45	12.00
Graven Road	Off Walton Nicholson Road	3	0.25	\$ 59,400.00		1320	45	6.67
Hergott Drive	End of Sub C to Wright Road	4	0.60	\$ 142,560.00		3168	45	12.00
Independence Road	Off KY 17, Norther of Callant	6	0.50	\$ 118,800.00		2640	45	10.00
James Road	End of Sub C to Banklick	1	0.10	\$ 23,760.00	SKC	528	45	15.00
James Road	North of Moffett	3	0.20	\$ 47,520.00	SKC	1056	45	25.00
Kenton Station Road	South of Moffett	5	0.20	\$ 47,520.00		1056	45	17.95
KY 177	KY 177 to D.E.	14	0.78	\$ 185,328.00	Visalia	4118.4	45	24.55
North Lake Road	End of Visalia project to Conley Road	27	1.10	\$ 95,040.00	SKC	5808	45	10.00
Rosanna Lane	White Villa - Off Decoursey	4	0.40	\$ 47,520.00		1056	45	10.00
Spruce View Drive	Off of Callant	2	0.20	\$ 47,520.00		1056	45	11.25
Trace Run Road	Walton Nicholson to D.E.	9	0.80	\$ 190,080.00		4224	45	40.00
Wright Road	Off of Moffett	4	0.10	\$ 23,760.00		528	45	11.67
Wright Road	Graven to D.E.	14	1.20	\$ 285,120.00		6336	45	11.67
Wright Road	Banklick to Graven	7	0.61	\$ 179,430.77		3220.8	55.71	11.48
Marshall Road	Klette to Coleman	157	11.59	\$ 2,788,278.77		61195.2		

Subdistrict 3
 Project Summary #5
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Armstrong Road	Off Moffett	3	0.40	\$ 95,040.00	SKC	2112	45	7.50
Fontanna	KY 177	16	0.60	\$ 142,560.00	SKC	3168	45	26.67
Hempfling Road	Oak Island to Rich	12	1.30	\$ 308,880.00		6864	45	9.23
Hempfling Road	Sub C D.E. to Navaho Road	26	1.50	\$ 356,400.00		7920	45	17.33
Hempfling Road	Navaho to Oak Island	11	0.65	\$ 154,440.00		3432	45	16.92
Kenton Station Road	Martin to Rector	20	1.80	\$ 427,680.00		9504	45	11.11
KY 177	#14443 south of Kenton Station to Rich Ro	17	2.30	\$ 546,480.00	Kenton	12144	45	7.39
Moffett Road	Armstrong to Kenton Station	3	1.20	\$ 285,120.00		6336	45	2.50
Rich Road	Fiskburg to KY 177	9	0.60	\$ 142,560.00		3168	45	15.00
Rich Road	End of Sub C to Hempfling	7	0.70	\$ 166,320.00		3696	45	10.00
Rich Road	Hempfling to Little Cruises	2	0.40	\$ 95,040.00		2112	45	5.00
Rich Road	Little Cruises to Fiskburg	16	1.00	\$ 237,600.00		5280	45	16.00
Washboard Road	Off KY 177	4	0.10	\$ 23,760.00		528	45	40.00
		146	12.55	\$ 2,981,880.00		66264		

Subdist... T
 Project Summary #6
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Campbell Drive	US 25 to D.E.	5	0.70	\$ 166,320.00	SKC	3696	45	7.14
Eads Road	US 25 to I-71/75	5	0.70	\$ 166,320.00	SKC	3696	45	7.14
Fiskburg Road	Alexander to Rich Road	4	0.60	\$ 142,560.00	SKC	3168	45	6.67
Gleason Road	KY 17 to D.E.	9	0.30	\$ 71,280.00		1584	45	30.00
Jones Road	Walton to D.E.	35	1.40	\$ 332,640.00		7392	45	25.00
Kensington Road	Off Green Road	2	0.20	\$ 47,520.00	SKC	1056	45	13.33
KY 177	KY 14 to St. Marys	16	1.20	\$ 285,120.00	SKC	6336	45	6.92
KY 177	St. Mary Rd to Alexander Road	9	1.30	\$ 308,880.00	SKC	6864	45	12.80
Little Cruises Creek Rd	KY 17 to Rich Road	32	2.50	\$ 594,000.00		13200	45	2.50
Navaho Road	Hempling to D.E.	1	0.40	\$ 95,040.00		2112	45	20.00
Northcut Road	Jones Road to D.E.	8	0.40	\$ 95,040.00		2112	45	3.75
Oak Island	Off of Moffett	3	0.80	\$ 190,080.00		4224	45	20.00
Sawgrass Road	Off Green Road	2	0.10	\$ 23,760.00		528	45	20.00
		131	10.60	\$ 2,518,560.00		55968		

Subdis... V
 Project Summary #7
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Alexander Road	Saint Marys Road to KY 177	35	2.60	\$ 617,760.00	SKC	13728	45	13.46
Alexander Road	KY 177 to D.E.	9	1.40	\$ 332,640.00	SKC	7392	45	6.43
Dixon Drive	Rich Road to D.E.	23	1.60	\$ 380,160.00	SKC	8448	45	14.38
Elliot Road	KY 17 to D.E.	16	0.90	\$ 213,840.00		4752	45	17.78
Fiskburg Road	Goshorn to Pfanstiehl Road	1	0.10	\$ 23,760.00	SKC	528	45	10.00
Fiskburg Road	Pfanstiehl to Alexander	7	0.50	\$ 118,800.00	SKC	2640	45	14.00
Goshorn Road	Fiskburg to D.E.	12	0.80	\$ 190,080.00		4224	45	15.00
Holly Hock	Wolf to D.E.	5	0.10	\$ 23,760.00		528	45	50.00
Lawnmower Rd	Locust to D. E.	5	0.10	\$ 23,760.00		528	45	50.00
Locust Pike	Feiser Road to # 9684	20	2.40	\$ 570,240.00		12672	45	8.33
Pfanstiehl Road	Fiskburg to D.E.	11	1.40	\$ 332,640.00		7392	45	7.86
Rouse	Off KY 177-	3	0.20	\$ 47,520.00	SKC	1056	45	15.00
Saint Marys Road	Fiskburg to KY 177	16	1.20	\$ 285,120.00		6336	45	13.33
Wolf	Holly Hock to D.E.	8	0.40	\$ 95,040.00		2112	45	20.00
		171	13.30	\$ 3,255,120.00		72336		

Project Summary #
 Northern Kentucky Water District
 Kenton County Unserved Streets

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
KY 177 Sleepy Hollow Road	Alexander Road to Pendleton County Line Existing D.E. near Diamond Ct. to Ludlow	0 0	0.30 1.00	\$ 71,280.00 \$ 237,600.00	SKC	1584 5280	45 45	0.00 0.00
Streets not assigned to a project								
Garvey Avenue Key West Road	Fuchs to bridge near Ripple Creek Drive US 25 to D.E.	2 2	0.30 0.20	\$ 71,280.00 \$ 47,520.00		1584 1056	45 45	6.67 10.00

Project Summary Subdistrict E
Northern Kentucky Water District
Kenton County Unserved Streets
0-2 year FUNDED PROJECT

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bethel Grove Road	Vise's Trail to #12104	20	0.49	\$ 102,841.20	Visalia	2587.2	39.75	40.82
Brandy Lane	Bethel Grove to Licking Station	5	0.08	\$ 16,790.40	Visalia	422.4	39.75	62.50
Bromley-Cres. Springs	Amsterdam to north 0.53 miles toward Broi	17	0.59	\$ 123,829.20	Crescent Spgs	3115.2	39.75	28.81
Fiskburg Road	KY 17 to Goshorn (KY17 to 1.2 miles)	29	1.21	\$ 253,954.80	SKC	6388.8	39.75	23.97
Ishmail Road	Kenton Area	7	0.20	\$ 41,976.00	Kenton	1056	39.75	35.00
Kenton Station Road	Rector to Conley	10	0.77	\$ 161,607.60		4065.6	39.75	12.99
Kenton Station Road	Conley to Moffett	6	0.50	\$ 104,940.00		2640	39.75	12.00
Kenton Station Road	Moffett to KY 177	5	0.28	\$ 58,766.40		1478.4	39.75	17.86
KY 177	KY 536 North to #11282	8	0.36	\$ 75,556.80	Visalia	1900.8	39.75	22.22
KY 177	KY 536 to Visalia Road	13	0.45	\$ 94,446.00	Visalia	2376	39.75	28.89
KY 177	Visalia Road south to #12246	16	0.44	\$ 92,347.20	Visalia	2323.2	39.75	36.36
KY 177	Kenton Station south to #14443	34	1.28	\$ 268,646.40	Kenton	6758.4	39.75	26.56
KY 177	Kenton Station north to #13361	36	1.34	\$ 281,239.20	Kenton	7075.2	39.75	26.87
Licking Station	Bethel Grove to D.E.	12	0.23	\$ 48,272.40		1214.4	39.75	52.17
Oliver Road	Stephens to Harris	30	0.95	\$ 199,386.00		5016	39.75	31.58
Oliver Road	McCullum to Stephens	3	0.35	\$ 73,458.00		1848	39.75	8.57
St Johns Road	Bromley Crs. Springs to 0.37 miles	5	0.37	\$ 77,655.60		1953.6	39.75	13.51
Vise's Trail	KY 177 to Visalia Rd. to South .23 miles(nc	13	0.40	\$ 83,952.00		2112	39.75	32.50
Whitaker/McDonald	Off of Old KY 17	6	0.17	\$ 35,679.60		897.6	39.75	35.29
		275	10.46	\$ 2,195,344.80		55228.8		

Project Summary Subdistrict R (Fairview/Ryland Heights)
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
KY 177	End of Sub-R (near Kaiser) to Wolf Road	22	0.77	\$ 172,869.31	Fairview	4065.6	42.52	28.57
KY 177	Wolf to Marshall (bridge)	18	0.92	\$ 206,496.58	Ryland Heights	4857.6	42.51	19.57
KY 177	910' to short marshall, 500' short marshall	2	0.1	\$ 22,445.28		528	42.51	20.00
Porter Road		2	0.16	\$ 35,912.45		844.8	42.51	12.50
Tecumseh	Porter to D.E.	8	0.35	\$ 78,558.48		1848	42.51	22.86
		52	2.30	\$ 516,282.10		12144		

Project Summary Klette Road Project
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Klette Road	#3335 to Rice Road	15	1.16	\$ 341,212.61	Independence	6124.8	55.71	12.93
Klette Road	Rice to Marshall	7	1.21	\$ 355,920.05	Independence	6388.8	55.71	5.79
Rice Road #2	Off Klette Road	16	0.45	\$ 132,366.96	Independence	2376	55.71	35.56
		38	2.82	\$ 829,499.62		14889.6		

Campbell/Kenton

2020 Water Management
Planning Council

2003 Project Profiles Submittal Summaries

Campbell County Area

Subdistrict F
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 Year Project HIGH PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Grandview Rd. (Including Amy Lou Dr.)	Alexandria/Unincorporated	43	1.70	\$ 403,920.00	8976	45	25.29
Heck Rd.	Alexandria	12	0.70	\$ 166,320.00	3696	45	17.14
Dodsworth Ln.	Unincorporated	23	1.30	\$ 308,880.00	6864	45	17.69
West Main Street (Alex.)-(1/2 mile from Licking Pike towards Steffen Rd.	Unincorporated	10	0.50	\$ 118,800.00	2640	45	20.00
	Unincorporated	11	0.50	\$ 118,800.00	2640	45	22.00
		99	4.70	\$ 1,116,720.00	24816		

Pendleton County Water District
 0-2 Year Project HIGH PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
12" Main to County Line New Master Meter Vault 250,000 gallon elevated water tank Booster Pumping Station 6" water main to serve 80 customers along Hissem, Aulick & Demossville Roads				\$ 2,719,350.00			

Subdistrict H
 Project Summary #1
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Blangey Rd.	Brent	10	0.60	\$ 142,560.00	3168	45	16.67
Fender Rd.	Melbourne	8	0.90	\$ 213,840.00	4752	45	8.89
Four Mile Pike (Melbourne to Silver Grove)	Melbourne	1	0.50	\$ 118,800.00	2640	45	2.00
Four Mile Road (Nelson to Woodrun Dr.)	Alexandria/Unincorporated	6	1	\$ 237,600.00	5280	45	6.00
Gunkle Rd. Number 1	Melbourne	7	0.60	\$ 142,560.00	3168	45	11.67
Gunkle Rd. Number 2	Melbourne	8	0.40	\$ 95,040.00	2112	45	20.00
Gunkle Rd. Number 3 (From bottom of hill to line from ten mil	Melbourne	6	0.50	\$ 118,800.00	2640	45	12.00
Lower Tug Fork Rd.	Melbourne	6	0.80	\$ 190,080.00	4224	45	7.50
Owl Creek Rd.	Silver Grove	7	1.20	\$ 285,120.00	6336	45	5.83
Reitman Rd.	Alexandria	1	0.30	\$ 71,280.00	1584	45	3.33
Rt.8 (Blangey Rd. to End of line from Ky-1998)	Brent	10	0.60	\$ 142,560.00	3168	45	16.67
Rt.8 (Lester Ln. to River Rd.)	Ft. Thomas	3	2.30	\$ 546,480.00	12144	45	1.30
Tower Hill Rd. Ft Thomas	Ft. Thomas	4	0.30	\$ 71,280.00	1584	45	13.33
		77	10.00	\$ 2,376,000.00	52800		

Subdistrict J
 Project Summary #2
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Enzweiler	Alexandria	12	1.00	\$ 237,600.00	3585	45	12.00
Geotz Rd	Unincorporated	31	1.70	\$ 403,920.00	5280	45	18.24
Licking Pike (From Alex-Licking Pike to Rifle-Range Rd.)	Unincorporated	5	0.60	\$ 142,560.00	8976	45	8.33
Licking Pike (From Rifle-Range Rd. to Poplar Thicket Rd.)	Unincorporated	2	0.50	\$ 118,800.00	3168	45	4.00
Low Gap Rd (From end of line to Alex-Licking Pike)	Unincorporated				2640	45	
Orlando	Alexandria	31	2.20	\$ 522,720.00	760	45	14.09
Poplar Thicket Rd.	Unincorporated	16	1.70	\$ 403,920.00	11616	45	9.41
Rifle Range Rd. (From First 26 Houses to end of road)	Unincorporated	27	0.80	\$ 190,080.00	8976	45	33.75
Rifle Range Rd. (From Licking Pike to First 27 Houses)	Unincorporated	14	1.40	\$ 332,640.00	4224	45	10.00
Tippenhauer Rd. From #211 to end of road	Cold Spring	2	0.50	\$ 118,800.00	7392	45	4.00
West Main Street (Alex.)-(1/2 mile from city building towards	Unincorporated				2640	45	
		140	10.40	\$ 2,471,040.00	55672		

Subdistrict L
 Project Summary #3
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Indian Trace Rd. (From JoAnn to End of road)	Unincorporated	18	0.90	\$ 213,840.00	4752	45	20.00
Indian Trace Rd. (From Pond Cr. Rd to JoAnn)	Unincorporated	15	0.60	\$ 142,560.00	3168	45	25.00
JoAnn Lane (off of Indian Tr. Rd)	Unincorporated	20	0.40	\$ 95,040.00	2112	45	50.00
Lees Road (From Pleasant Rdg. Rd. To Schmudde Tarvin R	Unincorporated	14	1.00	\$ 237,600.00	5280	45	14.00
Maddox Rd	Claryville	26	1.20	\$ 285,120.00	6336	45	21.67
Pleasant Rdg. Rd. (From Lees Rd. to Harrisburg Hill Rd.)	Unincorporated	15	1.10	\$ 261,360.00	5808	45	13.64
Pleasant Rdg. Rd. (From Visalia Rd to Lees Rd.)	Unincorporated	11	0.70	\$ 166,320.00	3696	45	15.71
Pond Creek Road (From Bridge to Visalia Rd.)	Unincorporated	15	1.00	\$ 237,600.00	5280	45	15.00
Pond Creek Road (From Indian Trace Rd. to Bridge)	Unincorporated -25 lot SubDiv.	19	0.50	\$ 118,800.00	2640	45	38.00
Pond Creek Road (From John Miller Rd. to Indian Trace Rd.)	Unincorporated	6	0.20	\$ 47,520.00	1056	45	30.00
Pond Creek Road (From Licking Pike to John Miller Rd.)	Unincorporated	11	1.60	\$ 380,160.00	8448	45	6.88
Schmudde Tarvin Rd. (From Lees Rd to Schmudde Phillips)	Unincorporated	1	0.50	\$ 118,800.00	2640	45	2.00
Schmudde Tarvin Rd. (From Schmudde Phillips to Licking Pil	Unincorporated	3	0.70	\$ 166,320.00	3696	45	4.29
Visalia Road	Unincorporated	19	1.30	\$ 308,880.00	6864	45	14.62
		193	11.70	\$ 2,779,920.00	61776		

Subdistrict N
 Project Summary #4
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
4&12 Mile Rd. (Lower Lick Br. Rd. to Oneonta Rd.)	Unincorporated	1	0.20	\$ 47,520.00	1056	45	5.00
4&12 Mile Rd. (End of 2" line to Lower Lick Br. Rd.)	Unincorporated	9	0.40	\$ 95,040.00	2112	45	22.50
4&12 Mile Rd. (Oneonta Rd. to A.A. Hwy)	Unincorporated	5	0.60	\$ 142,560.00	3168	45	8.33
Lower Grandview Rd.	Unincorporated	5	0.30	\$ 71,280.00	1584	45	16.67
Lower Lick Branch Rd.	Unincorporated	6	0.80	\$ 190,080.00	4224	45	7.50
Oneonta Rd.(From Rt.8 to Truesdale)	California/Unincorporated	12	0.80	\$ 190,080.00	4224	45	15.00
Oneonta Rd.(From Truesdale to Washington Tr. Rd.)	Unincorporated	7	0.70	\$ 166,320.00	3696	45	10.00
Oneonta Rd.(From Washington Tr. Rd. to 4&12 Mile Rd.)	Unincorporated	3	0.30	\$ 71,280.00	1584	45	10.00
Painter Rd (From Washington Tr. Rd to Route 8)	California/Unincorporated	8	1.50	\$ 356,400.00	7920	45	5.33
Route 8 (Oneonta to Painter Rd.)	California/Unincorporated	9	1.60	\$ 380,160.00	8448	45	5.63
Rt.8 (From end of line to Oneonta Rd.)	California/Unincorporated	6	0.40	\$ 95,040.00	2112	45	15.00
Truesdale Rd.	Melbourne	15	1.00	\$ 237,600.00	5280	45	15.00
Upper Lick Branch Rd.	Unincorporated	13	0.80	\$ 190,080.00	4224	45	16.25
Washington Tr. Rd (From Oneonta to Painter Rd.)	California/Unincorporated	10	0.70	\$ 166,320.00	3696	45	14.29
Washington Tr. Rd (Painter Rd. to End of 3' line on Wash. Tr	California/Unincorporated	16	0.80	\$ 190,080.00	4224	45	20.00
		125	10.90	\$ 2,589,840.00	57552		

Subdistrict P
 Project Summary #5
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Bob-White Lane	Unincorporated	7	0.70	\$ 166,320.00	3696	45	10.00
California Cross Rds.(From Route 8 to Washington Tr.Rd.)	Calif.(Res srvd frm X-Cntry Inc.)	14	1.10	\$ 261,360.00	5808	45	12.73
Daniels Rd. (From Schababerle Hill to Route 10)	Unincorporated	24	2.10	\$ 498,960.00	11088	45	11.43
Koehler Rd(From Calif. Cr. Rds. to Route 10)	California/Unincorporated	6	0.90	\$ 213,840.00	4752	45	6.67
Route 10 (From A. A. Hwy. Connector to Daniels Road)	Unincorporated	1	0.50	\$ 118,800.00	2640	45	2.00
Route 10 (From Daniels Road to Pendelton Co. Line)	Unincorporated	4	0.60	\$ 142,560.00	3168	45	6.67
Route 10 (From Smith Rd. to A. A. Hwy. Connector)	Unincorporated	12	0.90	\$ 213,840.00	4752	45	13.33
Schababerle Hill(From Daniels Rd. to Route 10)	Unincorporated	4	1.40	\$ 332,640.00	7392	45	2.86
Wagner Rd (Dead Timber Rd. to end of Sub-Dist D on Wagn	California/Unincorporated	8	1.70	\$ 403,920.00	8976	45	4.71
Washington Tr.Rd. South End (End of 3" line to A.A. Hwy.)	California/Unincorporated	9	0.80	\$ 190,080.00	4224	45	11.25
		89	10.70	\$ 2,542,320.00	56496		

Subdistrict S
 Project Summary #6
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
4&12 Mile Rd. (A.A. Hwy. to Route 10)	Unincorporated	11	0.90	\$ 213,840.00	4752	45	12.22
Barrs Branch Rd. (From End of line on Barrs Br. To Rt 10)	Alexandria/Unincorporated	19	1.20	\$ 285,120.00	6336	45	15.83
Dead Timber Rd. (from end of line To Wagner Rd.)	Alexandria/Unincorporated	7	0.60	\$ 142,560.00	3168	45	11.67
Dead Timber Rd. (from Wagner Rd. To end of road)	California/Unincorporated	3	0.60	\$ 142,560.00	3168	45	5.00
Flatwoods Rd (From Race Track Rd. to Burns Rd)	Unincorporated	2	1.50	\$ 356,400.00	7920	45	1.33
Ky. State Route 154 (From Burns to PCWD Service area.)	Unincorporated	10	1.00	\$ 237,600.00	5280	45	10.00
Losey Rd.	Unincorporated	2	0.70	\$ 166,320.00	3696	45	2.86
Schmudde Phillips Cr. Rd.	Unincorporated	4	1.00	\$ 237,600.00	5280	45	4.00
Shaw-Hess Rd (From end of line on Shaw Hess to Persimmc	Unincorporated	2	0.60	\$ 142,560.00	3168	45	3.33
Siry Road (From Flatwoods Rd. to End of PCWD Line at Box	Unincorporated	19	2.00	\$ 475,200.00	10560	45	9.50
		79	10.10	\$ 2,399,760.00	53328		

Subdistrict U
 Project Summary #7
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Bezold Rd. (From Burns Rd to California Cr. Rds.)	Unincorporated	13	1.00	\$ 237,600.00	5280	45	13.00
Burns Rd. (from Flatwoods Rd. to Bezold Rd.)	Unincorporated	17	1.20	\$ 285,120.00	6336	45	14.17
Burns Rd. (From Flatwoods Rd. to St. Route 154)	Unincorporated	30	2.00	\$ 475,200.00	10560	45	15.00
California Cross Rds. (From Shaw Goetz Rd. to Bezold Rd)	California/Unincorporated	11	1.00	\$ 237,600.00	5280	45	11.00
Fisher Rd (From Bezold Rd to Wish Rd.)	Unincorporated	1	0.25	\$ 59,400.00	1320	45	4.00
Fisher Rd (From Haubner Rd. to end of road)	Unincorporated	18	1.80	\$ 427,680.00	9504	45	10.00
Fisher Rd (From Wish Rd. to Haubner Rd.)	Unincorporated	11	1.10	\$ 261,360.00	5808	45	10.00
Haubner Rd.	Unincorporated	11	0.80	\$ 190,080.00	4224	45	13.75
Shaw Goetz Rd. (From Reis Ridge Rd. to California Cross Rd)	Unincorporated	12	1.80	\$ 427,680.00	9504	45	6.67
Wish Rd.	Unincorporated	9	0.60	\$ 142,560.00	3168	45	15.00
		133	11.55	\$ 2,744,280.00	60984		

Subdistrict W
 Project Summary #8
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Harrisburg Hill	Unincorporated	21	1.10	\$ 261,360.00	5808	45	19.09
Kenton Station Rd. (From to Pleasant Rdg. Rd.)	Unincorporated	9	0.90	\$ 213,840.00	4752	45	10.00
Kenton Station Rd. (From Pleasant Rdg. Rd. to Pond Cr.Rd.)	Unincorporated	4	1.00	\$ 237,600.00	5280	45	4.00
Lees Road (From Harrisburg Hill Rd. to)	Unincorporated	4	0.40	\$ 95,040.00	2112	45	10.00
Lees Road (From Schmutde Tarvin Rd. to Harrisburg Hill Rd)	Unincorporated	11	0.70	\$ 166,320.00	3696	45	15.71
Pleasant Rdg. Rd. (From Harrisburg Hill Rd. to Kenton Station)	Unincorporated	4	1.10	\$ 261,360.00	5808	45	3.64
Pond Creek Road (From Visalia Rd. to Kenton station Rd.)	Unincorporated	29	3.10	\$ 736,560.00	16368	45	9.35
S. Harrisburg Hill	Unincorporated	10	0.50	\$ 118,800.00	2640	45	20.00
		92	8.80	\$ 2,090,880.00	46464		

Subdistrict X
 Project Summary #9
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Bakerfield Rd. (Off of Boone Smith Rd.)	Unincorporated	14	0.60	\$ 142,560.00	3168	45	23.33
Boone Smith Rd.(From Bakerfield Rd.to PCWD end of line)	Unincorporated	10	0.70	\$ 166,320.00	3696	45	14.29
Boone Smith Rd.(From Pleasant Rdg Rd to Bakerfield Rd)	Unincorporated	4	0.20	\$ 47,520.00	1056	45	20.00
Clay Rdg. Rd. (From Morningview Rd. Griffen Fords Rd.)	Unincorporated	5	0.20	\$ 47,520.00	1056	45	25.00
Clay Rdg. Rd. (From Pleasant Rdg Rd. to Morningview Rd)	Unincorporated	10	0.80	\$ 190,080.00	4224	45	12.50
Clay Rdg. Rd. (From Wolf Rd. to Pleasant Rdg Rd.)	Unincorporated	8	0.60	\$ 142,560.00	3168	45	13.33
Enzweiler	Alexandria	17	0.6	\$ 142,560.00	3168	45	28.33
Morningview Rd.	Unincorporated	16	1.80	\$ 427,680.00	9504	45	8.89
Orlando	Alexandria	7	0.1	\$ 23,760.00	528	45	70.00
Pleasant Rdg. Rd. (From Boone Smith Road to Clay Rdg. Rd)	Unincorporated	20	1.30	\$ 308,880.00	6864	45	15.38
Pleasant Rdg. Rd. (From Kenton Station Rd. to Boone Smith	Unincorporated	6	0.60	\$ 142,560.00	3168	45	10.00
Wolf Road (From Clay Rdg. Rd. to end of road)	Unincorporated -24 Lot Subdivis	10	0.60	\$ 142,560.00	3168	45	16.67
Wolf Road (From Kenton Station Rd. to Clay Rdg. Rd.)	Unincorporated	9	1.40	\$ 332,640.00	7392	45	6.43
		136	9.50	\$ 2,257,200.00	50160		

Subdistrict Y
 Project Summary #10
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
A.A.Hwy	Will/Cld Sprng/Alex/Cai/Ment	27	15.90	\$ 3,777,840.00	83952	45	1.70

Subdistrict Z
 Project Summary #11
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Baynum Hill Rd.	Unincorporated	12	0.70	\$ 166,320.00	3696	45	17.14
Decker Rd.	Unincorporated	8	0.30	\$ 71,280.00	1584	45	26.67
Reis Ridge (From Shaw Goetz to Decker Rd.)	Unincorporated	8	0.50	\$ 118,800.00	2640	45	16.00
Reis Ridge (From Decker Rd. to end of road)	Unincorporated	9	0.60	\$ 142,560.00	3168	45	15.00
Schababerle Hill(From Wesley Chapel Rd. to Daniels Rd.)	Unincorporated	15	0.65	\$ 154,440.00	3432	45	23.08
Shaw Goetz Rd..(From Route 10 to Reis Ridge Rd.)	Unincorporated	19	1.10	\$ 261,360.00	5808	45	17.27
Wesley Chapel Rd.(From Calif. Cr.Rds. To Schababerle Hill)	Unincorporated	18	1.10	\$ 232,628.00	5808	45	16.36
Wesley Chapel Rd.(From Schababerle Hill to Rout 10)	Unincorporated	33	1.80	\$ 427,680.00	9504	45	18.33
Race Trace Rd.(From Old State Rd. #4 to Flatwoods Rd.)	California/Unincorporated	19	1.00	\$ 290,400.00	5280	55	19.00
Licking Pike (From Evergreen Subdivision to Ripple Cr.Rd)	Unincorporated	7	0.40	\$ 95,040.00	2112	45	17.50
Race Trace Rd.(From Flatwoods to end of 3" line on Racetra: California/Unincorporated		7	0.50	\$ 145,200.00	2640	55	14.00
		155	8.65	\$ 2,105,708.00	45672		

Project Summary #PCWD
 Northern Kentucky Water District
 Campbell County Unserved Streets

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Muinn Rd.	Unincorporated	15	0.70	\$ 166,320.00	3696	45	21.43
Nagle Rd. (From Ridge View Estates to Hissem Rd.)	Unincorporated	9	0.70	\$ 166,320.00	3696	45	12.86
West Hissem Rd.	Unincorporated	9	0.90	\$ 213,840.00	4752	45	10.00
		33	2.30	\$ 546,480.00	12144		

**Project Summary #0
Northern Kentucky Water District
Campbell County Unserved Streets**

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Gunkle Rd. Number 3 (From end of line to bottom of hill)	Melbourne	0	0.50	\$ 118,800.00	2640	45	0.00
Licking Pike (From end of line at Tiphauer to Murnan Rd)	Unincorporated	0	0.50	\$ 118,800.00	2640	45	0.00
KY Rt. 536 (From U.S. 27 to Licking Pike)	Unincorporated	0	0.80	\$ 190,080.00	4224	45	0.00
Route 8 (Painter Rd. to End Line on Route 8 from Carthage R California/Unincorporated	Brent	0	0.20	\$ 47,520.00	1056	45	0.00
Rt.8 (River Rd. to Blangey Rd.))	Ft. Thomas	0	0.30	\$ 71,280.00	1584	45	0.00
Rt.8 (Tower Hill to Lester Ln.)		0	0.60	\$ 142,560.00	3168	45	0.00
Projects with no home							
Aulick Rd. (From End of PCWD service Area to Muinn Rd.)	Unincorporated	8	0.7	\$ 166,320.00	3696	45	11.43
Aulick Rd. (From Muinn Rd. to Demossville Rd.)	Unincorporated	4	0.4	\$ 95,040.00	2112	45	10.00

Subdistrict D Phase V
Northern Kentucky Water District
Campbell County Unserved Streets
0-2 Year Project FUNDED - UNDER CONSTRUCTION 08/03

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Licking Pike (from Walker Dr. to Poplar Thicket or #4006)		18	1.46	\$ 338,453.08	7882	42.94	12.33
Steffen Road (From Licking Pike to 1050 feet)		6	0.2	\$ 39,191.13	1023	38.31	30.00
		24	1.66	\$ 377,644.21	8905		

Northern Kentucky Water District

January 20, 2004

John Luhrman
5933 Lieberman Road
Covington, Ky. 41051

Re: Water Main Extension Cost Estimate on Lieberman Road, Kenton County

Mr. John Luhrman,

Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Lieberman Road from the existing water main at Wilson Road. It is approximately 1950 linear feet to extend the property main to 5909 Lieberman Road. Based on this distance, the estimated cost for an "water main, including fire hydrants, would be \$79,380.00. This estimate includes labor, materials & contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements from the city. This estimate does not include tap fees of \$750.00 for each customer and the service line extension from the house to the meter.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of the water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. For example, under this policy, if there were 8 customers that connected to the new water main extension, then the approximate cost per customer would be \$7,887.00 plus the tap and service line extensions based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of 5 years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with their addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contacted by the District to prepare an engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the district. Should you have any questions or need any additional information you can reach me at (859) 426-2720.

Cordially,



Greg Napier
Engineering Technician

Northern Kentucky Water District

March 24, 2004

Mrs. Spicer
641 Hollyhock Drive
Covington, Ky. 41015

Re: Water Main Extension Cost Estimate on Hollyhock Drive, Kenton County

Mrs. Spicer,

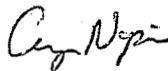
Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Hollyhock Road from the existing water main at Wolf Road. It is approximately 750 linear feet to extend the property main to 631 Hollyhock Road. Based on this distance, the estimated cost for an "water main, including fire hydrants, would be \$40,368.00. This estimate includes labor, materials & contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements from the city. This estimate does not include a 5/8" tap fee of \$750.00 for each customer and the service line extension from the house to the meter.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of the water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. For example, under this policy, if there were 5 customers that connected to the new water main extension, then the approximate cost per customer would be \$5,289.60 plus the tap and service line extensions based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of 5 years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with their addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contacted by the District to prepare an engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the district. Should you have any questions or need any additional information you can reach me at (859) 426-2720.

Cordially,



Greg Napier
Engineering Technician

Northern Kentucky Water District

March 24, 2004

Mrs. Spicer
641 Hollyhock Drive
Covington, Ky. 41015

Re: Water Main Extension Cost Estimate on Hollyhock Drive, Kenton County

Mrs. Spicer,

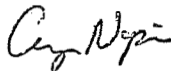
Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Hollyhock Road from the existing water main at Wolf Road. It is approximately 750 linear feet to extend the property main to 631 Hollyhock Road. Based on this distance, the estimated cost for an "water main, including fire hydrants, would be \$40,368.00. This estimate includes labor, materials & contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements from the city. This estimate does not include a 5/8" tap fee of \$750.00 for each customer and the service line extension from the house to the meter.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of the water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. For example, under this policy, if there were 5 customers that connected to the new water main extension, then the approximate cost per customer would be \$5,289.60 plus the tap and service line extensions based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of 5 years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with their addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contacted by the District to prepare an engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the district. Should you have any questions or need any additional information you can reach me at (859) 426-2720.

Cordially,



Greg Napier
Engineering Technician

Northern Kentucky Water District

April 1, 2004

Ms. Tina Roseberry
1663 Race Track Road
Alexandria, Ky. 41001

Re: Water Main Extension Cost Estimate on Race Track, Campbell County

Ms. Roseberry,

Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Race Track Road. It is approximately 2700 linear feet to extend the property main to 1663 Race Track Road. Based on this distance, the estimated cost for an "water main, including fire hydrants, would be \$135,310.50. This estimate includes labor, materials & contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements from the city. This estimate does not include a 5/8" tap fee of \$750.00 for each customer and the service line extension from the house to the meter.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of the water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. For example, under this policy, if there were 7 customers that connected to the new water main extension, then the approximate cost per customer would be \$16,824.57 plus the tap and service line extensions based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of 5 years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with their addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contacted by the District to prepare an engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the district. Should you have any questions or need any additional information you can reach me at (859) 426-2720.

Cordially,



Greg Napier
Engineering Technician

Average Cost Per Foot	50' Participation by District for each Customer	Total # of Customers	District's Total Portion of Project
\$50.11	\$2,505.50	7	\$17,538.50
Total Cost	\$135,310.50		
District's Total Portion of Cost	\$17,538.50		
Total	\$117,772.00		
# of Customers Connecting to Main	Total Customer Cost	Cost For Each Customer	
1	\$132,805.00	\$132,805.00	
2	\$130,299.50	\$65,149.75	
3	\$127,794.00	\$42,598.00	
4	\$125,288.50	\$31,322.13	
5	\$122,783.00	\$24,556.60	
6	\$120,277.50	\$20,046.25	
7	\$117,772.50	\$16,824.57	
			Actual Sign Ups
	(Column B - \$2,505.50)/Column A = Column C		
Cost does not include \$750.00 Service Tap Fee for each house.	(3/4 service tap) cost may change yearly		

Northern Kentucky Water District

July 14, 2004

Ms. Brenda Sebastian
777 Right Fork Road
Crestview Hills, Ky. 41017

Re: Water Main Extension Cost Estimate on Horsebranch Road, Kenton County

Ms. Sebastian,

Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Horsebranch Road from the existing 16" or 36" cross country water mains that cross along Horsebranch Road. The 16" is approximately 900 linear feet to extend the property main to 777 Right Fork Road. Based on this distance, the estimated cost for a" water main, including fire hydrants, would be \$89,214.00. The 36" is approximately 1,900 linear feet to extend the property main to 777 Right Fork Road. Based on this distance, the estimated cost for a" water main, including fire hydrants, would be \$158,424.00. These estimates include labor, materials & contingencies. These estimates do not include any special precautions for the existing utilities or additional requirements from the city. These estimates do not include tap fees for each customer and the service line extension from the house to the meter.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of the water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. For example, under this policy, if there were 3 customers that connected to the proposed new water main extension from the 16" cross country water main, then the approximate cost per customer would be \$24,781.67 plus the tap and service line extensions based on the ball park estimate. The proposed new water main extension from the 36" cross country water main for 3 customers would cost approximately \$48,635.95 per customer. Any additional customers would reduce the cost to each customer for a period of 5 years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with there addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contacted by the District to prepare an engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the district. Should you have any questions or need any additional information you can reach me at (859) 426-2720.

Cordially,



Greg Napier
Engineering Technician

Average Cost Per Foot	50' Participation by District for each Customer	Total # of Customers	District's Total Portion of Project
\$83.38	\$4,169.05	1	\$4,169.05
Total Cost	\$158,424.00		
District's Total Portion of Cost	\$4,169.05		
Total	\$154,254.95		
# of Customers Connecting to Main	Total Customer Cost	Cost For Each Customer	
1	\$154,254.95	\$154,254.95	
2	\$150,076.90	\$75,038.45	
3	\$145,907.85	\$48,635.95	
4	\$141,738.80	\$35,434.70	
5	\$137,569.75	\$27,513.95	
			Actual Sign Ups
	(Column B - \$2,500.26)/Column A = Column C		
Cost does not include Service Tap Fee for each house.	Service tap cost may change yearly		

Gene Street proposed 8" water main extension ---- Cost Estimate

ITEM	QUANTITY	UNIT	TOTAL COST	COST
8" PVC Pipe & Fittings	530	LF	22.00	\$11,660.00
8" Cast Iron Res. Seated Gate Valve & Box	1	EA	600.00	\$600.00
8"x8"x6" Ductile Iron Anchoring Tee & Block	1	EA	250.00	\$250.00
8" Plug & Block	1	EA	150.00	\$150.00
Fire Hydrant Assembly	1	EA	1,600.00	\$1,600.00
Roadway Restoration	16	SY	40.00	\$640.00
Restoration	1	LS	500.00	\$500.00
Sub-Total				\$15,400.00
20% Conting. (Eng, Etc.)				3,080.00
Total Cost				\$18,480.00

Average Cost/Foot	50' Participation Amount by District for each Customer	# of Customers connecting to main.	Total Customer Cost	Cost for each Customer
\$34.87	\$1,743.40	1	\$16,736.60	\$16,736.60
		2	\$14,993.21	\$7,496.60
		3	\$13,249.81	\$4,416.60
		4	\$11,506.42	\$2,876.60
		5	\$9,763.02	\$1,952.60
		6	\$8,019.62	\$1,336.60
		7	\$6,276.23	\$896.60
		8	\$4,532.83	\$566.60
		9	\$2,789.43	\$309.94
		10	\$1,046.04	\$104.60

Richard Harrison, 11:47 AM 8/27/01 , Mr. Lawson on Amsterdam Road

X-Auth-No:
X-Sender: rharr@192.9.200.6
X-Mailer: QUALCOMM Windows Eudora Light Version 3.0.5 (32)
Date: Mon, 27 Aug 2001 11:47:37 -0400
To: JSCEBEN@NKYWATER.ORG
From: Richard Harrison <rharr@nkywater.org>
Subject: Mr. Lawson on Amsterdam Road

John, Mr. Lawson left me a voice mail wondering if he was going to get service from Amsterdam Road. I didn't return the call. Will you call him at 341-2482 to check this out and let him know where he stands.

Richard

3001 Amsterdam Rd.

Campbell/Kenton

2020 Water Management
Planning Council

2004 Project Profiles Submittal Summaries

Campbell County Area

Subdistrict F
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 Year Project HIGH PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Grandview Rd. (Including Amy Lou Dr.)	Alexandria/Unincorporated	43	1.70	\$ 588,107.52	8976	65.52	25.29
Heck Rd. (Upper Tug Fork to dead end)	Alexandria	12	0.70	\$ 242,161.92	3696	65.52	17.14
West Main Street (Alex.)-(1/2 mile from Licking Pike towards Alex.)	Unincorporated	10	0.50	\$ 172,972.80	2640	65.52	20.00
Steffen Rd. (end of line to dead end)	Unincorporated	11	0.40	\$ 138,378.24	2112	65.52	27.50
Licking Pike (From Evergreen Subdivision to Cold Stream (Ripple Cr.Rd))	Unincorporated	7	0.40	\$ 138,378.24	2112	65.52	17.50
Licking Pike (From Tollgate (Alex-Licking) to Rifle-Range Rd.)	Unincorporated	31	1.70	\$ 588,107.52	8976	65.52	18.24
Licking Pike (From Rifle-Range Rd. to Sub D)	Unincorporated	7	0.85	\$ 294,053.76	4488	65.52	8.24
		121	6.25	\$ 2,162,160.00	33000		

Pendleton County Water District
0-2 Year Project HIGH PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
				\$ 850,000.00			

12" Main to County Line
New Master Meter Vault

Project Profile MPTP Chemical Building
Northern Kentucky Water District
Campbell County Unserved Streets
0-2 Year Project HIGH PRIORITY

\$ 4,500,000.00

Memorial Parkway Treatment Plant Chemical Building

In June 2002, the Northern Kentucky Water District acquired the City of Newport water distribution system and Memorial Parkway Water Treatment Plant to help regionalize the water system. The Memorial Parkway Treatment Plant (MPTP) will help provide some treatment plant redundancy and will help meet future growth needs for the District's service area. The existing chemical building at the MPTP is in poor condition and was designed for dry chemical storage only. The District needs to use liquid chemicals to meet current standards for water treatment. This proposed project would involve rebuilding the existing chemical building and appurtenances, updating the outdated chemical pumps and piping, and upgrading the liquid chemical storage areas to include a containment system. These improvements will help improve the efficiency of the plant and the overall site safety which would benefit our existing and future customers. This project also includes some modifications to the reservoir pumping station and pipe work. The estimated cost for this project is \$4,500,000. The District is planning to fund the \$500,000 in design cost and use the State Revolving Loan Funds for the \$4,000,000 in construction cost for this critical regional project.

Subdistrict H
 Project Summary #1
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Blangey Rd.		10	0.60	\$ 174,240.00	3168	55	16.67
Dodsworth Ln.	Unincorporated	25	1.30	\$ 377,520.00	6864	55	19.23
Fender Rd.	Melbourne	10	0.90	\$ 261,360.00	4752	55	11.11
Four Mile Pike (Melbourne to Silver Grove)	Melbourne	1	0.50	\$ 145,200.00	2640	55	2.00
Four Mile Pike (Nelson to Woodrun Dr.)	Alexandria/Unincorporated	6	1	\$ 290,400.00	5280	55	6.00
Gunkle Rd. (Gunkle # 1) (Nine Mile Rd to dead end)	Melbourne	7	0.60	\$ 174,240.00	3168	55	11.67
Lower Tug Fork Rd.	Melbourne	6	0.80	\$ 232,320.00	4224	55	7.50
Mystic Rose (Gunkle Rd. #2) (Gunkle Rd to dead end)	Melbourne	8	0.40	\$ 116,160.00	2112	55	20.00
Owl Creek Rd.	Silver Grove	7	1.20	\$ 348,480.00	6336	55	5.83
Reitman Rd.	Alexandria	1	0.30	\$ 87,120.00	1584	55	3.33
Rt.8 (Blangey Rd. to End of line from Ky-1998)	Brent	10	0.60	\$ 174,240.00	3168	55	16.67
Rt.8 (Lester Ln. to River Rd.)	Ft. Thomas	3	2.30	\$ 667,920.00	12144	55	1.30
Rt.8 (Tower Hill to Lester Ln.)	Ft. Thomas	1	0.60	\$ 174,240.00	3168	55	1.67
Tower Hill Rd. (From Rt. 8 to Watchpoint)	Ft. Thomas	4	0.10	\$ 29,040.00	528	55	40.00
Vineyard (Gunkle Rd. #3) (From end of line to bottom of hill)	Melbourne	1	0.50	\$ 145,200.00	2640	55	2.00
Vineyard (Gunkle Rd. # 3) (From bottom of hill to line from ten mile)	Melbourne	8	0.50	\$ 145,200.00	2640	55	16.00
		108	12.20	\$ 3,542,880.00	64416		

Subdistrict J
 Project Summary #2
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Geoltz Rd (from Murnan to dead end)		12	1.00	\$ 290,400.00	5280	55	12.00
Licking Pike (From end of line at Tiphauer to Murnan Rd)		3	0.50	\$ 145,200.00	2640	55	6.00
Poplar Thicket Rd. (Licking Pike to dead end)		31	2.20	\$ 638,880.00	11616	55	14.09
Rifle Range Rd. (From bridge to end of road)		12	1.60	\$ 464,640.00	8448	55	7.50
Rifle Range Rd. (From Licking Pike to bridge)		29	0.90	\$ 261,360.00	4752	55	32.22
Tippenhauer Rd. From #211 to end of road		16	1.40	\$ 406,560.00	7392	55	11.43
		103	7.60	\$ 2,207,040.00	40128		

Subdistrict L
 Project Summary #3
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Creektrace (Pond Creek) (From Indian Trace Rd. to Bridge)	Unincorporated -25 lot SubDiv.	20	0.50	\$ 145,200.00	2640	55	40.00
Creektrace (Pond Creek) (From John Miller Rd. to Indian Trace Rd.)	Unincorporated	6	0.20	\$ 58,080.00	1056	55	30.00
Creektrace (Pond Creek) (From Licking Pike to John Miller Rd.)	Unincorporated	10	1.60	\$ 464,640.00	8448	55	6.25
Creektrace (KY Rt. 536) (From U.S. 27 to Licking Pike)	Unincorporated	1	0.80	\$ 232,320.00	4224	55	1.25
Indian Trace Rd. (From U.S. 27 to Licking Pike)	Unincorporated	18	0.90	\$ 261,360.00	4752	55	20.00
Indian Trace Rd. (From JoAnn to End of road)	Unincorporated	15	0.60	\$ 174,240.00	3168	55	25.00
JoAnn Lane (From Creek Trace (Pond Cr.) to JoAnn)	Unincorporated	19	0.40	\$ 116,160.00	2112	55	47.50
John Miller (From Creektrace to dead end)	Unincorporated	10	0.50	\$ 105,600.00	2640	40	20.00
Lauren (From Creek Trace (Rt. 536) to dead end)	Unincorporated	18	0.40	\$ 116,160.00	2112	55	45.00
Lees Road (From Pleasant Rdg. Rd. To Tarvin Rd.)	Unincorporated	14	1.00	\$ 290,400.00	5280	55	14.00
Maddox Rd (Madonna to dead end)	Claryville	28	1.20	\$ 348,480.00	6336	55	23.33
Pleasant Rdg. Rd. (From Lees Rd. to Harrisburg Hill Rd.)	Unincorporated	15	1.10	\$ 319,440.00	5808	55	13.64
Pleasant Rdg. Rd. (From Visalia Rd to Lees Rd.)	Unincorporated	11	0.70	\$ 203,280.00	3696	55	15.71
Pond Creek Road (From Bridge to Visalia Rd.)	Unincorporated	16	1.00	\$ 290,400.00	5280	55	16.00
Tarvin Rd. (Schmudde) (From Lees Rd to Phillips Creek Rd. (Schmudde))	Unincorporated	1	0.50	\$ 145,200.00	2640	55	2.00
Tarvin Rd. (Schmudde) (From Phillips Creek Rd. (Schmudde) to Licking Pike)	Unincorporated	3	0.70	\$ 203,280.00	3696	55	4.29
Visalia Road (Pleasant Ridge to Pond Creek)	Unincorporated	20	1.30	\$ 377,520.00	6864	55	15.38
		225	13.40	\$ 3,851,760.00	70752		

Subdistrict N
 Project Summary #4
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Branch Lick (Lower Lick Branch Rd.) (from Stone House to dead end)	Unincorporated	6	0.80	\$ 232,320.00	4224	55	7.50
Lower Grandview Rd. (from Stone House to dead end)	Unincorporated	5	0.30	\$ 87,120.00	1584	55	16.67
Neises (From Rt.8 to dead end)	Unincorporated	2	0.20	\$ 42,240.00	1056	40	10.00
Oneonta Rd.(From Rt.8 to Truesdale)	California/Unincorporated	10	0.80	\$ 232,320.00	4224	55	12.50
Oneonta Rd.(From Truesdale to Washington Tr. Rd.)	Unincorporated	7	0.70	\$ 203,280.00	3696	55	10.00
Oneonta Rd.(From Washington Tr. Rd. to Stonehouse Rd. (4&12 Mile)	Unincorporated	3	0.30	\$ 63,360.00	1584	40	10.00
Painter Rd (From Washington Tr. Rd to Route 8)	California/Unincorporated	8	1.50	\$ 435,600.00	7920	55	5.33
Route 8 (Oneonta to Painter Rd.)	California/Unincorporated	11	1.60	\$ 464,640.00	8448	55	6.88
Rt.8 (From end of line #7610 to Oneonta Rd.)	California/Unincorporated	6	0.40	\$ 116,160.00	2112	55	15.00
Stonehouse Rd. (4&12 Mile Rd.) (Branch Lick Rd. (Lower Lick Br.) to Oneonta Rd.)	Unincorporated	1	0.20	\$ 58,080.00	1056	55	5.00
Stonehouse Rd. (4&12 Mile Rd.) (End of 2" line to Branch Lick Rd (Lower Lick Br.))	Unincorporated	12	0.50	\$ 145,200.00	2640	55	24.00
Stonehouse Rd. (4&12 Mile) (Oneonta Rd. to A.A. Hwy)	Unincorporated	5	0.60	\$ 174,240.00	3168	55	8.33
Truesdale Rd. (Box 7568 to Oneonta)	Melbourne	15	1.00	\$ 290,400.00	5280	55	15.00
Upper Lick Branch Rd. (From Grandview to AA Hwy)	Unincorporated	13	0.80	\$ 232,320.00	4224	55	16.25
Washington Tr. Rd (From Oneonta to Painter Rd.)	California/Unincorporated	9	0.70	\$ 203,280.00	3696	55	12.86
Washington Tr. Rd (Painter Rd. to End of 3' line on Wash. Tr.)	California/Unincorporated	17	0.80	\$ 232,320.00	4224	55	21.25
		130	11.20	\$ 3,212,880.00	59136		

Subdistrict P
 Project Summary #5
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Bob-White Lane	Unincorporated	8	0.70	\$ 203,280.00	3696	55	11.43
California Cross Rds.(From Route 8 to Washington Tr.Rd.)	Calif.(Res svrd frm X-Entry line	12	1.10	\$ 319,440.00	5808	55	10.91
Daniels Rd. (From Schababerle Hill to Route 10)	Unincorporated	26	2.10	\$ 609,840.00	11088	55	12.38
Kennedy (From Daniels to dead end)	Unincorporated	2	0.1	\$ 29,040.00	528	55	20.00
Kennedy (From AA Hwy to dead end)	Unincorporated	2	0.10	\$ 29,040.00	528	55	20.00
Koehler Rd.(From Calif. Cr. Rds. to Route 10)	California/Unincorporated	8	0.90	\$ 261,360.00	4752	55	8.89
Picnic Rd. (From Wagner to dead end)	Unincorporated	2	0.1	\$ 29,040.00	528	55	20.00
Route 10 (From Short Cut Rd. (A. A. Hwy. Connector) to Daniels Road)	Unincorporated	1	0.50	\$ 145,200.00	2640	55	2.00
Route 10 (From Daniels Road to Pendelton Co. Line)	Unincorporated	4	0.60	\$ 174,240.00	3168	55	6.67
Route 10 (From Smith Rd. to Short Cut Rd. (A. A. Hwy. Connector))	Unincorporated	15	0.90	\$ 261,360.00	4752	55	16.67
Schababerle Hill (From Daniels Rd. to Flagg Springs Pike (Route 10))	Unincorporated	4	1.40	\$ 406,560.00	7392	55	2.86
Wagner Rd (From #??? (Dead Timber Rd.) to Picnic	California/Unincorporated	10	1.70	\$ 493,680.00	8976	55	5.88
Washington Tr.Rd. South End (End of 3" line to A.A. Hwy.)	California/Unincorporated	10	0.80	\$ 232,320.00	4224	55	12.50
		104	11.00	\$ 3,194,400.00	58080		

Subdistrict S
 Project Summary #6
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN FOOT	Est. \$ PER FOOT	Customers Per Mile
Barrs Branch Rd. (From End of line on Barrs Br. To Flagg Springs Pike (Rt 10))	Alexandria/Unincorporated	16	1.20	\$ 348,480.00	6336	55	13.33
Flatwoods Rd (From Race Track Rd. to Burns Rd)	Unincorporated	3	1.50	\$ 435,600.00	7920	55	2.00
Ky. State Route 154 (From Burns to PCWD Service area.)	Unincorporated	10	1.00	\$ 290,400.00	5280	55	10.00
Losey Rd. (Phillips Creek to Licking Pike)	Unincorporated	4	0.70	\$ 203,280.00	3696	55	5.71
Newberry Rd. (Dead Timber Rd. #2) (from Wagner Rd. To end of road)	California/Unincorporated	3	0.60	\$ 174,240.00	3168	55	5.00
Phillips Cr. Rd. (Schmudde) (Box 11053 to Tarvin Road)	Unincorporated	4	1.00	\$ 290,400.00	5280	55	4.00
Shaw-Hess Rd (From end of line on Shaw Hess to Persimmon Gr. Pk.)	Unincorporated	2	0.60	\$ 174,240.00	3168	55	3.33
Siry Road (From Flatwoods Rd. To End of PCWD Line at Box 1204)	Unincorporated	19	2.00	\$ 580,800.00	10560	55	9.50
Stonehouse Rd. (4&12 Mile) (A.A. Hwy. to Flagg Springs Pike (Route 10))	Unincorporated	11	0.90	\$ 261,360.00	4752	55	12.22
Wagoner Rd. (Dead Timber Rd. #2) (from end of line To Newberry Rd.)	Alexandria/Unincorporated	7	0.60	\$ 174,240.00	3168	55	11.67
		79	10.10	\$ 2,933,040.00	53328		

Subdistrict U
 Project Summary #7
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Bezold Rd. (From Burns Rd to California Cr. Rds.)	Unincorporated	15	1.00	\$ 290,400.00	5280	55	15.00
Burns Rd. (from Flatwoods Rd. to Bezold Rd.)	Unincorporated	16	1.20	\$ 348,480.00	6336	55	13.33
Burns Rd. (From Flatwoods Rd. to St. Route 154)	Unincorporated	31	2.00	\$ 580,800.00	10560	55	15.50
California Cross Rds.(From Shaw Goetz Rd. to Bezold Rd)	California/Unincorporated	10	1.00	\$ 290,400.00	5280	55	10.00
Decker Rd. (from Bezold to dead end)	California/Unincorporated	2	0.20	\$ 58,080.00	1056	55	10.00
Fisher Rd (From Bezold Rd to Wish Rd.)	Unincorporated	1	0.25	\$ 72,600.00	1320	55	4.00
Fisher Rd (From Haubner Rd. to #13634)	Unincorporated	13	1.40	\$ 406,560.00	7392	55	9.29
Fisher Rd (From Wish Rd. to Haubner Rd.)	Unincorporated	11	1.10	\$ 319,440.00	5808	55	10.00
Shaw Goetz Rd. (from Fischer to dead end)	Unincorporated	11	0.80	\$ 232,320.00	4224	55	13.75
Wish Rd. (From Reis Ridge Rd. to California Cross Rds.)	Unincorporated	12	1.80	\$ 522,720.00	9504	55	6.67
Wish Rd. (From Fischer to dead end)	Unincorporated	9	0.60	\$ 174,240.00	3168	55	15.00
		131	11.35	\$ 3,296,040.00	59928		

Subdistrict W
 Project Summary #8
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Harrisburg Hill (From Lees to Pleasant Rdg. Rd.)	Unincorporated	23	1.10	\$ 319,440.00	5808	55	20.91
Harrisburg Hill (From Pleasant Ridge to dead end)	Unincorporated	10	0.50	\$ 145,200.00	2640	55	20.00
Kenton Station Rd. (From Lees to Pleasant Rdg. Rd.)	Unincorporated	9	0.90	\$ 261,360.00	4752	55	10.00
Kenton Station Rd. (From Pleasant Rdg. Rd. to Pond Cr. Rd.)	Unincorporated	4	1.00	\$ 290,400.00	5280	55	4.00
Lees Road (From Harrisburg Hill Rd. to Kenton Station)	Unincorporated	4	0.40	\$ 116,160.00	2112	55	10.00
Lees Road (From Tarvin Rd. to Harrisburg Hill Rd.)	Unincorporated	18	0.70	\$ 203,280.00	3696	55	25.71
Pleasant Rdg. Rd. (From Harrisburg Hill Rd. to Kenton Station Rd.)	Unincorporated	4	1.10	\$ 319,440.00	5808	55	3.64
Pond Creek Road (From Visalia Rd. to Kenton station Rd.)	Unincorporated	31	3.10	\$ 900,240.00	16368	55	10.00
		103	8.80	\$ 2,555,520.00	46464		

Subdistrict X
 Project Summary #9
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Bakerfield Rd. (Off of Boone Smith Rd.)	Unincorporated	22	0.90	\$ 261,360.00	4752	55	24.44
Boone Smith Rd.(From Bakerfield Rd.to PCWD end of line)	Unincorporated	12	0.70	\$ 203,280.00	3696	55	17.14
Boone Smith Rd.(From Pleasant Rdg Rd to Bakerfield Rd)	Unincorporated	4	0.20	\$ 58,080.00	1056	55	20.00
Clay Rdg. Rd. (From Morningview Rd. Griffen Fords Rd.)	Unincorporated	5	0.20	\$ 58,080.00	1056	55	25.00
Clay Rdg. Rd. (From Pleasant Rdg Rd. to Morningview Rd)	Unincorporated	12	0.80	\$ 232,320.00	4224	55	15.00
Clay Rdg. Rd. (From Wolf Rd. to Pleasant Rdg Rd.)	Unincorporated	9	0.60	\$ 174,240.00	3168	55	15.00
Enzweiler	Alexandria	17	0.6	\$ 174,240.00	3168	55	28.33
Morningview Rd. (Clay Ridge to dead end.)	Unincorporated	16	1.80	\$ 522,720.00	9504	55	8.89
Orlando (U.S. 27 to dead end)	Alexandria	7	0.1	\$ 29,040.00	528	55	70.00
Pleasant Rdg. Rd. (From Boone Smith Road to Clay Rdg. Rd.)	Unincorporated	20	1.30	\$ 377,520.00	6864	55	15.38
Pleasant Rdg. Rd. (From Kenton Station Rd. to Boone Smith Road)	Unincorporated	6	0.60	\$ 174,240.00	3168	55	10.00
Wolf Road (From Clay Rdg. Rd. to end of road)	Unincorporated -24 Lot Subdivis	9	0.60	\$ 174,240.00	3168	55	15.00
Wolf Road (From Kenton Station Rd. to Clay Rdg. Rd.)	Unincorporated	9	1.40	\$ 406,560.00	7392	55	6.43
		148	9.80	\$ 2,845,920.00	51744		

Subdistrict Y
 Project Summary #10
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET

A.A.Hwy (Pendleton Cnty line to Pooler Creek #1

COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN FOOT	Est. \$ PER FOOT	Customers Per Mile
Will/Cld Sprng/Alex/Cal/Ment	20	15.90	\$ 4,617,360.00	83952	55	1.26

Subdistrict Z
 Project Summary #11
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Baynum Hill Rd.	Unincorporated	12	0.70	\$ 203,280.00	3696	55	17.14
Low Gap Rd (From end of line to Tollgate (Alex-Licking Pike))	Unincorporated	2	0.50	\$ 145,200.00	2640	55	4.00
Reis Lane (Decker Rd.)	Unincorporated	11	0.30	\$ 87,120.00	1584	55	36.67
Reis Ridge (From Shaw Goetz to Reis Lane (Decker Rd))	Unincorporated	9	0.50	\$ 145,200.00	2640	55	18.00
Reis Ridge (From Reis Lane (Decker Rd) to end of road)	Unincorporated	9	0.60	\$ 174,240.00	3168	55	15.00
Schababerle Hill (From Wesley Chapel Rd. to Daniels Rd.)	Unincorporated	16	0.65	\$ 188,760.00	3432	55	24.62
Shaw Goetz Rd. (From Flagg Springs Pike (Route 10) to Reis Ridge Rd)	Unincorporated	19	1.10	\$ 319,440.00	5808	55	17.27
Wesley Chapel Rd. (From Calif. Cr.Rds. To Schababerle Hill)	Unincorporated	18	1.10	\$ 232,628.00	5808	55	16.36
Wesley Chapel Rd. (From Schababerle Hill to Flagg Springs Pike (Route 10))	Unincorporated	33	1.80	\$ 522,720.00	9504	55	18.33
		129	7.25	\$ 2,018,588.00	38280		

Project Summary #PCWD
 Pendleton County Water District
 Pendleton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Muinn Rd. (Aulick to dead end)	Unincorporated	15	0.70	\$ 203,280.00	3696	55	21.43
Nagel Rd. (From Ridge View Estates to Hissem Rd.)	Unincorporated	10	0.70	\$ 203,280.00	3696	55	14.29
Hissem Rd. (from Fairlane to Nagel)	Unincorporated	8	0.90	\$ 261,360.00	4752	55	8.89
Aulick Rd. (From End of PCWD service Area to Muinn Rd.)	Unincorporated	9	0.7	\$ 203,280.00	3696	55	12.86
Aulick Rd. (From Muinn Rd. to Demossville Rd.)	Unincorporated	4	0.4	\$ 116,160.00	2112	55	10.00
Hissem Rd. (From Fairlane to County Line)	Unincorporated	2	0.40	\$ 116,160.00	2112	55	5.00
Hissem Rd. (from Nagel to Aulick)	Unincorporated	9	0.90	\$ 190,080.00	4752	40	10.00
Newkirk Road (#13634 to Peach Grove Rd. (Ky rt. 154))	Unincorporated	3	0.3	\$ 87,120.00	1584	55	10.00
Yelton Road (From Rt. 154 to dead end)	Unincorporated	9	0.60	\$ 126,720.00	3168	40	15.00
		69	5.60	\$ 1,507,440.00	29568		

Project Summary #0
 Northern Kentucky Water District
 Campbell County Unserved Streets

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Rt.8 (River Rd. to Blangey Rd.))	Brent	0	0.30	\$ 87,120.00	1584	55	0.00
<i>Projects with no home</i> 250,000 gallon elevated water tank Booster Pumping Station	Unincorporated Unincorporated						

Subdistrict D Phase V
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 Year Project FUNDED - UNDER CONSTRUCTION 08/03

STREET	COMMENTS	NUMBER OF UNSERVED HOUSEHOLDS	DISTANCE (miles)	ESTIMATED PROJECT COST	FEET OF MAIN	Est. \$ PER FOOT	Customers Per Mile
Licking Pike (from Walker Dr. to Poplar Thicket or #4006)		18	1.46	\$ 338,453.08	7882	42.94	12.33
Steffen Road (From Licking Pike to 1050 feet)		6	0.2	\$ 39,191.13	1023	38.31	30.00
		24	1.66	\$ 377,644.21	8905		

Campbell/Kenton

2020 Water Management
Planning Council

2004 Project Profiles Submittal Summaries

Kenton County Area

Project Summary Subdistrict G
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

<u>Street</u>	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bramlage Road	Banklick to Wilson	23	0.90	\$ 388,285.92	Independence	4752	81.71	25.56
Bullock Pen Road	Old Ky 17 to D.E.	20	0.70	\$ 302,000.16	Erlanger	3696	81.71	28.57
Fowler Creek Road	Pelly to Cox	26	1.30	\$ 560,857.44	Independence	6864	81.71	20.00
Klein Road	Visalia to D.E.	32	1.00	\$ 431,428.80	SKC	5280	81.71	32.00
Petty Road	Marshall to End of Sub A	26	1.00	\$ 431,428.80	SKC	5280	81.71	26.00
Pleasure Isle Drive	New KY 17 to D.E.	10	0.19	\$ 81,971.47	Erlanger	1003.2	81.71	52.63
		137	5.09	\$ 2,195,972.59		26875.2		

Project Summary Bullock Pen Water Line Extension Phase 6
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bagby Road	US 25 to Parker Grove	34	2.40	\$ 240,768.00	SKC	12672	19	14.17
Carlisle Road	KY 14 to Parker Grove	45	1.90	\$ 190,608.00	SKC	10032	19	23.68
Parker Grove	KY 14 to Grant County Line (Bullock Pen)	34	2.20	\$ 220,704.00	SKC	11616	19	15.45
Peoples Cemetary	Bagby Rd to dead end (Bullock Pen)	3	0.20	\$ 20,064.00	SKC	1056	19	15.00
		116	6.70	\$ 672,144.00		35376		

Bull... en Water District Phase 9
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Anderson Road	Gardnersville to D.E.	11	0.90	\$ 104,544.00	SKC	4752	22	12.22
Courtney Road	Walton Veron Road to Boone County Line	26	0.70	\$ 81,312.00	SKC	3696	22	37.14
Eads Road	I-71/75 to Walton Verona Road	14	1.35	\$ 156,816.00	SKC	7128	22	10.37
Gardnersville Road	End of Sub C to Anderson Road	3	0.60	\$ 69,696.00	SKC	3168	22	5.00
Grassy Creek Road	Gardnersville to D.E.	17	1.20	\$ 139,392.00	SKC	6336	22	14.17
Paxton Road	End of Sub C to Parker Grove	9	1.50	\$ 174,240.00	SKC	7920	22	6.00
Lunsford Road	Off KY 14 (Bullock Pen)	13	0.70	\$ 81,312.00	SKC	3696	22	18.57
Carter Chappel Road		1	0.40	\$ 46,464.00	SKC	2112	22	2.50
Menifee Road		0	0.30	\$ 34,848.00	SKC	1584	22	0.00
Stephenson Road	Off KY 14 (Bullock Pen)	17	1.10	\$ 127,776.00	SKC	5808	22	15.45
Shady Lane		0	0.50	\$ 58,080.00	SKC	2640	22	0.00
		111	9.25	\$ 1,074,480.00		48840		

Subdistrict 1
 Project Summary #1
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

Comment:

Street	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Coons Branch Road	1	0.20	\$ 58,080.00	Covington	1056	55	5.00
Decoursey	2	0.60	\$ 174,240.00	Covington	3168	55	3.33
Erlanger Road	2	0.85	\$ 246,840.00	Erlanger	4488	55	2.35
Eubanks Road	10	0.40	\$ 116,160.00	Crescent Spgs	2112	55	25.00
Forest View Lane	3	0.10	\$ 29,040.00	Taylor Mill	528	55	30.00
Fuchs Road	1	0.10	\$ 29,040.00	Elsmere	528	55	10.00
Highwater Road	5	0.50	\$ 145,200.00	Villa Hills	2640	55	10.00
Horsebranch Road	3	0.17	\$ 49,368.00	Edgewood	897.6	55	17.65
Locust Pike	1	0.50	\$ 145,200.00	Ryland Heights	2640	55	2.00
Misty Lane	5	0.70	\$ 203,280.00	Covington	528	55	50.00
Montague Road	4	0.5	\$ 145,200.00	Erlanger	3696	55	5.71
Pin Oak Lane	12	0.90	\$ 551,760.00	Villa Hills	2640	55	2.00
Route 8	9	0.30	\$ 87,120.00	Taylor Mill	10032	55	6.32
Route 8	8	0.25	\$ 72,600.00	Covington	4752	55	10.00
Wilson Road	4	0.40	\$ 116,160.00	Taylor Mill	1584	55	26.67
Worthington Drive	6	31.15	\$ 7,807,635.26	Taylor Mill	1320	55	16.00
Taylor Mill Road	560				2112	55	15.00

Sub-district K
 Project Summary #2
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Decoursey	I-275 to end of Sub-R near Locust Pike	10	0.90	\$ 261,360.00	Fairview	4752	55	11.11
Decoursey	Marshall to end of Sub-R	3	0.70	\$ 203,280.00	Ryland Heights	3696	55	4.29
Fowler Creek Road	Madison to Pelly	20	1.80	\$ 522,720.00	Covington	9504	55	11.11
Fowler Creek Road	Cox to Stephens	5	0.50	\$ 145,200.00	Independence	2640	55	10.00
Lambs Ferry Road	Whites Road to Whites Road	10	1.80	\$ 522,720.00	Ryland Heights	9504	55	5.56
Marshall Road	KY 177 to Klette	14	0.80	\$ 232,320.00	Ryland Heights	4224	55	17.50
Marshall Road	Coleman to Stewart	1	0.80	\$ 232,320.00	Ryland Heights	4224	55	1.25
Old Fowler Creek Road	Off KY 17	3	0.20	\$ 58,080.00	Covington	1056	55	15.00
Scenic Drive	Off Pelly Road	8	0.30	\$ 87,120.00	Independence	1584	55	26.67
Sugar Camp Road	From #6558 to Fowler Creek	9	0.40	\$ 116,160.00	Covington	2112	55	22.50
KY 177	Ryland Lakes C.C. to .35 N. or KY 536	6	1.20	\$ 348,480.00	SKC	6336	55	5.00
		89	9.40	\$ 2,729,760.00		49632		

Subdistrict M
 Project Summary #3
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bethel Grove Road	#12104 to RR Crossing @ Vices Trail	13	0.30	\$ 87,120.00	Visalia	1584	55	43.33
Case Road	Steep Creek to KY 177	5	0.30	\$ 87,120.00	SKC	1584	55	16.67
Cherry	Off KY 17, North of Apple	6	0.20	\$ 58,080.00	Independence	1056	55	30.00
Cody Road	Independence to Jupiter	1	0.10	\$ 29,040.00	Independence	528	55	10.00
Cody Road	Flagstone to RR Tracks	7	0.56	\$ 162,624.00	Independence	2956.8	55	12.50
Cody Road	RR Tracks to Webster	7	0.50	\$ 145,200.00	Independence	2640	55	14.00
Cody Road	RR Tracks to Troopers Crossing	6	0.60	\$ 174,240.00	Independence	3168	55	10.00
Far Hills Drive	RR Tracks to Troopers Crossing	3	0.11	\$ 31,944.00	Independence	580.8	55	27.27
Independence Station Rd	From end of 16" to D.E.	3	0.40	\$ 116,160.00	Independence	2112	55	7.50
Independence Station Rd	Cody to R.R. Tracks	3	0.30	\$ 87,120.00	Independence	1584	55	10.00
Justice Lane	Justice to RR Tracks	3	0.30	\$ 87,120.00	Independence	1584	55	20.00
Lakeview Drive	Existing D.E. of 8" to D.E.	6	0.30	\$ 87,120.00	Independence	1584	55	40.00
Locust Lane	Off Taylor Mill Road, South of Harris	4	0.10	\$ 29,040.00	SKC	528	55	13.33
Madison Pike	KY 17 to D.E.	2	0.15	\$ 43,560.00	SKC	792	55	4.29
Mann Road	Old Richardson Road to Far Hills	3	0.70	\$ 203,280.00	Independence	3696	55	14.00
McHugh Lane	Visalia to Steep Creek	21	1.50	\$ 435,600.00	SKC	7920	55	6.67
Nelson Road	Off Independence Station Road	2	0.30	\$ 87,120.00	Independence	1584	55	10.00
Pruett	Narrows to Deer Chase	1	0.10	\$ 29,040.00	Erlanger	528	55	15.00
Rice Road #1	Marshall to Petty	6	0.40	\$ 116,160.00	SKC	2112	55	0.00
Stafford Heights Lane	Off Mills Road	0	0.11	\$ 31,944.00	Independence	580.8	55	25.00
Steep Creek	Off Harris Pike	5	0.20	\$ 58,080.00	Independence	1056	55	14.23
Stephens Drive	Marshall to KY 177	37	2.60	\$ 755,040.00	SKC	13728	55	2.50
Tamarita Lane	Don Victor to Oliver	1	0.40	\$ 116,160.00	Independence	2112	55	25.00
Vices's Trail	Harris to KY 16	3	0.12	\$ 34,848.00	Independence	633.6	55	7.79
Upton Drive	From KY177 go North 0.77 miles(south end)	6	0.77	\$ 223,608.00	SKC	4065.6	55	16.00
Webster Road	Cody to D.E.	4	0.25	\$ 72,600.00	Independence	1320	55	30.00
Webster Road	Off Cody Road	6	0.20	\$ 58,080.00	Independence	1056	55	15.00
Webster Road	North of Independence Station	3	0.20	\$ 58,080.00	Independence	1056	55	12.50
Webster Road	South of Independence Station	5	0.40	\$ 116,160.00	Independence	2112	55	27.14
Webster Road	Richardson Road to D.E.	19	0.70	\$ 203,280.00	Independence	3696	55	3.33
Wehrman Road	KY 16 to D.E.	1	0.30	\$ 87,120.00	Independence	1584	55	
		189	13.17	\$ 3,824,568.00		69537.6		

Subdistrict O
 Project Summary #4
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Banklick Road	Maheer to Independence	17	0.90	\$ 261,360.00	Independence	4752	55	18.89
Banklick Road	Independence to Bramlage	1	0.40	\$ 116,160.00	Independence	2112	55	2.50
Banklick Road	Bramlage to Walton-Nicholson	15	1.40	\$ 406,560.00	Independence	7392	55	10.71
Bird Road	D.E. near Wynewood to end of road	2	0.30	\$ 87,120.00	SKC	1584	55	6.67
Conley Road	Kenton Station to KY 177	15	1.30	\$ 377,520.00	SKC	6864	55	11.54
Gene Street	Off Walton Nicholson Road	4	0.25	\$ 72,600.00	SKC	1320	55	16.00
Graven Road	End of Sub C to Wright Road	3	0.25	\$ 72,600.00	SKC	1320	55	12.00
Hergott Drive	Off KY 17, Norther of Callant	4	0.60	\$ 174,240.00	SKC	3168	55	6.67
Independence Road	End of Sub C to Banklick	6	0.50	\$ 145,200.00	SKC	2640	55	12.00
James Road	North of Moffett	1	0.10	\$ 29,040.00	SKC	528	55	10.00
James Road	South of Moffett	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
Kenton Station Road	KY 177 to D.E.	5	0.20	\$ 58,080.00	SKC	1056	55	25.00
KY 177	End of Visalia project to Conley Road	14	0.78	\$ 226,512.00	Visalia	4118.4	55	17.95
North Lake Road	White Villa - Off Decoursey	27	1.10	\$ 319,440.00	SKC	5808	55	24.55
Rosanna Lane	Off of Callant	4	0.40	\$ 116,160.00	SKC	2112	55	10.00
Spruce View Drive	Walton Nicholson to D.E.	2	0.20	\$ 58,080.00	SKC	1056	55	10.00
Trace Run Road	Off of Moffett	9	0.80	\$ 232,320.00	SKC	4224	55	11.25
Wright Road	Graven to D.E.	4	0.10	\$ 29,040.00	SKC	528	55	40.00
Wright Road	Banklick to Graven	14	1.20	\$ 348,480.00	SKC	6336	55	11.67
		150	10.98	\$ 3,188,592.00		57974.4		

Subdistrict Q
 Project Summary #5
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Armstrong Road	Off Moffett	3	0.40	\$ 116,160.00	SKC	2112	55	7.50
Fontanna	KY 177	16	0.60	\$ 174,240.00	SKC	3168	55	26.67
Hempfling Road	Oak Island to Rich	12	1.30	\$ 377,520.00	SKC	6864	55	9.23
Hempfling Road	Sub C D.E. to Navaho Road	26	1.50	\$ 435,600.00	SKC	7920	55	17.33
Hempfling Road	Navaho to Oak Island	11	0.65	\$ 188,760.00	SKC	3432	55	16.92
Kenton Station Road	Martin to Rector	20	1.80	\$ 522,720.00	SKC	9504	55	11.11
KY 177	#14443 south of Kenton Station to Rich Ro	17	2.30	\$ 667,920.00	Kenton	12144	55	7.39
Moffett Road	Armstrong to Kenton Station	3	1.20	\$ 348,480.00	SKC	6336	55	2.50
Rich Road	Fiskburg to KY 177	9	0.60	\$ 174,240.00	SKC	3168	55	15.00
Rich Road	End of Sub C to Hempfling	7	0.70	\$ 203,280.00	SKC	3696	55	10.00
Rich Road	Hempfling to Little Cruises	2	0.40	\$ 116,160.00	SKC	2112	55	5.00
Rich Road	Little Cruises to Fiskburg	16	1.00	\$ 290,400.00	SKC	5280	55	16.00
Washboard Road	Off KY 177	4	0.10	\$ 29,040.00	SKC	528	55	40.00
		146	12.55	\$ 3,644,520.00		66264		

Subdistrict T
 Project Summary #6
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Campbell Drive	US 25 to D.E.	5	0.70	\$ 203,280.00	SKC	3696	55	7.14
Eads Road	US 25 to I-71/75	5	0.70	\$ 203,280.00	SKC	3696	55	7.14
Fiskburg Road	Alexander to Rich Road	4	0.60	\$ 174,240.00	SKC	3168	55	6.67
Gleason Road	KY 17 to D.E.	9	0.30	\$ 87,120.00	SKC	1584	55	30.00
Jones Road	Walton to D.E.	35	1.40	\$ 406,560.00	SKC	7392	55	25.00
Kensington Road	Off Green Road	2	0.20	\$ 58,080.00	SKC	1056	55	10.00
KY 177	KY 14 to St. Marys	16	1.20	\$ 348,480.00	SKC	6336	55	13.33
KY 177	St. Mary Rd to Alexander Road	9	1.30	\$ 377,520.00	SKC	6864	55	6.92
Little Cruises Creek Rd	KY 17 to Rich Road	32	2.50	\$ 726,000.00	SKC	13200	55	12.80
Navaho Road	Hempling to D.E.	1	0.40	\$ 116,160.00	SKC	2112	55	2.50
Northcut Road	Jones Road to D.E.	8	0.40	\$ 116,160.00	SKC	2112	55	20.00
Oak Island	Off of Moffett	3	0.80	\$ 232,320.00	SKC	4224	55	3.75
Sawgrass Road	Off Green Road	2	0.10	\$ 29,040.00	SKC	528	55	20.00
		131	10.60	\$ 3,078,240.00		55968		

Subdistrict V
 Project Summary #7
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Alexander Road	Saint Marys Road to KY 177	35	2.60	\$ 755,040.00	SKC	13728	55	13.46
Alexander Road	KY 177 to D.E.	9	1.40	\$ 406,560.00	SKC	7392	55	6.43
Bethel Grove Road	End Sub E to D.E.	3	0.22	\$ 63,888.00	Visalia	1161.6	55	13.64
Dixon Drive	Rich Road to D.E.	23	1.60	\$ 464,640.00	SKC	8448	55	14.38
Elliot Road	KY 17 to D.E.	16	0.90	\$ 261,360.00	SKC	4752	55	17.78
Fiskburg Road	Goshorn to Pfanstiehl Road	1	0.10	\$ 29,040.00	SKC	528	55	10.00
Fiskburg Road	Pfanstiehl to Alexander	7	0.50	\$ 145,200.00	SKC	2640	55	14.00
Goshorn Road	Fiskburg to D.E.	12	0.80	\$ 232,320.00	SKC	4224	55	15.00
Holly Hock	Wolf to D.E.	5	0.10	\$ 29,040.00	Covington	528	55	50.00
Lieberman Drive	Lipsolm to D.E.	8	0.35	\$ 101,640.00	Covington	1848	55	22.86
Locust Pike/Lawnmower	F Feiser Road to # 9684	23	2.50	\$ 726,000.00	Ryland Heights	13200	55	9.20
Porter Road	Tecumseh to existing water line	2	0.28	\$ 81,312.00	Ryland Heights	1478.4	55	7.14
Pfanstiehl Road	Fiskburg to D.E.	11	1.40	\$ 406,560.00	SKC	7392	55	7.86
Rouse	Off KY 177-	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
Saint Marys Road	Fiskburg to KY 177	16	1.20	\$ 348,480.00	SKC	6336	55	13.33
Wolf	Holly Hock to D.E.	8	0.40	\$ 116,160.00	Taylor Mill	2112	55	20.00
		182	14.15	\$ 4,225,320.00		76824		

Project Summary #
Northern Kentucky Water District
Kenton County Unserved Streets

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
KY 177	Alexander Road to Pendleton County Line	0	0.30	\$ 87,120.00	SKC	1584	55	0.00
Sleepy Hollow Road	Existing D.E. near Diamond Ct. to Ludlow	0	1.00	\$ 290,400.00	Covington	5280	55	0.00
Narrows Road	Richardson to Thorntree	0	0.20	\$ 58,080.00	Erlanger	1056	55	0.00
Narrows Road	Thorntree to Nelson (served by spiderline)	1	0.20	\$ 58,080.00	Erlanger	1056	55	5.00
Narrows Road	Nelson to D.E. at Erlanger Fire	0	0.20	\$ -	Erlanger	1056	55	0.00
Streets not assigned to a project								
Key West Road	US 25 to D.E. (Bullock Pen)	2	0.20	\$ 58,080.00	SKC	1056	55	10.00

Project Summary Subdistrict E		CONSTRUCTION COMPLETED - SOME FUNDING LEFT OVER						
Northern Kentucky Water District								
Kenton County Unserved Streets								
0-2 year FUNDED PROJECT								
Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bethel Grove Road	Vise's Trail to #12104	20	0.49	\$ 102,841.20	Visalia	2587.2	39.75	40.82
Brandy Lane	Bethel Grove to Licking Station	5	0.08	\$ 16,790.40	Visalia	422.4	39.75	62.50
Bromley-Cres. Springs	Amsterdam to north 0.53 miles toward Bromley	17	0.59	\$ 123,829.20	Crescent Spgs	3115.2	39.75	28.81
Fiskburg Road	KY 17 to Goshorn (KY17 to 1.2 miles)	29	1.21	\$ 253,954.80	SKC	6388.8	39.75	23.97
Ishmail Road	Kenton Area	7	0.20	\$ 41,976.00	Kenton	1056	39.75	35.00
Kenton Station Road	Rector to Conley	10	0.77	\$ 161,607.60	SKC	4065.6	39.75	12.99
Kenton Station Road	Conley to Moffett	6	0.50	\$ 104,940.00	SKC	2640	39.75	12.00
Kenton Station Road	Moffett to KY 177	5	0.28	\$ 58,766.40	SKC	1478.4	39.75	17.86
KY 177	KY 536 North to #11282	8	0.36	\$ 75,556.80	Visalia	1900.8	39.75	22.22
KY 177	KY 536 to Visalia Road	13	0.45	\$ 94,446.00	Visalia	2376	39.75	28.89
KY 177	Visalia Road south to #12246	16	0.44	\$ 92,347.20	Visalia	2323.2	39.75	36.36
KY 177	Kenton Station south to #14443	34	1.28	\$ 268,646.40	Kenton	6758.4	39.75	26.56
KY 177	Kenton Station north to #13361	36	1.34	\$ 281,239.20	Kenton	7075.2	39.75	26.87
Licking Station	Bethel Grove to D.E.	12	0.23	\$ 48,272.40		1214.4	39.75	52.17
Oliver Road	Stephens to Harris	30	0.95	\$ 199,386.00		5016	39.75	31.58
Oliver Road	McCullum to Stephens	3	0.35	\$ 73,458.00		1848	39.75	8.57
St Johns Road	Bromley Crs. Springs to 0.37 miles	5	0.37	\$ 77,655.60		1953.6	39.75	13.51
Vise's Trail	KY 177 to Visalia Rd. to South .23 miles north	13	0.40	\$ 83,952.00		2112	39.75	32.50
Whitaker/McDonald	Off of Old KY 17	6	0.17	\$ 35,679.60		897.6	39.75	35.29
		275	10.46	\$ 2,195,344.80		55228.8		

CONSTRUCTION COMPLETED - SOME FUNDING LEFT OVER

Project Summary Subdistrict R (Fairview/Ryland Heights)
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
KY 177	End of Sub-R (near Kaiser) to Wolf Road	22	0.77	\$ 172,869.31	Fairview	4065.6	42.52	28.57
KY 177	Wolf to Marshall (bridge)	18	0.92	\$ 206,496.58	Ryland Heights	4857.6	42.51	19.57
KY 177	910' to short marshall, 500' short marshall	2	0.1	\$ 22,445.28		528	42.51	20.00
Porter Road		2	0.16	\$ 35,912.45		844.8	42.51	12.50
Tecumseh	Porter to D.E.	8	0.35	\$ 78,558.48		1848	42.51	22.86
		52	2.30	\$ 516,282.10		12144		

Project Summary Klette Road Project
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Klette Road	#3335 to Rice Road	15	1.16	\$ 341,212.61	Independence	6124.8	55.71	12.93
Klette Road	Rice to Marshall	7	1.21	\$ 355,920.05	Independence	6388.8	55.71	5.79
Rice Road #2	Off Klette Road	16	0.45	\$ 132,366.96	Independence	2376	55.71	35.56
		38	2.82	\$ 829,499.62		14889.6		

Campbell/Kenton

2020 Water Management
Planning Council

2005 Project Profiles Submittal Summaries

Kenton County Area

Project Profile Kenton County Water Unserved and Underserved Project 1
Northern Kentucky Water District
Kenton County Projects
0-2 Year Project HIGH PRIORITY
WRIS Project Number: WX21117203

\$9,773,000

Underserved and Unserved Projects

This project profile summarizes a critical unserved and underserved \$9,700,000 project that will impact over 60% of the District's nearly 80,000 customer base. This project will also include an additional interconnection between the Bullock Pen Water District and the Northern Kentucky Water District. The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$4,500,000 of State Budget funding and will provide a match for the remaining \$5,273,000 necessary to complete the project.

The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding.

1) The unserved portion of this project includes 5 miles of waterline extension to serve 92 households at a project cost of \$3,100,000. The average number of households served per mile for this project is 18.22 per mile. This project will also improve pressure to two wholesale customers and provide an additional interconnection between the Bullock Pen Water District and the Northern Kentucky Water District. This component will be partially funded by a \$30 monthly customer surcharge and will be part of the District's Subdistrict system designated as Subdistrict 1.

2) The underserved portion of this project includes several components. The first is a 36 inch River Crossing that will provide an additional river crossing across the Licking River for security and redundancy purposes in the event the District loses service from its existing 36 inch Licking River Crossing. This component will impact over 50% of the District's nearly 80,000 customers at an estimated cost of \$2,200,000. The second is the addition of U. V. Treatment at the District's Taylor Mill Treatment Plant to meet EPA regulations regarding Contact Time (CT) at an estimated cost of \$2,500,000. The next component is the construction of a back-up power generator to power the District's Dudley Pumping Station for security purposes at an estimated cost of \$1,500,000. The final component of the underserved portion of the project involves the replacement of a 4,000 foot section of transite (A.C.) water main in Edgewood at an estimated cost of \$473,000.

Project: Water Quality Infrastructure Rehabilitation and Upgrade
 Northern Kentucky Water District
 Kenton County Projects
 0-2 Year Project HIGH PRIORITY
 WRIS Project Number: WX21117204

Water Main Replacement Consensus Project

\$5,000,000

This project profile summarizes a critical underserved \$5,000,000 project that involves the replacement of water mains located in the urban core of the Northern Kentucky Water District's Kenton County Service Area. The location of this project is in Covington and involves the replacement of several water lines with a high incidence of breakage. The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$2,500,000 of State Budget funding and will provide a match for the remaining \$2,500,000 necessary to complete the project. The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding.

<u>Street</u>	<u>Comment:</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>
3rd Street	Crescent to Johnson	\$ 675,000.00	Covington	2500	270
4th Street	Philadelphia to Russell	\$ 504,900.00	Covington	1870	270
5th Street	Philadelphia to Scott	\$ 864,000.00	Covington	3200	270
Philadelphia	3rd to 5th streets	\$ 264,600.00	Covington	980	270
Bakewell	3rd to 5th streets	\$ 283,500.00	Covington	1050	270
Johnson	2nd to 3rd streets	\$ 108,000.00	Covington	400	270
9th Street	Pike to Willow	\$ 459,000.00	Covington	1700	270
Pike Street	Hollman to Willow	\$ 504,900.00	Covington	1870	270
Philadelphia	9th to Pike	\$ 245,700.00	Covington	910	270
Willard	8th to 9th streets	\$ 141,700.00	Covington	545	260
8th Street	Main to Craig	\$ 270,000.00	Covington	1000	270
Bakewell	6th to 9th streets	\$ 423,800.00	Covington	1630	260
4th Street	Madison to Greenup	\$ 256,500.00	Covington	950	270
		\$ 5,001,600.00		18605	

Project Primary Bullock Pen Water Line Extension Phase 6 and Phase 9
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY
 WRIS Project Number: WX21117012

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bagby Road	US 25 to Parker Grove	35	2.40	\$ 696,960.00	SKC	12672	55	14.58
Carlisle Road	KY 14 to Parker Grove	46	1.90	\$ 551,760.00	SKC	10032	55	24.21
Courtney Road	Eads Road to Boone County Line	22	0.70	\$ 203,280.00	SKC	3696	55	31.43
Lunsford Road	Off KY 14 (Bullock Pen)	13	0.70	\$ 203,280.00	SKC	3696	55	18.57
Parker Grove	KY 14 to Grant County Line (Bullock Pen)	32	2.20	\$ 638,880.00	SKC	11616	55	14.55
Paxton Road	End of Sub C to Parker Grove	13	1.50	\$ 435,600.00	SKC	7920	55	8.67
Peoples Cemetery	Bagby Rd to dead end (Bullock Pen)	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
Stephenson Road	Off KY 14 (Bullock Pen)	16	1.10	\$ 319,440.00	SKC	5808	55	14.55
		180	10.70	\$ 3,107,280.00		56496		

Subdist. - 1
 Project Summary
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year project HIGH PRIORITY
 WRIS Project Number: This subdistrict is part of WX21117203

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Banklick Road	Maier to Independence	17	0.90	\$ 289,872.00	Independence	4752	61	18.89
Banklick Road	Bramlage to Walton-Nicholson	15	1.40	\$ 450,912.00	Independence	7392	61	10.71
Banklick Road	Independence to Bramlage	1	0.40	\$ 128,832.00	Independence	2112	61	2.50
Cody Road	#5414 to #5364	6	0.50	\$ 145,200.00	Independence	2640	61	12.00
Cody Road	Flagstone to #5555	7	0.60	\$ 174,240.00	Independence	3168	55	11.67
Holly Hock	Wolf to D.E.	5	0.10	\$ 32,208.00	Covington	528	61	50.00
Lieberman Drive	Lipscomb to Dead end	11	0.35	\$ 112,728.00	Covington	1848	61	31.43
Sugar Camp Road	From #2870 to Fowler Creek	10	0.40	\$ 128,832.00	Covington	2112	61	25.00
Upton Drive	Cody to D.E.	4	0.25	\$ 72,600.00	Independence	1320	61	16.00
Webster Road	Off Cody Road - hydrant at #351 to D.E.	5	0.20	\$ 58,080.00	Independence	1056	61	25.00
Wolf	Holly Hock to D.E.	7	0.40	\$ 128,832.00	Covington	2112	61	17.50
		88	5.50	\$ 1,722,336.00		29040		

Bulloc, Water District Phase 9
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117205

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Anderson Road	Gardnersville to D.E.	10	0.90	\$ 261,360.00	SKC	4752	55	11.11
Eads Road	I-71/75 to county line	14	1.35	\$ 392,040.00	SKC	7128	55	10.37
Gardnersville Road	End of Sub C to Anderson Road	2	0.60	\$ 174,240.00	SKC	3168	55	3.33
Grassy Creek Road	Gardnersville to D.E.	14	1.20	\$ 348,480.00	SKC	6336	55	11.67
		40	4.05	\$ 1,176,120.00		21384		

Subdistrict AA
 Project Summary #1
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117301

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Decoursey	Grand to I-275	2	0.60	\$ 174,240.00	Covington	3168	55	3.33
Erlanger Road	Hartman to Turfway	2	0.85	\$ 246,840.00	Erlanger	4488	55	2.35
Eubanks Road	Erlanger-Crs.Spgs. Road to D.E.	11	0.40	\$ 116,160.00	Crescent Spgs	2112	55	27.50
Forest View Lane	Cleveland Avenue to D.E.	3	0.10	\$ 29,040.00	Taylor Mill	528	55	30.00
Fuchs Road	Garvey Avenue to D.E.	1	0.10	\$ 29,040.00	Elsmere	528	55	10.00
Harrisburg Road	Klein to D.E.	5	0.40	\$ 116,160.00	SKC	2112	55	12.50
Highwater Road	End of Bromley System to River Heights	5	0.50	\$ 145,200.00	Villa Hills	2640	55	10.00
Holdsbranch	End of existing pipe to D.E. of street	6	0.40	\$ 116,160.00	Taylor Mill	2112	55	15.00
Ishmael	End of existing hydrant to #14072	2	0.10	\$ 29,040.00	SKC	528	55	20.00
Lipscomb	Lieberman to D.E.	2	0.40	\$ 116,160.00	Covington	2112	55	5.00
Locust Pike	#9684 To end of Sub R near Whites	1	0.50	\$ 145,200.00	Ryland Heights	2640	55	2.00
Misty Lane	Off KY 17, North of Hands Pike	5	0.10	\$ 29,040.00	Covington	528	55	50.00
Montague Road	Fire Hydrant to Sleepy Hollow	2	0.70	\$ 203,280.00	Covington	3696	55	2.86
River Road (Route 8)	Amsterdam to Chevron	12	1.90	\$ 551,760.00	Villa Hills	10032	55	6.32
Saint Marys Road	Fiskburg to KY 177	7	0.80	\$ 232,320.00	SKC	4224	55	8.75
Spruce View Drive	Walton Nicholson to D.E.	2	0.20	\$ 58,080.00	SKC	1056	55	10.00
Trace Run Road	Off of Moffett	9	0.80	\$ 232,320.00	SKC	4224	55	11.25
Washboard Road	KY 177 to D.E.	4	0.10	\$ 29,040.00	SKC	528	55	40.00
Mason Road	hydrant at #460 to Decoursey	4	0.20	\$ 58,080.00	Taylor Mill	1056	55	20.00
Worthington Drive	Off KY 17, South of Hands Pike	3	0.20	\$ 58,080.00	Covington	1056	55	15.00
		88	9.35	\$ 2,715,240.00		49368		

Subdist... K
 Project Summary #2
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117300

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Decoursey	I-275 to end of Sub-R near Locust Pike	10	0.90	\$ 261,360.00	Fairview	4752	55	11.11
Decoursey	Marshall to end of Sub-R	3	0.70	\$ 203,280.00	Ryland Heights	3696	55	4.29
Fowler Creek Road	Old Madison to Pelly	20	1.80	\$ 522,720.00	Covington	9504	55	11.11
Fowler Creek Road	Cox to Stephens	6	0.50	\$ 145,200.00	Independence	2640	55	12.00
KY 177	Ryland Lakes C.C. to #11282	5	1.40	\$ 406,560.00	SKC	7392	55	3.57
Lambs Ferry Road	Whites Road to Whites Road	11	1.80	\$ 522,720.00	Ryland Heights	9504	55	6.11
Marshall Road	KY 177 to Klette	14	0.80	\$ 232,320.00	Covington	4224	55	17.50
Marshall Road	Coleman to Stewart	1	0.80	\$ 232,320.00	Ryland Heights	4224	55	1.25
Shady Lane	Bagby Rd to county line	0	0.50	\$ 145,200.00	SKC	2640	55	0.00
Tamarita Lane	Harris to KY 16	3	0.12	\$ 34,848.00	Independence	634	55	25.00
		73	9.32	\$ 2,706,528.00		49210		

Subdi. - M
 Project Summary #3
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117302

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Case Road	Steep Creek to KY 177	4	0.30	\$ 87,120.00	SKC	1584	55	13.33
Cherry	Off KY 17, North of Apple	6	0.20	\$ 58,080.00	Independence	1056	55	30.00
Far Hills Drive	From end of 16" to D.E.	3	0.11	\$ 31,944.00	Independence	581	55	27.27
Independence Station Rd	Justice to RR Tracks	3	0.30	\$ 87,120.00	Independence	1584	55	10.00
Justice Lane	Last hydrant to D.E.	6	0.30	\$ 87,120.00	Independence	1584	55	20.00
Lakeview Drive	Off Taylor Mill Road, South of Harris	4	0.10	\$ 29,040.00	SKC	528	55	40.00
Locust Lane	KY 17 to D.E.	2	0.15	\$ 43,560.00	SKC	792	55	13.33
Madison Pike	Old Richardson Road to Far Hills	3	0.70	\$ 203,280.00	Independence	3696	55	4.29
Mann Road	Visalia to Steep Creek	21	1.50	\$ 435,600.00	SKC	7920	55	14.00
McHugh Lane	Off Independence Station Road	2	0.30	\$ 87,120.00	Independence	1584	55	6.67
Menefee Road	Shady Lane to county line	1	0.30	\$ 87,120.00	SKC	1584	55	3.33
Nelson Road	Narrows to Deer Chase	1	0.10	\$ 29,040.00	Erlanger	528	55	10.00
Rich Road	Little Cruises to Fiskburg	17	1.00	\$ 290,400.00	SKC	5280	55	17.00
Steep Creek	Marshall to KY 177	33	2.60	\$ 755,040.00	SKC	13728	55	12.69
Stephens Drive	Don Victor to Oliver	1	0.40	\$ 116,160.00	Independence	2112	55	2.50
Taylor Mill Road	#4860 to Grand	6	0.40	\$ 116,160.00	Taylor Mill	2112	55	15.00
Vises's Trail	From KY177 go North 0.77 miles(south en	6	0.77	\$ 223,608.00	SKC	4066	55	7.79
Webster Road	Richardson Road to D.E.	19	0.70	\$ 203,280.00	Independence	3696	55	27.14
Webster Road	North of Independence Station	3	0.20	\$ 58,080.00	Independence	1056	55	15.00
Webster Road	South of Independence Station	5	0.40	\$ 116,160.00	Independence	2112	55	12.50
Wehrman Road	KY 16 to D.E.	1	0.30	\$ 87,120.00	Independence	1584	55	3.33
		147	11.13	\$ 3,232,152.00		58766		

Subdis. O
 Project Summary #4
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117303

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bird Road	D.E. near Wynewood to end of road	5	0.30	\$ 87,120.00	SKC	1584	55	16.67
Conley Road	Kenton Station to KY 177	15	1.30	\$ 377,520.00	SKC	6864	55	11.54
Gene Street	Off Walton Nicholson Road	4	0.25	\$ 72,600.00	SKC	1320	55	16.00
Graven Road	End of Sub C to Wright Road	3	0.25	\$ 72,600.00	SKC	1320	55	12.00
Hergott Drive	Off KY 17, Norther of Callant	4	0.60	\$ 174,240.00	SKC	3168	55	6.67
Independence Road	End of Sub C to Banklick	5	0.50	\$ 145,200.00	SKC	2640	55	10.00
James Road	South of Moffett	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
James Road	North of Moffett from Amer Legion to D.E.	4	0.30	\$ 87,120.00	SKC	1584	55	13.33
Kenton Station Road	KY 177 to D.E. (Thornhill)	5	0.20	\$ 58,080.00	SKC	1056	55	25.00
KY 177	End of Sub E, past Conley to 13361	15	1.50	\$ 435,600.00	Visalia	7920	55	10.00
Northcut Road	Jones Road to D.E.	8	0.40	\$ 116,160.00	SKC	2112	55	20.00
Pfanstiehl Road	Fiskburg to D.E.	12	1.40	\$ 406,560.00	SKC	7392	55	8.57
Porter Road	Tecumseh to existing water line	2	0.28	\$ 81,312.00	Ryland Heights	1478	55	7.14
Rouse	KY 177 to Rich	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
Stafford Heights Lane	Off Harris Pike	6	0.20	\$ 58,080.00	Independence	1056	55	30.00
White Villa Estates	Lakeshore, Maple, North Lake Rd	26	1.10	\$ 354,288.00	SKC	5808	61	23.64
Wright Road	Graven to D.E.	4	0.10	\$ 29,040.00	SKC	528	55	40.00
Wright Road	Banklick to Graven	14	1.20	\$ 348,480.00	SKC	6336	55	11.67
		138	10.28	\$ 3,020,160.00		54278		

Subdis. 10 Q
 Project Summary #5
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117304

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Armstrong Road	Off Moffett to D.E.	3	0.40	\$ 116,160.00	SKC	2112	55	7.50
Fontanna	KY 177	16	0.60	\$ 174,240.00	SKC	3168	55	26.67
Hempfling Road	Sub C D.E. to Navaho Road	24	1.50	\$ 435,600.00	SKC	7920	55	16.00
Hempfling Road	Navaho to Oak Island	10	0.65	\$ 188,760.00	SKC	3432	55	15.38
Hempfling Road	Oak Island to Rich	12	0.70	\$ 203,280.00	SKC	3696	55	17.14
Kenton Station Road	Martin to Rector	16	1.80	\$ 522,720.00	SKC	9504	55	8.89
KY 177	#14443 south of Kenton Station to Rich R	17	2.00	\$ 580,800.00	Kenton	10560	55	8.50
Moffett Road	Armstrong to Kenton Station	4	0.90	\$ 261,360.00	SKC	4752	55	4.44
Rich Road	Fiskburg to KY 177 to Rouse	9	0.60	\$ 174,240.00	SKC	3168	55	15.00
Rich Road	End of Sub C to Hempfling	9	0.70	\$ 203,280.00	SKC	3696	55	12.86
Rich Road	Hempfling to Little Cruises	1	0.40	\$ 116,160.00	SKC	2112	55	2.50
Rosanna Lane	Off of Gallant	4	0.40	\$ 116,160.00	SKC	2112	55	10.00
		125	10.65	\$ 3,092,760.00		56232		

Subdi. JCT
 Project Summary #6
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117650

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Campbell Drive	US 25 to D.E.	3	0.70	\$ 203,280.00	SKC	3696	55	4.29
Eads Road	US 25 to I-71/75	6	0.70	\$ 203,280.00	SKC	3696	55	8.57
Fiskburg Road	Alexander to Rich Road	4	0.60	\$ 174,240.00	SKC	3168	55	6.67
Gleason Road	KY 17 to D.E.	8	0.30	\$ 87,120.00	SKC	1584	55	26.67
Jones Road	Walton to D.E.	35	1.40	\$ 406,560.00	SKC	7392	55	25.00
Kensington Road	Off Green Road	1	0.20	\$ 58,080.00	SKC	1056	55	5.00
KY 177	KY 14 to St. Marys	16	1.20	\$ 348,480.00	SKC	6336	55	13.33
KY 177	St. Mary Rd to Alexander Road	10	1.30	\$ 377,520.00	SKC	6864	55	7.69
Little Cruises Creek Rd	KY 17 to Rich Road	27	2.60	\$ 755,040.00	SKC	13728	55	10.38
Navaho Road	Hemping to D.E.	1	0.20	\$ 58,080.00	SKC	1056	55	5.00
Oak Island	Moffett to Hempfling	3	0.80	\$ 232,320.00	SKC	4224	55	3.75
Old Fowler Creek Road	Off KY 17	3	0.20	\$ 58,080.00	Covington	1056	55	15.00
Scenic Drive	Off Pelly Road	7	0.30	\$ 87,120.00	Independence	1584	55	23.33
		124	10.50	\$ 3,049,200.00		55440		

Subd. J.V
 Project Summary #7
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117307

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Alexander Road	Saint Marys Road to KY 177	34	3.10	\$ 900,240.00	SKC	16368	55	10.97
Alexander Road	KY 177 to D.E.	8	1.00	\$ 290,400.00	SKC	5280	55	8.00
Bethel Grove Road	End of Sub E to D.E.	3	0.22	\$ 63,888.00	Visalia	1162	55	13.64
Dixon Drive	Rich Road to D.E.	25	1.60	\$ 464,640.00	SKC	8448	55	15.63
Elliot Road	KY 17 to D.E.	19	1.30	\$ 377,520.00	SKC	6864	55	14.62
Fiskburg Road	Pfanstiehl to Alexander	7	0.50	\$ 145,200.00	SKC	2640	55	14.00
Fiskburg Road	Goshorn to Pfanstiehl Road	1	0.10	\$ 29,040.00	SKC	528	55	10.00
Fiskburg Road	Fiskburg to D.E.	15	0.80	\$ 232,320.00	SKC	4224	55	18.75
Goshorn Road		23	2.50	\$ 726,000.00	Ryland Heights	13200	55	9.20
Locust Pike/Lawnmower	F Feiser Road to # 9684	1	0.50	\$ 145,200.00	Erlanger	2640	55	2.00
Pin Oak Lane	Erlanger showcase cinema drive to D.E. (S	6	0.40	\$ 116,160.00	SKC	2112	55	15.00
Pruett	Marshall to Petty	12	0.90	\$ 261,360.00	Villa Hills	4752	55	13.33
River Road (Route 8)	Chevron to Bromley	2	0.10	\$ 29,040.00	SKC	528	55	20.00
Sawgrass Road	Off Green Road							
		156	13.02	\$ 3,781,008.00		68746		

Subd. st ZZ
 Project Summary #8
 Northern Kentucky Water District
 Kenton County Unserved Streets
 WRIS Project Number: WX2111

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Amsterdam Road	12" CC to Sanitation Plant Entrance	0	0.65	\$ 188,760.00	Villa Hills	3432	55	0.00
Gripshover	County line to D.E.	1	0.60	\$ 174,240.00	SKC	3168	55	1.67
Horsebranch	Orphanage to Thomas More Parkway	3	1.36	\$ 394,944.00	Crestview Hills	7181	55	2.21
Key West Road	US 25 to D.E. (Bullock Pen)	1	0.20	\$ 58,080.00	SKC	1056	55	5.00
KY 177	Alexander Road to Pendleton County Line	0	0.30	\$ 87,120.00	SKC	1584	55	0.00
Narrows Road	Thorntree to Nelson (served by spiderline)	1	0.20	\$ 58,080.00	Erlanger	1056	55	5.00
Narrows Road	Richardson to Thorntree	0	0.20	\$ 58,080.00	Erlanger	1056	55	0.00
Narrows Road	Nelson to D.E. at Erlanger Fire	0	0.20	\$ 58,080.00	Erlanger	1056	55	0.00
Rice Road #1	Off Mills Road	0	0.25	\$ 72,600.00	Independence	1320	55	0.00
Spruce View Drive	Walton Nicholson to D.E.	2	0.20	\$ 58,080.00	SKC	1056	55	10.00
Sleepy Hollow Road	Existing D.E. near Diamond Ct. to Ludlow	0	1.00	\$ 290,400.00	Covington	5280	55	0.00
Independence Station Rd	Canberra to R.R. Tracks	0	0.40	\$ 116,160.00	Independence	2112	55	0.00
		8	5.56	\$ 1,614,624.00		29357		

CONSTRL JN COMPLETED - SOME FUNDING LEFT OVER

Project Summary Subdistrict E
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT
 WRIS Project Number: WX21117200

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bethel Grove Road	Vises Trail to #12104	20	0.49	\$ 102,841.20	Visalia	2587	39.75	40.82
Brandy Lane	Bethel Grove to Licking Station	5	0.08	\$ 16,790.40	Visalia	422	39.75	62.50
Bromley-Cres. Springs	Amsterdam to north 0.53 miles toward Bro	17	0.59	\$ 123,829.20	Crescent Spgs	3115	39.75	28.81
Fiskburg Road	KY 17 to Goshorn (KY17 to 1.2 miles)	29	1.21	\$ 253,954.80	SKC	6389	39.75	23.97
Ishmail Road	Kenton Area	7	0.20	\$ 41,976.00	Kenton	1056	39.75	35.00
Kenton Station Road	Rector to Conley	10	0.77	\$ 161,607.60	SKC	4066	39.75	12.99
Kenton Station Road	Conley to Moffett	6	0.50	\$ 104,940.00	SKC	2640	39.75	12.00
Kenton Station Road	Moffett to KY 177	5	0.28	\$ 58,766.40	SKC	1478	39.75	17.86
KY 177	KY 536 North to #11282	8	0.36	\$ 75,556.80	Visalia	1901	39.75	22.22
KY 177	KY 536 to Visalia Road	13	0.45	\$ 94,446.00	Visalia	2376	39.75	28.89
KY 177	Visalia Road south to #12246	16	0.44	\$ 92,347.20	Visalia	2323	39.75	36.36
KY 177	Kenton Station south to #14443	34	1.28	\$ 268,646.40	Kenton	6758	39.75	26.56
KY 177	Kenton Station north to #13361	36	1.34	\$ 281,239.20	Kenton	7075	39.75	26.87
Licking Station	Bethel Grove to D.E.	12	0.23	\$ 48,272.40		1214	39.75	52.17
Oliver Road	Stephens to Harris	30	0.95	\$ 199,386.00		5016	39.75	31.58
Oliver Road	McCullum to Stephens	3	0.35	\$ 73,458.00		1848	39.75	8.57
St Johns Road	Bromley Crs. Springs to 0.37 miles	5	0.37	\$ 77,655.60		1954	39.75	13.51
Vises's Trail	KY 177 to Visalia Rd. to South .23 miles(n	13	0.40	\$ 83,952.00		2112	39.75	32.50
Whitaker/McDonald	Off of Old KY 17	6	0.17	\$ 35,679.60		898	39.75	35.29
		275	10.46	\$ 2,195,344.80		55229		

CONSTRUCTION COMPLETED - SOME FUNDING LEFT OVER

Project Summary Subdistrict R (Fairview/Ryland Heights)
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT
 WRIS Project Number: WX21117202

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
KY 177	End of Sub-R (near Kaiser) to Wolf Road	22	0.77	\$ 172,869.31	Fairview	4066	42.52	28.57
KY 177	Wolf to Marshall (bridge)	18	0.92	\$ 206,496.58	Ryland Heights	4858	42.51	19.57
KY 177	910' to short marshall, 500' short marshall	2	0.1	\$ 22,445.28		528	42.51	20.00
Porter Road		2	0.16	\$ 35,912.45		845	42.51	12.50
Tecumseh	Porter to D.E.	8	0.35	\$ 78,558.48		1848	42.51	22.86
		52	2.30	\$ 516,282.10		12144		

Project: Summary Klette Road Project
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT - Under Construction 9/05
 WRIS Project Number: WX21117250

<u>Street</u>	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Klette Road	#3335 to Rice Road	15	1.16	\$ 341,212.61	Independence	6125	55.71	12.93
Klette Road	Rice to Marshall	7	1.21	\$ 355,920.05	Independence	6389	55.71	5.79
Rice Road #2	Off Klette Road	16	0.45	\$ 132,366.96	Independence	2376	55.71	35.56
		38	2.82	\$ 829,499.62		14890		

Project Summary Subdistrict G
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY - FUNDED
 WRIS Project Number: WX21117004

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bramlage Road	Banklick to Wilson	23	0.90	\$ 261,360.00	Independence	4752	55	25.56
Bullock Pen Road	Old Ky 17 to D.E.	20	0.70	\$ 203,280.00	Erlanger	3696	55	28.57
Estate Lane	Visalia Road (KY 536) to D.E.	8	0.30	\$ 87,120.00	SKC	1584	55	26.67
Fowler Creek Road	Pelly to Cox	26	1.30	\$ 377,520.00	Independence	6864	55	20.00
Klein Road	Visalia to D.E.	27	1.00	\$ 290,400.00	SKC	5280	55	27.00
Petty Road	Marshall to End of Sub A	26	1.00	\$ 290,400.00	SKC	5280	55	26.00
Pleasure Isle Drive	New KY 17 to D.E.	10	0.19	\$ 55,176.00	Erlanger	1003	55	52.63
Water fill stations	Ryland and Piner							
		140	5.39	\$ 1,617,221.00		28459		

Campbell/Kenton

2020 Water Management
Planning Council

2005 Project Profiles Submittal Summaries

Campbell County Area

Project Profile Campbell County Water Unserved and Underserved Project 1
Northern Kentucky Water District
Campbell County Projects
0-2 Year Project HIGH PRIORITY
WRIS Project Number: WX21037203

Underserved and Unserved Water Project

\$9,776,000

This project profile summarizes a critical unserved and underserved \$9,776,000 project that will impact over 60% of the District's nearly 80,000 customer base. This project will also allow the District to construct an emergency interconnection to the East Pendleton County Water District. The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$4,500,000 of State Budget funding and will provide a match for the remaining \$5,276,000 necessary to complete the project. The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding.

- 1) The unserved portion of this project includes 11.15 miles of waterline extension to serve 255 unserved households at an estimated cost of \$4,258,000. The average number of households served per mile for this project is 22.87 houses per mile. This project will also allow the District to provide an emergency interconnection to the East Pendleton County Water District. This component will be partially funded by a \$30 monthly customer surcharge and will be part of the District's Subdistrict system designated as Subdistrict H.
- 2) The underserved portion of this project includes two main replacement and enlargement components. The first involves the replacement of approximately 2,000 feet of 4 inch transite (A.C.) water main with new 8 inch water main and is estimated to cost \$265,000. The second involves the replacement of approximately 9,700 feet of 120 year old 30 inch water main with new 42 inch water main to improve pressure and system reliability. This improvement will impact over 50 percent of the Districts nearly 80,000 customers at an estimated cost of \$5,253,000.

Project Profile Water Quality Infrastructure Rehabilitation and Upgrade
 Northern Kentucky Water District
 Campbell County Projects
 0-2 Year Project HIGH PRIORITY
 WRIS Project Number: WX21037204

\$5,000,000

Water Main Replacement Consensus Project

This project profile summarizes a critical underserved \$5,000,000 project that involves the replacement of water mains located in the urban core of the Northern Kentucky Water District's Campbell County Service Area. The location of this project is in Newport and involves the replacement of several water lines with a high incidence of breakage. The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$2,500,000 of State Budget funding and will provide a match for the remaining \$2,500,000 necessary to complete the project. The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding.

Street	Comment:	Estimated Project Cost	City	Feet of Main	Est \$ per Foot
Newport 30" low service interconnect	Saratogo to Providence	\$ 1,960,000.00	Newport	2000	270
East 4th Street	5th to 8th	\$ 540,000.00	Newport	1400	270
Isabella	Brighten to Isabella	\$ 378,000.00	Newport	935	270
Elm	York to Linden 20"	\$ 252,450.00	Newport	3450	470
9th Street	Isabell to Brighten	\$ 1,621,500.00	Newport	940	270
8th Street		\$ 253,800.00			
		\$ 5,005,750.00			

Pendleton County Water District
 0-2 Year Project HIGH PRIORITY
 WRIS Project Number: WX21191408

Street

Comment:

Number of
 Unserved
 Households

Distance
 (Miles)

City

Estimated
 Project
 Cost

Feet
 of
 Main
 Foot

Est \$
 per
 Foot

Customers
 Per
 mile

12" Main to County Line
 New Master Meter Vault

\$ 850,000.00

Project Profile Memorial Parkway Treatment Plant Improvements
Northern Kentucky Water District
Campbell County Unserved Streets
0-2 Year Project HIGH PRIORITY
WRIS Project Number: WX21037560

Memorial Parkway Treatment Plant Improvements

\$6,030,600

This project profile has been updated to add a Filter Rehabilitation component, a Clearwell Rehabilitation and Baffling component and a distribution system interconnect component to strengthen the area served by the Memorial Parkway Treat Plant in addition to the Chemical Building Replacement project original proposed in 2004. Additionally, the District is planning to replace almost 500 feet of 4 inch transite (A.C.) water main located on Montrose Street in Ft. Thomas. These components together address several critical needs of the Memorial Parkway Treatment Plant and the distribution system area that it serves and meets several key criteria areas established in the DOW/KIA SRF Priority List.

In June 2002, the Northern Kentucky Water District acquired the City of Newport water distribution system and Memorial Parkway Water Treatment Plant to help regionalize the water system. In addition to serving the City of Newport, the Memorial Parkway Treatment Plant (MPTP) will help provide some treatment plant redundancy and will help meet future growth needs for the District. Several components of this facility and the distribution system it serves were identified for improvement. These improvements include the replacement of chemical storage and feed systems, improvements to three of the six filters, improvements and repairs to the 3 million gallon finished water clearwell, and a key redundancy interconnect between the Newport Low Service and High Service portions of the distribution system served by this critical treatment facility. A more detailed description of each of the improvements follows.

The MPTP existing chemical building is in poor condition and was designed for dry chemical storage only. The District needs to use liquid chemicals to meet current standards for water treatment. This proposed project would involve rebuilding the existing chemical building and appurtenances, updating the outdated chemical pumps and piping, and upgrading the liquid chemical storage areas to include a containment system. These improvements will help improve the efficiency of the plant and the overall site safety which would benefit our existing and future customers. This project also includes some modifications to the reservoir pumping station and pipe work. This improvement will allow the Memorial Parkway Treatment Plant to 1) supplement the potable water supply of the Northern Kentucky Water District, 2) have improved Microbiological and Turbidity removal by enhancing chemical systems, improving chemical reliability and 3) produce a more consistent water quality. This portion of the project is estimated to cost \$4,500,000.

The second component of this project includes renovating three filters because currently only three of the six available filters are functional. The three filters cannot be used because of problematic valves, nonfunctioning surface wash systems and media difficulties. This improvement will rehabilitate Filters 1,2 and 3 for operational flexibility and redundancy purposes. Presently there is filter redundancy when the plant is at capacity. This improvement will provide better finished water turbidity by improving the filter performance of the non-renovated filters and allowing the filters to perform at a lower flow rate. This improvement will also help allow the plant to be expanded to meet future supply needs. This improvement is estimated to cost \$530,000.

The third component of this project includes rehabilitating and baffling the District's MPTP 3-mgd clearwell. The existing valves that control water flow through the clearwell's chambers are not functional. As a result, the separate chambers cannot be isolated independently of each other making inspection difficult and cleaning impossible. In addition the concrete is in need of repairs in numerous locations due to cracking and chipping and exposed reinforcing rods. NKWD has also performed a tracer study of the clearwell and has found that in its current condition, it will not be able to meet disinfection contact time requirements during cold water temperatures at flow rates near the plant's rated capacity. As a result, the NKWD would intend to also install baffling during the renovation project to improve disinfection performance at the Memorial Parkway Treatment Plant. As a result of these improvements, CT removal requirements for microbial pathogens would be greatly improved. The Clearwell Rehabilitation and Baffling improvement will provide better finished water quality by improving the disinfection efficiency of the treatment plant and is estimated to cost \$430,000.

The fourth component involves a critical interconnection between the distribution service area served by the District's Fort Thomas Treatment Plant and the Memorial Parkway Treatment Plant service area. This new water main improvement includes an interconnection between the District's 1017 gradient service area and its 740 service area in Newport. This improvement will 1) enhance pressure during emergency conditions created by breaks and leaks in the District's aged distribution system and 2) provide supplemental flow in the event of inadequate distribution storage due to a system emergency. This improvement is estimated to cost \$520,000.

The final component involves the replacement of a 460 foot long section of 4 inch transite water main located in the City of Fort Thomas.

The total project cost is estimated to be \$6,030,600. The District is seeking DOW SRF funding of \$4,000,000 for this critical project.

Subdistrict H
 Project Summary
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 year project HIGH PRIORITY
 WRIS Project Number: This subdistrict is part of WX21037203

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Cory	Maddox to D.E.	13	0.30	\$ 98,208.00	Unincorporated/Claryville	1584	62	43.33
Creektrace Rd. (Pond Creek)	From Licking Pike to John Miller Rd.	10	1.60	\$ 523,776.00	Unincorporated	8448	62	6.25
Creektrace Rd. (Pond Creek)	From John Miller Rd. to Indian Trace Rd.	6	0.20	\$ 65,472.00	Unincorporated	1056	62	30.00
Creektrace Rd. (Pond Creek)	From Indian Trace Rd. to Bridge	20	0.50	\$ 163,680.00	Unincorporated	2640	62	40.00
Enzweiler Road	From last fire hydrant to dead end - East of AA hwy	17	0.60	\$ 196,416.00	Alexandria	3168	62	28.33
Indian Trace Rd.	Indian Trace Rd. (From JoAnn to End of road)	18	0.90	\$ 294,624.00	Unincorporated	4752	62	20.00
Indian Trace Rd.	Indian Trace Rd. (From Creek Trace (Pond Cr.) to JoAnn)	16	0.60	\$ 196,416.00	Unincorporated	3168	62	26.67
JoAnn Lane	Indian Trace to dead end	19	0.40	\$ 130,944.00	Unincorporated	2112	62	47.50
John Miller	From Creek Trace to dead end	10	0.50	\$ 163,680.00	Unincorporated	2640	62	20.00
Lauren	From Creek Trace to dead end	19	0.40	\$ 130,944.00	Unincorporated	2112	62	47.50
Maddox Rd	Creek Trace (Rt. 536) to D.E.	11	0.70	\$ 229,152.00	Claryville	3696	62	15.71
Orlando	Madonna to dead end	6	0.10	\$ 32,736.00	Alexandria	528	62	60.00
Rifle Range Rd.	House #22 to D.E. (#15 has spiderline)	21	0.70	\$ 229,152.00	Unincorporated	3696	62	30.00
Schababerle Hill	From Licking Pike to bridge	16	0.65	\$ 212,784.00	Unincorporated	3432	62	24.62
Wesley Chapel Rd.	From Wesley Chapel Rd. to Daniels Rd	16	1.10	\$ 360,096.00	Unincorporated	5808	62	14.55
Wesley Chapel Rd.	From Calif. Cr. Rds. To Schababerle Hill	33	1.80	\$ 589,248.00	Unincorporated	9504	62	18.33
Wesley Chapel Rd.	From Schababerle Hill to Flagg Springs Pike (Route 10)	251	11.05	\$ 3,617,328.00		58344		

Subdistrict J
 Project Summary #1
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037520

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ per Foot	Customers Per mile
3 Mile Road	Johns Hill Road to Tessner	12	1.40	\$ 450,912.00	Wilder	7392	61	8.57
Daniels Rd.	From Schababerle Hill to #3185	16	1.00	\$ 327,360.00	Unincorporated	5280	62	16.00
Gibson	3 mile road to D.E.	3	0.10	\$ 32,208.00	Wilder	528	61	30.00
Oneonta Rd.	From Washington Tr. Rd. to Stonehouse Rd. (4&12 Mile)	3	0.30	\$ 96,624.00	Unincorporated	1584	61	10.00
Poplar Thicket Rd.	From Washington Tr. Rd. to Stonehouse Rd. (4&12 Mile)	14	1.00	\$ 290,400.00	Unincorporated	5280	55	14.00
Reis Lane (Decker Rd.)	Licking Pike to #446	8	0.30	\$ 96,624.00	Unincorporated	1584	61	26.67
Reis Ridge	Reis Ridge (Decker) to Dead end	10.00	0.50	\$ 161,040.00	Unincorporated	2640	61	20.00
Reis Ridge	From Reis Lane (Decker Rd) to end of road	10	0.50	\$ 161,040.00	Unincorporated	2640	61	20.00
Shaw Goetz Rd.	From Shaw Goetz to Reis Lane (Decker Rd)	20	1.10	\$ 354,288.00	Unincorporated	5808	61	18.18
Stonehouse Rd. (4&12 Mile)	From Flagg Springs Pike (Route 10) to Reis Ridge Rd.	0	0.20	\$ 58,080.00	Unincorporated	1056	55	0.00
Stonehouse Rd. (4&12 Mile)	Branch Lick Rd (Lower Lick Br.) to Oneonta Rd.	8	0.40	\$ 128,832.00	Unincorporated	2112	61	20.00
Washington Tr. Rd	End of 2" line to Branch Lick Rd. (Lower Lick Br.)	9	0.70	\$ 225,456.00	California/Unincorporated	3696	61	12.86
Washington Tr. Rd	From Oneonta to Painter Rd.	16	0.80	\$ 257,664.00	California/Unincorporated	4224	61	20.00
Washington Tr. Rd	Painter Rd. to End of 3' line on Wash. Tr.	129	8.30	\$ 2,640,528.00		43824		

Subdistrict L
 Project Summary #2
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037551

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Blangey Rd.		14	0.50	\$ 145,200.00	Brent	2640	55	28.00
Burger Road	Gunkle Rd. to dead end	4	0.60	\$ 174,240.00	Unincorporated	3168	55	6.67
Dodsworth Ln.	Dodsworth Ln.	25	1.30	\$ 377,520.00	Unincorporated	6864	55	19.23
Fender Rd.	Fender Rd.	8	0.90	\$ 261,360.00	Melbourne	4752	55	8.89
Four Mile Pike	Nelson to Woodrun Dr.	6	1.00	\$ 290,400.00	Alexandria	5280	55	6.00
Gunkle Rd. (Gunkle #1)	Nine Mile Road to dead end	8	0.60	\$ 174,240.00	Melbourne	3168	55	13.33
Lees Road	From Pleasant Rdg. Rd. To Tarvin Rd.	14	1.00	\$ 290,400.00	Unincorporated	5280	55	14.00
Mystic Rose (Gunkle Rd. #2)	Gunkle Rd. to dead end	8	0.40	\$ 116,160.00	Melbourne	2112	55	20.00
Owl Creek Rd.	Owl Creek Rd.	6	1.20	\$ 348,480.00	Silver Grove	6336	55	5.00
Pleasant Rdg. Rd.	From Visalia Rd to Lees Rd.	11	0.70	\$ 203,280.00	Unincorporated	3696	55	15.71
Pleasant Rdg. Rd.	From Lees Rd. to Harrisburg Hill Rd.	15	1.10	\$ 319,440.00	Unincorporated	5808	55	13.64
Pond Creek Road	From Bridge to Visalia Rd.	16	1.00	\$ 290,400.00	Unincorporated	5280	55	16.00
Rt.8	Winters Lane to End of line near Ky-1998	9	0.60	\$ 174,240.00	Brent	3168	55	15.00
Rt.8	Lester Ln. to River Rd.	3	2.30	\$ 667,920.00	Ft. Thomas	12144	55	1.30
Rt.8	Tower Hill to Lester Ln.	1	0.60	\$ 174,240.00	Ft. Thomas	3168	55	1.67
Tarvin Rd. (Schmudde)	From Lees Rd to Phillips Creek Rd. (Schmudde)	1	0.50	\$ 145,200.00	Unincorporated	2640	55	2.00
Tarvin Rd. (Schmudde)	From Phillips Creek Rd. (Schmudde) to Licking Pike	3	0.70	\$ 203,280.00	Unincorporated	3696	55	4.29
Tower Hill Rd.	From Rt. 8 to Watchpoint	4	0.25	\$ 72,600.00	Ft. Thomas	1320	55	16.00
Vineyard (Gunkle Rd. #3)	From Ten Mile to end of line (#6752 to #6436)	8	0.90	\$ 261,360.00	Melbourne	4752	55	8.89
Visalia Road	Pleasant Ridge to Pond Creek	20	1.30	\$ 377,520.00	Unincorporated	6864	55	15.38
		184	17.45	\$ 5,067,480.00		92136		

Subdistrict N
 Project Summary #4
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037306

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Branch Lick (Lower Lick Branch)	from Stone House to dead end	5	0.80	\$ 232,320.00	Unincorporated	4224	55	6.25
Lower Grandview Rd.	from Stone House to dead end	5	0.30	\$ 87,120.00	Unincorporated	1584	55	16.67
Neises	From Rt.8 to dead end	2	0.20	\$ 58,080.00	Unincorporated	1056	55	10.00
Oneonta Rd.	From Truesdale to Washington Tr. Rd.	7	0.70	\$ 203,280.00	Unincorporated	3696	55	10.00
Oneonta Rd.	From Rt.8 to Truesdale	10	0.80	\$ 232,320.00	California/Unincorporated	4224	55	12.50
Painter Rd	From Washington Tr. Rd to Route 8	9	1.50	\$ 435,600.00	California/Unincorporated	7920	55	6.00
Rt.8	Oneonta to Painter Rd.	11	1.60	\$ 464,640.00	California/Unincorporated	8448	55	6.88
Rt.8	End of existing line (#11927) to county line	6	1.00	\$ 290,400.00	Mentor	5280	55	6.00
Rt.8	From end of line #7610 to Oneonta Rd.	6	0.40	\$ 116,160.00	California/Unincorporated	2112	55	15.00
Stonehouse Rd. (4&12 Mile)	Oneonta Rd. to A.A. Hwy	7	0.60	\$ 174,240.00	Unincorporated	3168	55	11.67
Truesdell Rd.	Box 7568 to Oneonta	15	1.00	\$ 290,400.00	Melbourne	5280	55	15.00
Upper Lick Branch Rd.	From Grandview to AA Hwy	12	0.80	\$ 232,320.00	Unincorporated	4224	55	15.00
		95	9.70	\$ 2,816,880.00		51216		

Subdistrict P
 Project Summary #5
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037305

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Bob-White Lane		8	0.70	\$ 203,280.00	Unincorporated	3696	55	11.43
California Cross Rds.	From Route 8 to Washington, Tr. Rd.	11	1.10	\$ 319,440.00	Residents are served from X-Coun	5808	55	10.00
Daniels Rd.	From #3185 to Flagg Springs Pike (Route 10)	6	1.10	\$ 319,440.00	Unincorporated	5808	55	5.45
Flagg Springs (Route 10)	From Daniels Road to Pendleton Co. Line	4	0.60	\$ 174,240.00	Unincorporated	3168	55	6.67
Flagg Springs (Route 10)	From Short Cut Rd. (A. A. Hwy. Connector) to Daniels Road	1	0.50	\$ 145,200.00	Unincorporated	2640	55	2.00
Kennedy	From Daniels to dead end	2	0.10	\$ 29,040.00	Unincorporated	528	55	20.00
Kennedy	From AA Hwy to dead end	2	0.10	\$ 29,040.00	Unincorporated	528	55	20.00
Koehler Rd	From Calif. Cr. Rds. to Flagg Springs (Route 10)	9	0.90	\$ 261,360.00	California/Unincorporated	4752	55	10.00
Picnic Road	from Wagner Rd. To end of road	2	0.10	\$ 29,040.00	Unincorporated	528	55	20.00
Schababerle Hill	From Daniels Rd. to Flagg Springs Pike (Route 10)	5	1.40	\$ 406,560.00	Unincorporated	7392	55	3.57
Wagoner (Dead Timber Rd. #2)	From Newberry Road (Dead Timber Rd.) to Picnic	10	1.70	\$ 493,680.00	California/Unincorporated	8976	55	5.88
Washington Tr.Rd.South End	End of 3" line to A.A. Hwy.	8	0.80	\$ 232,320.00	California/Unincorporated	4224	55	10.00
		68	9.10	\$ 2,642,640.00		48048		

Subdistrict S
 Project Summary #6
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037554

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Barrs Branch Rd.	From End of line on Barrs Br. To Flagg Springs Pike (Rt 10)	17	1.10	\$ 319,440.00		5808	55	15.45
Flatwoods Rd	From Race Track Rd. to Burns Rd	4	1.50	\$ 435,600.00	Alexandria	7920	55	2.67
Ky. State Route 154	From Burns to PCWD Service area.	10	1.00	\$ 290,400.00	Unincorporated	5280	55	10.00
Losey Rd.	Phillips Creek To Licking Pike	4	0.70	\$ 203,280.00	Unincorporated	3696	55	5.71
Newberry (Dead Timber Rd. #2)	from Wagner Rd. To end of road	3	0.60	\$ 174,240.00	California/Unincorporated	3168	55	5.00
Phillips Cr. Rd. (Schmudde)	Box 11053 to Tarvin Road	4	1.00	\$ 290,400.00	Unincorporated	5280	55	4.00
Shaw-Hess Rd	From end of line on Shaw Hess to Persimmon Gr. Pk.	2	0.60	\$ 174,240.00	Unincorporated	3168	55	3.33
Sity Road	From Flatwoods Rd. to End of PCWD Line at Box 1204	19	2.00	\$ 580,800.00	Unincorporated	10560	55	9.50
Stonehouse Rd. (4&12 Mile)	A.A. Hwy. to Flagg Springs Pike (Route 10)	11	0.90	\$ 261,360.00	Unincorporated	4752	55	12.22
US 27	CC Small Engine to south Licking pike	2	0.95	\$ 275,880.00	Unincorporated	5016	55	2.11
Wagoner (Dead Timber Rd. #2)	from end of line To Newberry (Wagner)	7	0.60	\$ 174,240.00	Alexandria	3168	55	11.67
		83	10.95	\$ 3,179,880.00		57816		

Subdistrict U
 Project Summary #7
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037308

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Bezold Rd.	From Burns Rd to California Cr. Rds.	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
Burns Rd.	From Flatwoods Rd. to St. Route 154	32	2.00	\$ 580,800.00	Unincorporated	10560	55	16.00
Burns Rd.	from Flatwoods Rd. to Bezold Rd.	16	1.20	\$ 348,480.00	Unincorporated	6336	55	13.33
California Cross Rds.	From Shaw Goetz Rd. to Bezold Rd	10	1.00	\$ 290,400.00	California/Unincorporated	5280	55	10.00
Decker Rd.	from Bezold Rd. to dead end	2	0.20	\$ 58,080.00	Unincorporated	1056	55	10.00
Fisher Rd	From Wish Rd. to Haubner Rd.	11	1.00	\$ 290,400.00	Unincorporated	5280	55	11.00
Fisher Rd	From Haubner Rd. to #13634	13	1.40	\$ 406,560.00	Unincorporated	7392	55	9.29
Fisher Rd	From Bezold Rd to Wish Rd.	2	0.25	\$ 72,600.00	Unincorporated	1320	55	8.00
Haubner Rd.	from Fischer to dead end	12	0.80	\$ 232,320.00	Unincorporated	4224	55	15.00
Shaw Goetz Rd.	From Reis Ridge Rd. to California Cross Rds.	11	1.80	\$ 522,720.00	Unincorporated	9504	55	6.11
Wish Rd.	From Fischer to dead end	9	0.60	\$ 174,240.00	Unincorporated	3168	55	15.00
		133	11.25	\$ 3,267,000.00		59400		

Subdistrict W
 Project Summary #8
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037557

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ per Foot	Customers Per mile
Harrisburg Hill	From Lees to Pleasant Rdg. Rd.	22	1.10	\$ 319,440.00	Unincorporated	5808	55	20.00
Harrisburg Hill	From Pleasant Ridge to dead end	10	0.50	\$ 145,200.00	Unincorporated	2640	55	20.00
Kenton Station Rd.	From Pleasant Rdg. Rd. to Pond Cr.Rd.	3	1.00	\$ 290,400.00	Unincorporated	5280	55	3.00
Kenton Station Rd.	From Lees to Pleasant Rdg. Rd.	9	0.90	\$ 261,360.00	Unincorporated	4752	55	10.00
Lees Road	From Tarvin Rd. to Harrisburg Hill Rd.	12	0.70	\$ 203,280.00	Unincorporated	3696	55	17.14
Lees Road	From Harrisburg Hill Rd. to Kenton Station	3	0.40	\$ 116,160.00	Unincorporated	2112	55	7.50
Pleasant Rdg. Rd.	From Harrisburg Hill Rd. to Kenton Station Rd.	4	1.10	\$ 319,440.00	Unincorporated	5808	55	3.64
Pond Creek Road	From Visalia Rd. to Kenton station Rd.	31	3.20	\$ 928,280.00	Unincorporated	16896	55	9.69
		94	8.90	\$ 2,584,560.00		46992		

Subdistrict X
 Project Summary #9
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037555

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Bakerfield Rd.	Off of Boone Smith Rd.	22	0.90	\$ 261,360.00	Unincorporated	4752	55	24.44
Boone Smith Rd.	From Pleasant Rdg Rd to Bakerfield Rd	3	0.20	\$ 58,080.00	Unincorporated	1056	55	15.00
Boone Smith Rd.	From Bakerfield Rd.to PCWD end of line (#873)	12	0.70	\$ 203,280.00	Unincorporated	3696	55	17.14
Clay Rdg. Rd.	From Wolf Rd. to Pleasant Rdg Rd.	9	0.60	\$ 174,240.00	Unincorporated	3168	55	15.00
Clay Rdg. Rd.	From Pleasant Rdg Rd. to Morningview Rd	12	0.80	\$ 232,320.00	Unincorporated	4224	55	15.00
Clay Rdg. Rd.	From Morningview Rd. Griffen Fords Rd.	5	0.70	\$ 203,280.00	Unincorporated	3696	55	7.14
Morningview Rd.	Clay Ridge to dead end.	15	1.80	\$ 522,720.00	Unincorporated	9504	55	8.33
Pleasant Rdg. Rd.	From Boone Smith Road to Clay Rdg. Rd.	19	1.30	\$ 377,520.00	Unincorporated	6864	55	14.62
Pleasant Rdg. Rd.	From Kenton Station Rd. to Boone Smith Road	5	0.60	\$ 174,240.00	Unincorporated	3168	55	8.33
Pleasant Rdg. Rd.	New Richmond Road to (south) D.E. of 3"	1	1.40	\$ 406,560.00	Unincorporated	7392	55	0.71
Rt.8	From Clay Rdg. Rd. to end of road	9	0.60	\$ 174,240.00	Unincorporated	3168	55	15.00
Wolf Road	From Kenton Station Rd. to Clay Rdg. Rd.	7	1.40	\$ 406,560.00	Unincorporated	7392	55	5.00
Wolf Road		119	11.00	\$ 3,194,400.00		58080		

Subdistrict Y
 Project Summary #10
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037556

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
A.A.Hwy	Pendleton Cnty line to Murnan Road (overpass)	11	15.00	\$ 4,356,000.00	Wil/Cld Sprng/Alex/Cal/Ment	79200	55	0.73

Subdistrict Z
 Project Summary #11
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037009

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Baynum Hill Rd.	Baynum Hill Rd.	11	0.70	\$ 203,280.00	Unincorporated	3696	55	15.71
Blue Sky Lane	Poplar Thicket to Dead End	2	0.15	\$ 43,560.00	Unincorporated	792	55	13.33
Hidden Valley	from Murnan to dead end	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
Johnson	Murnan to Trapp-Murnan	2	0.25	\$ 72,600.00	Unincorporated	1320	55	8.00
Licking Pike	Aspen to North	4	0.50	\$ 145,200.00	Wildier	2640	55	8.00
Licking Pike	From end of line at Tippahauer to Murnan Rd	1	0.50	\$ 145,200.00	Unincorporated	2640	55	2.00
Low Gap Rd	From end of line to Tollgate (Alex-Licking Pike)	5	0.50	\$ 145,200.00	Unincorporated	2640	55	10.00
Overlook	Fire hydrant to Licking Pike (#118 served)	4	0.15	\$ 43,560.00	Newport	792	55	26.67
Poplar Thicket Rd.	#466 to Dead End	16	1.30	\$ 418,704.00	Unincorporated	6864	61	12.31
Rifle Range Rd.	From bridge to end of road	17	2.00	\$ 580,800.00	Unincorporated	10560	55	8.50
Tippenhauer Rd.	From #211 to end of road	16	1.40	\$ 406,560.00	Cold Spring	7392	55	11.43
Trapp-Murnan	Johnson to D.E.	10	0.45	\$ 130,680.00	Unincorporated	2376	55	22.22
		103	8.90	\$ 2,625,744.00		46992		

Project Summary #PCWD
 Pendleton County Water District
 Pendleton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037050

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Aulick Rd.	From End of PCWD service Area to Muinn Rd.	12	0.70	\$ 203,280.00	Unincorporated	3696	55	17.14
Aulick Rd.	From Muinn Rd. to Demossville Rd.	3	0.40	\$ 116,160.00	Unincorporated	2112	55	7.50
Hissem Rd.	From Fairlane to Nagel	8	0.90	\$ 261,360.00	Unincorporated	4752	55	8.89
Hissem Rd.	From Nagel to Aulick	11	0.50	\$ 145,200.00	Unincorporated	2640	55	22.00
Hissem Rd.	From Fairlane to County Line	2	0.40	\$ 116,160.00	Unincorporated	2112	55	5.00
Muinn Rd.	Aulick to dead end	15	0.70	\$ 203,280.00	Unincorporated	3696	55	21.43
Muinn Rd.	From Ridge View Estates to Hissem Rd.	10	0.70	\$ 203,280.00	Unincorporated	3696	55	14.29
Nagel Rd.	From Fischer to Peach Grove Road (KY 154)	3	0.30	\$ 87,120.00	Unincorporated	1584	55	10.00
Newkirk Road	From Rt. 154 to Plum Creek	9	0.60	\$ 174,240.00	Unincorporated	3168	55	15.00
Yelton Hill Road		73	5.20	\$ 1,510,080.00		27456		

Subdistrict YY
 Project Summary #0
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037558

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
A.A.Hwy	Dry Creek to Ivy Ridge	0	1.00	\$ 290,400.00	Cold Spring	5280	55	0.00
Anderson Trace	Barrs Branch to D.E.	10.00	0.45	\$ 130,680.00	Alexandria	2376	55	22.22
Country Lake	AA Highway to dead end	4.00	0.10	\$ 29,040.00	California/Unincorporated	528	55	40.00
Creektrace Rd. (KY Rt. 536)	From U.S. 27 to Licking Pike	0	0.80	\$ 232,320.00	Unincorporated	4224	55	0.00
Dead Timber	End of 3" to Rt. 8	0	0.40	\$ 116,160.00	Unincorporated	2112	55	0.00
Gubser Mill Road	California Cross Road to dead end	1	0.80	\$ 232,320.00	California/Unincorporated	4224	55	1.25
Kappas Drive	Lauren to Dead End	8	0.40	\$ 116,160.00	Unincorporated	2112	55	20.00
Lick Hill	AA Highway to dead end	1	0.10	\$ 29,040.00	California/Unincorporated	528	55	10.00
Licking Pike	Banklick to 0.9 miles north (St. John's Church)	0	0.90	\$ 261,360.00	Wildier	4752	55	0.00
River Road	Last house to Rt. 8	0	0.50	\$ 145,200.00	Ft. Thomas	2640	55	0.00
Rt.8	?? South to Tower Hill	0	1.00	\$ 290,400.00	Dayton/Ft. Thomas	5280	55	0.00
Rt.8	River Rd. to Blangey Rd.	0	0.30	\$ 87,120.00	Brent	1584	55	0.00
Ten Mile Road	Ritter to 2802 Ten Mile Rd. (Schack farm)	0.00	0.50	\$ 145,200.00	Unincorporated	2640	55	0.00
West Main Street (Alex.)	1/2 mile from city building towards Licking Pike	0.00	0.50	\$ 145,200.00	Alexandria	2640	55	0.00
		24	7.75	\$ 2,250,600.00		40920		

Projects with no home
250,000 gallon elevated water tank Unincorporated
Booster Pumping Station Unincorporated

Subdistrict D Phase V
 Northern Kentucky Water District
 Campbell County Unserved Streets
 FUNDED - Completed 2003
 WRIS Project Number:

<u>Street</u>	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Licking Pike (from Walker Dr. to Po from Walker Dr. to Poplar Thicket or #4006 Steffen Road (From Licking Pike to from Licking Pike to 1050 feet		18	1.46	\$ 331,015.87	Alexandria	7709	42.94	12.33
		6	0.20	\$ 40,455.36	Alexandria	1056	38.31	30.00
		24	1.66	\$ 371,471.23		8765		

Subdistrict F
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 Year Project Funded
 WRIS Project Number: WX21037552

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ per Foot</u>	<u>Customers Per mile</u>
Grandview Rd.	Including Amy Lou Dr.	48	1.70	\$ 493,680.00	Alexandria	8976	55	28.24
Heck Rd.	Upper Tug Fork to dead end	12	0.70	\$ 203,280.00	Alexandria	3696	55	17.14
Licking Pike	From Evergreen Subdivision to Cold Stream (Ripple Cr.Rd)	6	0.40	\$ 116,160.00	Unincorporated	2112	55	15.00
Licking Pike	From Tollgate (Alex-Licking) to Rifle-Range Rd.	31	1.70	\$ 493,680.00	Unincorporated	8976	55	18.24
Licking Pike	Licking Pike (From Rifle-Range Rd. to Sub D)	8	0.85	\$ 246,840.00	Unincorporated	4488	55	9.41
Flagg Springs (Route 10)	From Smith Rd. to Short Cut Rd. (A. A. Hwy. Connector)	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
Steffen Rd.	#634 to dead end	11	0.50	\$ 145,200.00	Unincorporated	2640	55	22.00
West Main Street (Alex.)	1/2 mile from Licking Pike towards Alex.	10	0.50	\$ 145,200.00	Unincorporated	2640	55	20.00
2 Water Fill Stations	Cold Spring and Wilder	141	7.35	\$ 2,291,210.00		38808		

NORTHERN KENTUCKY WATER SERVICE DISTRICT

VOUCHER REQUEST

NAME Mark and Shannon Kelch

DATE 1/10/06

EET 12246 Don Street

CITY Independence STATE Ky ZIP 41094-9739

AMOUNT

DESCRIPTION Paid \$642.86 for Extension on Don Street. Cost was less than ESTimated - Only needed to pay \$500.02

140.84

"Send check to Greg Napier - Please!"

DISTRIBUTION :

ACCOUNT 479-002-000 AMT. #140.84

TOTAL

140.84

ACCOUNT _____ AMT. _____

DATE PD. _____

ACCOUNT _____ AMT. _____

CK. NO. _____

ACCOUNT _____ AMT. _____

VOU. NO. _____

ACCOUNT _____ AMT. _____

APPROVED BY: [Signature]

**WATER MAIN EXTENSION AGREEMENT
FOR APPLICANT AT TIME OF EXTENSION CONSTRUCTION**

This Agreement is made and entered into this 14th day of September, 2005, by and between Mark Kelch and Shannen Kelch, who reside at 12246 Don Street, Independence, Ky. 41094-9739 (hereinafter collectively referred to as "Customer") and the Northern Kentucky Water District (hereinafter referred to as the "District").

WHEREAS, Customer desires to participate in the construction of a water main extension pursuant to the District's Rates, Rules and Regulations; and

WHEREAS, the District desires to facilitate Customer's participation in the construction of the water main extension;

NOW, THEREFORE, Customer and the District hereby agree as follows:

1. Customer agrees to participate in the construction of a water main extension along Don Street in Independence in accordance with the District's Rates, Rules and Regulations. The District shall determine the total cost (exclusive of the meter connection costs) and the total length of the water main extension and agrees to pay that portion of the total cost equal to fifty (50) feet for each applicant for service to the extension at the time of construction and for a period of five years after the extension is placed in service.

2. Customer understands that the total cost of the extension not covered by the District's contribution shall be paid, in equal shares, by all applicants desiring service on the extension at the time of construction and for a period of five years after the extension is placed in service. Customer agrees to pay its estimated contribution and actual share for the construction of the extension as outlined in paragraph 3 below. Customer also agrees to pay the District's approved "tapping fee" for a meter connection to the water main extension.

3. Based on the estimated costs for the water main extension, Customer's estimated contribution will be \$642.86, but not exceed \$750.00. Customer agrees to pay this amount before any service or water main construction will begin. In consideration of Customer's payment of this amount, the District will proceed with the water main extension. After the extension is completed, the actual cost of the project will be determined. Customer agrees to pay to the District, within thirty (30) days after receiving written notification, any amount by which its actual share of the cost of the extension exceeds its estimated contribution. The District shall refund to Customer any amount by which Customer's estimated contribution exceeds its actual share of the cost.

4. For a period of five years after the water main extension is placed in service, each new applicant for connection to the water main extension (but not to laterals or extensions therefrom) will be required to contribute to the cost of the extension based on a recomputation of the District's portion and each customer's/applicant's share of the actual cost. Each year, the District will refund to those customers/applicants that have previously contributed to the cost of the extension that amount necessary to reduce their contribution to the currently

calculated amount for each customer/applicant on the extension.

5. Customer shall keep the District informed at all times of its current address using the District's "Change of Address" form. Any refunds will be sent to the most current address provided by Customer.

6. Following the expiration of five years after the water main extension is placed in service, each new applicant for service on the extension will only be required to pay the District's "tap-on-fee."

ENTERED into the date first above written.

CUSTOMER

NORTHERN KENTUCKY WATER DISTRICT *RA*

Signature: Mark A Kelch

Signature: 

Printed Name: MARK KELCH

Printed Name: Ron LOVAN

Signature: Shanna Kelch

Title: President/CEO

Printed Name: Shannen Kelch

Address: 12246 Don St.

Walton, KY 41094

water\mainext.agr

Average Cost Per Foot	50' Participation by District for each Customer	Total # of Customers	District's Total Portion of Project
\$26,11	\$1,265.60	2	\$2,511.00
Total Cost	\$3,515.03		
District's Total Portion of Cost	\$2,511.00		
Total	\$1,004.03		
# of Customers Connecting to Main	Total Customer Cost	Cost For Each Customer	
1	\$2,259.53	\$2,259.53	
2	\$1,004.03	\$502.02	
3	\$0.00	\$0.00	
	(Column B - \$1,826.00)/Column A = Column C		
Cost does not include \$750.00 Service Tap Fee for each house.	(3/4 service tap) cost may change yearly		
		Actual Sign Ups	

NORTHERN KENTUCKY WATER SERVICE DISTRICT

VOUCHER REQUEST

NAME CHRISTY and Nancy Detry

DATE 1/10/06

REET 12247 Dow Street

CITY Independence STATE Ky ZIP 41094-9739

DESCRIPTION	AMOUNT
<u>Paid \$642.86 for Extension on</u>	<u>140.84</u>
<u>Dow Street. Cost was less than</u>	
<u>Estimated - only needed to pay</u>	
<u>\$ 502.02</u>	
<u>"Send check to Greg Napier - Please!"</u>	

DISTRIBUTION :

ACCOUNT 479-0002-000 AMT. \$140.84

TOTAL

ACCOUNT _____ AMT. _____

DATE PD. _____

ACCOUNT _____ AMT. _____

CK. NO. _____

ACCOUNT _____ AMT. _____

VOU. NO. _____

ACCOUNT _____ AMT. _____

APPROVED BY: [Signature]

**WATER MAIN EXTENSION AGREEMENT
FOR APPLICANT AT TIME OF EXTENSION CONSTRUCTION**

This Agreement is made and entered into this 14th day of September, 2005, by and between Christie Goetz and Nancy Goetz, who reside at 12247 Don Street, Independence, Ky. 41094-9739, (hereinafter collectively referred to as "Customer") and the Northern Kentucky Water District (hereinafter referred to as the "District").

WHEREAS, Customer desires to participate in the construction of a water main extension pursuant to the District's Rates, Rules and Regulations; and

WHEREAS, the District desires to facilitate Customer's participation in the construction of the water main extension;

NOW, THEREFORE, Customer and the District hereby agree as follows:

1. Customer agrees to participate in the construction of a water main extension along Don Street in Independence in accordance with the District's Rates, Rules and Regulations. The District shall determine the total cost (exclusive of the meter connection costs) and the total length of the water main extension and agrees to pay that portion of the total cost equal to fifty (50) feet for each applicant for service to the extension at the time of construction and for a period of five years after the extension is placed in service.

2. Customer understands that the total cost of the extension not covered by the District's contribution shall be paid, in equal shares, by all applicants desiring service on the extension at the time of construction and for a period of five years after the extension is placed in service. Customer agrees to pay its estimated contribution and actual share for the construction of the extension as outlined in paragraph 3 below. Customer also agrees to pay the District's approved "tapping fee" for a meter connection to the water main extension.

3. Based on the estimated costs for the water main extension, Customer's estimated contribution will be \$642.86, but not to exceed \$750.00. Customer agrees to pay this amount to the District before any service or water main construction will begin. In consideration of Customer's payment of this amount, the District will proceed with the water main extension. After the extension is completed, the actual cost of the project will be determined. Customer agrees to pay to the District, within thirty (30) days after receiving written notification, any amount by which its actual share of the cost of the extension exceeds its estimated contribution. The District shall refund to Customer any amount by which Customer's estimated contribution exceeds its actual share of the cost.

4. For a period of five years after the water main extension is placed in service, each new applicant for connection to the water main extension (but not to laterals or extensions therefrom) will be required to contribute to the cost of the extension based on a recomputation of the District's portion and each customer's/applicant's share of the actual cost. Each year, the District will refund to those customers/applicants that have previously contributed to the cost of the extension that amount necessary to reduce their contribution to the currently

calculated amount for each customer/applicant on the extension.

5. Customer shall keep the District informed at all times of its current address using the District's "Change of Address" form. Any refunds will be sent to the most current address provided by Customer.

6. Following the expiration of five years after the water main extension is placed in service, each new applicant for service on the extension will only be required to pay the District's "tap-on-fee."

ENTERED into the date first above written.

CUSTOMER

NORTHERN KENTUCKY WATER DISTRICT *2A*

Signature: Christy Goetz

Signature: _____

Printed Name: CHRISTY GOETZ

Printed Name: _____

Signature: Nancy Goetz

Signature: [Signature]

Printed Name: Nancy Goetz

Title: President/CEO

Address: 12247 Don St.
Walton, KY 41094

Average Cost Per Foot	60' Participation by District for each Customer	Total # of Customers	District's Total Portion of Project
\$26.11	\$1,255.60	2	\$2,511.00
Total Cost	\$3,515.03		
District's Total Portion of Cost	\$2,511.00		
Total	\$1,004.03		
# of Customers Connecting to Main	Total Customer Cost	Cost for Each Customer	
1	\$2,259.53	\$2,259.53	
2	\$1,004.03	\$502.02	
3	\$0.00	\$0.00	
(Column B - \$1,825.00)/Column A = Column C			
Cost does not include \$750.00 Service Tap fee for each house. (3/4 service tap) cost may change yearly			
Actual Sign Uses			

Northern Kentucky Water District

January 30, 2006

Dennis Redmond
1792 Forest Run Drive
Independence, Kentucky 41051

RE: Public Water Extension along Tower Hill Rd., Ft. Thomas, Kentucky

Dear Mr. Redmond:

During the past several years, the Northern Kentucky Water District has received several requests to extend a public water main down Tower Hill Road in the City of Ft. Thomas. The active landslide along a portion of Tower Hill Road is a major concern with extending a water main along this section of road. Water mains need to be installed in a safe and stable location to avoid future maintenance, costly repair problems and to minimize disruption to water service. The District hired a geotechnical engineer in 1999 to perform a preliminary investigation into the landslide and to review possible water main alignments along Tower Hill Road. The investigation determined that additional exploration was needed to evaluate stability issues and potential water main alignments along Tower Hill Road. Attached is a copy of their report for your reference. The cost of stabilizing the roadway and/or installing the water main at excessive depths is normally cost prohibitive when it is constructed as part of the water main project. Per conversations with the City of Ft. Thomas, they have submitted for a grant to perform stabilization and street repairs for Tower Hill which is still pending. If the City's Tower Hill Road Stabilization Project is a permanent fix and makes a stable corridor for a water main extension, this should address the District's stability concerns.

In Kenton and Campbell Counties, there are approximately 247 miles of un-served streets. Water main extensions are made in several different processes: (1) The 50' Extension Method where the District pays for 50' of water main extension cost for each property owner who connects to the extension and the remaining cost is split equally between the connecting property owners. For a period of 5 years, any new property owner who connects to this extension will be required to pay their recalculated participation amount and refunds would be issued to the original connecting property owners. (2) The District works with various agencies to secure grant monies which pay for a portion of the water main extension, the remaining cost is paid back through a surcharge on the water bill. These projects look at the number of households per mile to help prioritize streets for extensions. Based on current house counts, Tower Hill Road has approximately 20 customers per mile which places it in the upper end of the street list. However, these grants are very competitive to obtain and it often takes several years to receive funding if a street is eligible. (3) A developer can extend water to their development which may make water accessible to existing property owners.

January 30, 2006

The District is willing to work with the property owners along Tower Hill Road to extend a public water main per our current rules and regulations as long as a stable route can be secured. Should you have any questions or need additional information, feel free to contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Harrison', with a long horizontal flourish extending to the right.

Richard Harrison
Vice President of Distribution and Engineering

Cc: attachment
file

Northern Kentucky Water District

December 5, 2006

Mr. Eckert
6555 Mystic Rose
Melbourne, Ky. 41059

Re: Water Main Extension Cost Estimate on Mystic Rose, Melbourne, Campbell County

Mr. Eckert,

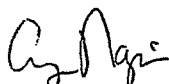
Per your request, the Water District has prepared a "ball park" estimate to extend the public water main along Mystic Rose from the existing water main at Nine Mile Road. It is approximately 2,750 linear feet to extend the property main 6555 Mystic Rose. Based on this distance, the estimated cost for an 8" water main, including fire hydrants, would be \$159,838.50. This estimate includes labor, materials & contingencies. This estimate does not include any special precautions for the existing utilities or additional requirements from the city. This estimate does not include a 5/8" tap fee of \$750.00 for each customer and the service line extension from the house to the meter.

Under the District's Tariff, it allows the District to participate with the water main extension project by paying for up to 50 feet of the water main cost for each customer that connects to the extension. The remainder of the cost of the project is divided equally among the property owners that connect to the extension. For example, under this policy, if there were 3 customers that connected to the new water main extension, then the approximate cost per customer would be \$50,373.35 plus the tap and service line extensions based on the ball park estimate. Any additional customers would reduce the cost to each customer for a period of 5 years after construction.

To continue forward with this project, the Water District will need a petition signed by everyone that is interested along with their addresses. After the Water District receives this petition, a Kentucky Registered Engineer will be contacted by the District to prepare an engineer's construction estimate to firm up project cost.

Another alternate method to extending the water main is privately hire a Kentucky Registered Engineer to design the project and contractor to construct the waterline, but this may limit the financial involvement of the district. Should you have any questions or need any additional information you can reach me at (859) 426-2720.

Cordially,



Greg Napier
Engineering Technician

Campbell/Kenton

2020 Water Management
Planning Council

2006 Project Profiles Submittal Summaries

Campbell County Area

Project Profile Memorial Parkway Treatment Plant Improvements

Northern Kentucky Water District
Campbell County Unserved Streets
0-2 Year Project HIGH PRIORITY
WRIS Project Number: WX21037560

\$6,365,000

Memorial Parkway Treatment Plant Improvements
This project profile has been updated to add a Filter Rehabilitation component, a Clearwell Rehabilitation and Baffling component and a distribution system interconnect component to strengthen the area served by the Memorial Parkway Treat Plant in addition to the Chemical Building Replacement project originally proposed in 2004. Additionally, the District is planning to replace almost 500 feet of 4 inch transite (A.C.) water main located on Montrose Street in Ft. Thomas and these components together address several critical needs of the Memorial Parkway Treatment Plant and the distribution system area that it serves and meets several key criteria areas established in the DOW/KIA SRF Priority List.

In June 2002, the Northern Kentucky Water District acquired the City of Newport water distribution system and Memorial Parkway Water Treatment Plant to help regionalize the water system. In addition to serving the City of Newport, the Memorial Parkway Treatment Plant (MPTP) will help provide some treatment plant redundancy and will help meet future growth needs for the District. Several components of this facility and the distribution system it serves were identified for improvement. These improvements include the replacement of chemical storage and feed systems. Improvements to three of the six filters, improvements and repairs to the 3 million gallon finished water clearwell, and a key redundancy interconnect between the Newport Low Service and High Service portions of the distribution system served by this critical treatment facility. A more detailed description of each of the improvements follows.

The MPTP existing chemical building is in poor condition and was designed for dry chemical storage only. The District needs to use liquid chemicals to meet current standards for water treatment. This project would involve rebuilding the existing chemical building and appurtenances, updating the outdated chemical pumps and piping, and upgrading the liquid chemical storage areas to include a containment system. These improvements will help improve the efficiency of the plant and the overall site safety which would benefit our existing and future customers. This project also includes some modifications to the reservoir pumping station and pipe work. This improvement will allow the Memorial Parkway Treatment Plant to 1) supplement the potable water supply of the Northern Kentucky Water District, 2) have improved Microbiological and Turbidity removal by enhancing chemical systems, improving chemical reliability and 3) produce a more consistent water quality.

The second component of this project includes renovating three filters because currently only three of the six available filters are functional. The three filters cannot be used because of problematic valves, nonfunctioning surface wash systems and media difficulties. This improvement will rehabilitate Filters 1, 2 and 3 for operational flexibility and redundancy purposes. Presently there is filter redundancy when the plant is at capacity. This improvement will provide better finished water turbidity by improving the filter performance of the non-renovated filters and allowing the filters to perform at a lower flow rate. This improvement will also help allow the plant to be expanded to meet future supply needs. This improvement is estimated to cost \$530,000.

The third component of this project includes rehabilitating and baffling the District's MPTP 3-mgd clearwell. The existing valves that control water flow through the clearwell's chambers are not functional. As a result, the separate chambers cannot be isolated independently of each other making inspection difficult and cleaning impossible. In addition the concrete is in need of repairs in numerous locations due to cracking and chipping and exposed reinforcing rods. NKWD has also performed a tracer study of the clearwell and has found that in its current condition, it will not be able to meet disinfection contact time requirements during cold water temperatures at flow rates near the plant's rated capacity. As a result, the NKWD would intend to also install baffling during the renovation project to improve disinfection performance at the Memorial Parkway Treatment Plant. As a result of these improvements, CT removal requirements for microbial pathogens would be greatly improved. This improvement is estimated to cost \$430,000.

The fourth component involves a critical interconnection between the distribution service area served by the District's Fort Thomas Treatment Plant and the Memorial Parkway Treatment Plant service area. This new water main improvement includes an interconnection between the District's 1017 gradiant service area and its 740 service area in Newport. This improvement will 1) enhance pressure conditions created by breaks and leaks in the District's aged distribution system and 2) provide supplemental flow in the event of inadequate distribution storage due to a system emergency. This improvement is estimated to cost \$520,000.

The final component involves the replacement of a 460 foot long section of 4 inch transite water main located in the City of Fort Thomas.

The total project cost is estimated to be \$6,030,600. The District is seeking DOW SRF funding of \$4,000,000 for this critical project.
Project Profile - Unserved streets - installation of new water main - 3 Mile Road/Gibson Lane
Northern Kentucky Water District

Project Profile Campbell County Water Unserved and Underserved Project 1
Northern Kentucky Water District
Campbell County Projects
0-2 Year Project HIGH PRIORITY
WRIS Project Number: WX21037203

\$9,776,000

Underserved and Unserved Water Project

This project profile summarizes a critical unserved and underserved \$9,776,000 project that will impact over 60% of the District's nearly 80,000 customer base. This project will also allow the District to construct an emergency interconnection to the East Pendleton County Water District.

The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$4,500,000 of State Budget funding and will provide a match for the remaining \$5,276,000 necessary to complete the project.

Design will commence upon receiving State Budget Funding. The District is committing these funds through Bond Anticipation Notes and other local funding sources. The average number of

1) The unserved portion of this project includes 11.15 miles of waterline extension to serve 255 unserved households at an estimated cost of \$4,258,000. The average number of households served per mile for this project is 22.87 houses per mile. This project will also allow the District to provide an emergency interconnection to the East Pendleton County Water District. This component will be partially funded by a \$30 monthly customer surcharge and will be part of the District's Subdistrict system designated as Subdistrict H.

2) The underserved portion of this project includes two main replacement and enlargement components. The first involves the replacement of approximately 2,000 feet of 4 inch transite (A.C.) water main with new 8 inch water main and is estimated to cost \$265,000. The second involves the replacement of approximately 9,700 feet of 120 year old 30 inch water main with new 42 inch water main to improve pressure and system reliability. This improvement will impact over 50 percent of the Districts nearly 80,000 customers at an estimated cost of \$5,253,000.

Project Profile Water Quality Infrastructure Rehabilitation and Upgrade
 Northern Kentucky Water District
 Campbell County Projects
 0-2 Year Project HIGH PRIORITY
 WRIS Project Number: WX21037204

\$5,000,000

Water Main Replacement Consensus Project

This project profile summarizes a critical underserved \$5,000,000 project that involves the replacement of water mains located in the urban core of the Northern Kentucky Water District's Campbell County Service Area. The location of this project is in Newport and involves the replacement of several water lines with a high incidence of breakage.

The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$2,500,000 of State Budget funding and will provide a match for the remaining \$2,500,000 necessary to complete the project. Design will commence upon receiving State Budget Funding. The District is committing these funds through Bond Anticipation Notes and other local funding sources.

Comment:

Street

Street	Estimated Project Cost	City	Feet of Main	Est \$ per Foot
Newport 30" low service interconnect	\$ 1,960,000.00	Newport	2000	270
East 4th Street	\$ 540,000.00	Newport	1400	270
Isabella	\$ 378,000.00	Newport	935	270
Elm	\$ 252,450.00	Newport	3450	470
9th Street	\$ 1,621,500.00	Newport	940	270
8th Street	\$ 253,800.00	Newport		
	\$ 5,005,750.00			

Pendleton County Water District
 0-2 Year Project HIGH PRIORITY
 WRIS Project Number: WX21191408

Street

Comment:

Customers
Per mile

Est \$
per
Foot

Feet
of
Main

City

Number of
Unserved
Households

Distance
(Miles)

Estimated
Project
Cost

\$ 850,000.00

12" Main to County Line
 New Master Meter Vault

Subdistrict H
 Project Summary #1
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 year project HIGH PRIORITY
 WRIS Project Number: This subdistrict is part of WX21037203

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ per Foot	Customers Per mile
Orlando	House #22 to D.E. (#15 has spiderline)	6	0.10	\$ 32,736.00	Alexandria	528	62	60.00
Maddox Rd	Madonna to dead end	11	0.70	\$ 229,152.00	Claryville	3696	62	15.71
Cory	Maddox to D.E.	12	0.30	\$ 98,208.00	Unincorporated/Claryville	1584	62	40.00
Enzweiler Road	From last fire hydrant to dead end - East of AA hwy	17	0.60	\$ 196,416.00	Alexandria	3168	62	28.33
Rifle Range Rd.	From Licking Pike to bridge	26	0.80	\$ 261,888.00	Unincorporated	4224	62	32.50
Creektrace Rd. (Pond Creek)	From Licking Pike to John Miller Rd.	10	1.60	\$ 523,776.00	Unincorporated	8448	62	6.25
Creektrace Rd. (Pond Creek)	From John Miller Rd. to Indian Trace Rd.	6	0.20	\$ 65,472.00	Unincorporated	1056	62	30.00
Creektrace Rd. (Pond Creek)	From Indian Trace Rd. to Bridge	20	0.50	\$ 163,680.00	Unincorporated -25 lot SubDiv. (all lot	2640	62	40.00
Indian Trace Rd.	Indian Trace Rd. (From JoAnn to End of road)	18	0.90	\$ 294,624.00	Unincorporated	4752	62	20.00
JoAnn Lane	Indian Trace Rd. (From Creek Trace (Pond Cr.) to JoAnn)	15	0.60	\$ 196,416.00	Unincorporated	3168	62	25.00
John Miller	Indian Trace to dead end	19	0.40	\$ 130,944.00	Unincorporated	2112	62	47.50
Lauren	From Creek Trace to dead end	10	0.50	\$ 163,680.00	Unincorporated	2640	62	20.00
Wesley Chapel Rd.	Creek Trace (Rt. 536) to D.E.	18	0.40	\$ 130,944.00	Unincorporated	2112	62	45.00
Wesley Chapel Rd.	From Calif. Cr.Rds. To Schababerle Hill	18	1.10	\$ 360,096.00	Unincorporated	5808	62	16.36
Schababerle Hill	From Schababerle Hill to Flagg Springs Pike (Route 10)	33	1.80	\$ 589,248.00	Unincorporated	9504	62	18.33
	From Wesley Chapel Rd. to Daniels Rd	16	0.65	\$ 212,784.00	Unincorporated	3432	62	24.62
		255	11.15			58872		22.87

Subdistrict J
 Project Summary #2
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037520

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Overlook	Fire hydrant to Licking Pike (#118 served)	4	0.15	\$ 43,560.00	Newport	792	55	26.67
Blangey Rd.		14	0.50	\$ 145,200.00	Brent	2640	55	28.00
Anderson Trace	Barrs Branch to D.E.	10	0.45	\$ 130,680.00	Alexandria	2376	55	22.22
Trapp-Murman	Johnson to D.E.	10	0.45	\$ 130,680.00	Unincorporated	2376	55	22.22
Shaw Goetz Rd.	From Reis Ridge Rd. to Flagg Springs Pike (Rt 10)	20	1.10	\$ 354,288.00	Unincorporated	5808	61	18.18
Reis Lane (Decker Rd.)	Reis Ridge (Decker) to Dead end	8	0.30	\$ 96,624.00	Unincorporated	1584	61	26.67
Reis Ridge	From Reis Lane (Decker Rd) to end of road	10	0.50	\$ 161,040.00	Unincorporated	2640	61	20.00
Reis Ridge	From Shaw Goetz to Reis Lane (Decker Rd)	10	0.50	\$ 161,040.00	Unincorporated	2640	61	20.00
Upper Lick Branch Rd.	From Grandview to driveway past #2274	10	0.45	\$ 130,680.00	Unincorporated	2376	55	22.22
Kappas Drive	Lauren to Dead End	8	0.40	\$ 116,160.00	Unincorporated	2112	55	20.00
Low Gap Rd	From #954 to #878	4	0.20	\$ 58,080.00	Unincorporated	1056	55	20.00
Picnic Road	from Wagner Rd. To end of road	2	0.1	\$ 29,040.00	Unincorporated	528	55	20.00
Mystic Rose (Gunkle Rd. #2)	Gunkle Rd. to dead end	8	0.40	\$ 116,160.00	Melbourne	2112	55	20.00
Pleasant Rdg. Rd.	From Visalia Rd to Lees Rd.	10	0.50	\$ 145,200.00	Unincorporated	2640	55	20.00
Pleasant Rdg. Rd.	From Lees Rd. to Harrisburg Hill Rd.	17	1.10	\$ 319,440.00	Unincorporated	5808	55	15.45
		145	7.10	\$ 2,137,872.00		37488		20.42

Subdistrict L
 Project Summary #3
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037551

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est. \$ per Foot	Customers Per mile
Harrisburg Hill	From Lees to Pleasant Rdg. Rd.	22	1.10	\$ 319,440.00	Unincorporated	5808	55	20.00
Harrisburg Hill	From Pleasant Ridge to dead end	10	0.50	\$ 145,200.00	Unincorporated	2640	55	20.00
Lees Road	From Tarvin Rd. to Harrisburg Hill Rd.	12	0.70	\$ 203,280.00	Unincorporated	3696	55	17.14
Lees Road	From Pleasant Rdg. Rd. To Tarvin Rd.	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
Lees Road	From Pleasant Rdg. Rd. To Tarvin Rd.	11	0.90	\$ 261,360.00	Unincorporated	4752	55	12.22
Stonehouse Rd. (4&12 Mile)	A.A. Hwy. to Flagg Springs Pike (Route 10)	5	0.25	\$ 72,600.00	Unincorporated	1320	55	20.00
Stonehouse Rd. (4&12 Mile)	Lower Grandview to A.A. Hwy	25	1.30	\$ 377,520.00	Unincorporated	6864	55	19.23
Dodsworth Ln.	Lower Grandview to A.A. Hwy	5	0.30	\$ 87,120.00	Unincorporated	1584	55	16.67
Lower Grandview Rd.	from Stone House to dead end	16	1.20	\$ 348,480.00	Unincorporated	6336	55	13.33
Burns Rd.	from Flatwoods Rd. to Bezold Rd.	121	7.25	\$ 2,105,400.00		38280		16.69

Subdistrict N
 Project Summary #4
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037306

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Burns Rd.	From Flatwoods Rd. to St. Route 154	32	2.00	\$ 580,800.00	Unincorporated	10560	55	16.00
Daniels Rd.	From Schababerle Hill to #3185	16	1.00	\$ 327,360.00	Unincorporated	5280	62	16.00
Tower Hill Rd.	From Rt. 8 to Watchpoint	4	0.25	\$ 72,600.00	Ft. Thomas	1320	55	16.00
Baynum Hill Rd.	Baynum Hill Rd.	11	0.70	\$ 203,280.00	Unincorporated	3696	55	15.71
Barrs Branch Rd.	From End of line on Barrs Br. To Flagg Springs Pike (Rt	17	1.10	\$ 319,440.00	Alexandria	5808	55	15.45
Visalia Road	Pleasant Ridge to Pond Creek	20	1.30	\$ 377,520.00	Unincorporated	6864	55	15.38
Hidden Valley	from Murnan to dead end	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
Kennedy	From Flaig Springs to dead end	2	0.20	\$ 58,080.00	Unincorporated	1056	55	10.00
		117	7.55	\$ 2,229,480.00		39864		15.50

Subdistrict P
 Project Summary #5
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037305

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Bezold Rd.	From Burns Rd to California Cr. Rds.	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
California Cross Rds.	From Bezold Rd to #2038	7	0.45	\$ 130,680.00	California/Unincorporated	2376	55	15.56
Lees Road	From Harrisburg Hill Rd. to Kenton Station	3	0.40	\$ 116,160.00	Unincorporated	2112	55	7.50
Kenton Station Rd.	From Lees to Pleasant Rdg. Rd.	9	0.90	\$ 261,360.00	Unincorporated	4752	55	10.00
Pleasant Rdg. Rd.	From Kenton Station Rd. to Boone Smith Road	5	0.60	\$ 174,240.00	Unincorporated	3168	55	8.33
Bakerfield Rd.	Off of Boone Smith Rd.	22	0.90	\$ 261,360.00	Unincorporated	4752	55	24.44
Boone Smith Rd.	From Pleasant Rdg Rd to Bakerfield Rd	3	0.20	\$ 58,080.00	Unincorporated	1056	55	15.00
Pleasant Rdg. Rd.	From Bakerfield Rd.to PCWD end of line (#873)	12	0.70	\$ 203,280.00	Unincorporated	3696	55	17.14
Boone Smith Rd.	From Boone Smith Road to Clay Rdg. Rd.	19	1.30	\$ 377,520.00	Unincorporated	6864	55	14.62
Pleasant Rdg. Rd.	From Wolf Rd. to Pleasant Rdg Rd.	9	0.60	\$ 174,240.00	Unincorporated	3168	55	15.00
Clay Rdg. Rd.	From Pleasant Rdg Rd. to Morningview Rd	12	0.80	\$ 232,320.00	Unincorporated	4224	55	15.00
Clay Rdg. Rd.	From Pleasant Rdg. Rd. to end of road	9	0.60	\$ 174,240.00	ated -24 Lot Subdivision being	3168	55	15.00
Wolf Road	Winters Lane to End of line near Ky-1998	9	0.60	\$ 174,240.00	Brent	3168	55	15.00
Rt.8		134	9.05	\$ 2,628,120.00		47784		14.81

Subdistrict S
 Project Summary #6
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037554

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Rt.8		6	0.40	\$ 116,160.00	California/Unincorporated	2112	55	15.00
Oneonta Rd.	From end of line #7610 to Oneonta Rd.	10	0.80	\$ 232,320.00	California/Unincorporated	4224	55	12.50
Truesdell Rd.	From Rt.8 to Truesdale	15	1.00	\$ 290,400.00	Melbourne	5280	55	15.00
Blue Sky Lane	Box 7568 to Oneota	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
Poplar Thicket Rd.	Licking Pike to #446	2	0.15	\$ 43,560.00	Unincorporated	792	61	13.33
Poplar Thicket Rd.	Poplar Thicket to Dead End	16	1.30	\$ 418,704.00	Unincorporated	6864	55	12.31
Gunkle Rd. (Gunkle #1)	#466 to Dead End	8	0.60	\$ 174,240.00	Melbourne	3168	55	13.33
Shaw-Hess Rd	Nine Mile Road to dead end	2	0.15	\$ 43,560.00	Unincorporated	792	55	12.50
Pond Creek Road	From end of line on Shaw Hess to #10280	15	1.20	\$ 348,480.00	Unincorporated	6336	55	12.50
Pond Creek Road	From Bridge to Visalia Rd.	25	2.00	\$ 580,800.00	Unincorporated	10560	55	11.57
Wagoner (Dead Timber Rd. #2)	From Visalia Rd. to #11707	7	0.60	\$ 174,240.00	Alexandria	3168	55	13.15
	from end of line To Newberry (Wagner)	121	9.20	\$ 2,712,864.00		48576		

Subdistrict U
 Project Summary #7
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037308

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est.\$ per Foot	Customers Per mile
Bob-White Lane		8	0.70	\$ 203,280.00	Unincorporated	3696	55	11.43
Tippenhauer Rd.	From #211 to end of road	16	1.40	\$ 406,560.00	Cold Spring	7392	55	11.43
Fisher Rd	From Bezold Rd to Wish Rd.	2	0.25	\$ 72,600.00	Unincorporated	1320	55	8.00
Fisher Rd	From Wish Rd. to Haubner Rd.	11	1.00	\$ 290,400.00	Unincorporated	5280	55	11.00
Haubner Rd.	from Fischer to dead end	12	0.80	\$ 232,320.00	Unincorporated	4224	55	15.00
Wish Rd.	From Fischer to dead end	9	0.60	\$ 174,240.00	Unincorporated	3168	55	15.00
Vineyard (Gunkle Rd. #3)	From Fischer to dead end	7	0.65	\$ 188,760.00	Meibourne	3432	55	10.77
Koehler Rd	From Ten Mile (#6752) to #6566	9	0.90	\$ 261,360.00	California/Unincorporated	4752	55	10.00
Losey Rd.	From Calif. Cr. Rds. to Flagg Springs (Route 10)	10	1.00	\$ 290,400.00	Unincorporated	5280	55	10.00
Oneonta Rd.	From Burns to PCWD Service area.	3	0.30	\$ 87,120.00	Unincorporated	1584	55	10.00
Washington Tr.Rd.South End	Licking Pike to #901	7	0.70	\$ 203,280.00	Unincorporated	3696	55	10.00
	From Truesdale to Washington Tr. Rd.	8	0.80	\$ 232,320.00	California/Unincorporated	4224	55	10.00
	End of 3" line to A.A. Hwy.	102	9.10	\$ 2,642,640.00				11.21

Subdistrict W
 Project Summary #8
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037557

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main Foot	Est \$ per Foot	Customers Per mile
Decker Rd.		2	0.20	\$ 58,080.00	Unincorporated	1056	55	10.00
Siry Road	from Bezold Rd. to dead end	19	2.00	\$ 580,800.00	Unincorporated	10560	55	9.50
Painter Rd	From Flatwoods Rd. to End of PCWD Line at #1204	8	0.85	\$ 246,840.00	California/Unincorporated	4488	55	9.41
Fisher Rd	From #3735 to Route 8	13	1.40	\$ 406,560.00	Unincorporated	7392	55	9.29
Fender Rd.	From Haubner Rd. to #13634	8	0.90	\$ 261,360.00	Melbourne	4752	55	8.89
3 Mile Road	Fender Rd.	8	0.70	\$ 225,456.00	Wildier	3696	61	11.43
Rifle Range Rd.	Gibson Road to Tessner	17	2.00	\$ 580,800.00	Unincorporated	10560	55	8.50
Licking Pike	From bridge to end of road Aspen to North	4	0.50	\$ 145,200.00	Wildier	2640	55	8.00
		79	8.55	\$ 2,505,096.00		45144		9.24

Subdistrict X
 Project Summary #9
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037555

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ per Foot</u>	<u>Customers Per mile</u>
Morningview Rd.	Clay Ridge to dead end.	15	1.80	\$ 522,720.00	Unincorporated	9504	55	8.33
Clay Rdg. Rd.	From Morningview Rd. Griffen Fords Rd.	5	0.70	\$ 203,280.00	Unincorporated	3696	55	7.14
Rt.8	Oneonta to Painter Rd.	11	1.60	\$ 464,640.00	California/Unincorporated	8448	55	6.88
Neises	From Rt.8 to dead end	2	0.20	\$ 58,080.00	Unincorporated	1056	55	10.00
Burger Road	Gunkle Rd. to dead end	4	0.60	\$ 174,240.00	Unincorporated	3168	55	6.67
California Cross Rds.	From Washington Tr.Rd. to #3765	4	0.60	\$ 174,240.00	Residents are served from X-Cou	3168	55	6.67
Daniels Rd.	From #3185 to Flagg Springs Pike (Route 10)	6	1.10	\$ 319,440.00	Unincorporated	5808	55	5.45
Flagg Springs (Route 10)	From Daniels Road to Pendelton Co. Line	4	0.60	\$ 174,240.00	Unincorporated	3168	55	6.67
Branch Lick (Lower Lick Branch)	from Stone House to dead end	5	0.80	\$ 232,320.00	Unincorporated	4224	55	6.25
Rt.8	End of existing line (#11927) to county line	6	1.00	\$ 290,400.00	Mentor	5280	55	6.00
Kennedy	From Daniels to dead end	2	0.10	\$ 29,040.00	Unincorporated	528	55	20.00
		64	9.10	\$ 2,642,640.00		48048		7.03

Subdistrict Y
 Project Summary #10
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037556

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ per Foot</u>	<u>Customers Per mile</u>
Shaw Goetz Rd.	From Reis Ridge Rd. to California Cross Rds.	11	1.80	\$ 522,720.00	Unincorporated	9504	55	6.11
Wagoner (Dead Timber Rd. #2)	From Newberry Road (Dead Timber Rd.) to Picnic	10	1.70	\$ 493,680.00	California/Unincorporated	8976	55	5.88
Stonehouse Rd. (4&12 Mile)	Oneonta Rd. to Lower Grandview	2	0.35	\$ 101,640.00	Unincorporated	1848	55	5.71
Upper Lick Branch Rd.	From driveway past #2274 to AA Hwy	2	0.35	\$ 101,640.00	Unincorporated	1848	55	5.71
California Cross Rds.	From Shaw Goetz Rd. to #2038	3	0.60	\$ 174,240.00	California/Unincorporated	3168	55	5.00
Newberry (Dead Timber Rd. #2)	from Wagner Rd. To end of road	3	0.60	\$ 174,240.00	California/Unincorporated	3168	55	5.00
Owl Creek Rd.	Owl Creek Rd.	6	1.20	\$ 348,480.00	Silver Grove	6336	55	5.00
Pond Creek Road	From #11707 to Kenton station Rd.	6	1.20	\$ 348,480.00	Unincorporated	6336	55	5.00
Wolf Road	From Kenton Station Rd. to Clay Rddg. Rd.	7	1.40	\$ 406,560.00	Unincorporated	7392	55	5.00
Schababerle Hill	From Daniels Rd. to Flagg Springs Pike (Route 10)	5	1.40	\$ 406,560.00	Unincorporated	7392	55	3.57
		55	10.60	\$ 2,555,520.00		55968		5.19

Subdistrict Z
 Project Summary #41
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037009

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Tarvin Rd. (Schmudde)	From Phillips Creek Rd. (Schmudde) to Licking Pike	3	0.70	\$ 203,280.00	Unincorporated	3696	55	4.29
Phillips Cr. Rd. (Schmudde)	Box 11053 to Tarvin Road	4	1.00	\$ 290,400.00	Unincorporated	5280	55	4.00
Tarvin Rd. (Schmudde)	From Lees Rd to Phillips Creek Rd. (Schmudde)	2	0.50	\$ 145,200.00	Unincorporated	2640	55	4.00
Pleasant Rdg. Rd.	From Harrisburg Hill Rd. to Kenton Station Rd.	4	1.10	\$ 319,440.00	Unincorporated	5808	55	3.64
US 27	Riley School to CC Small Engine	1	0.30	\$ 87,120.00	Unincorporated	1584	55	3.33
Vineyard (Gunkle Rd. #3)	From #6566 to #6436 (to end of line)	1	0.30	\$ 87,120.00	Meibourne	1584	55	3.33
Kenton Station Rd.	From Pleasant Rdg. Rd. to Pond Cr.Rd.	3	1.00	\$ 290,400.00	Unincorporated	5280	55	3.00
Rt.8	Lester Ln. to #617	3	1.00	\$ 290,400.00	Ft. Thomas	5280	55	3.00
Rt.8	Tower Hill to Lester Ln.	1	0.60	\$ 174,240.00	Ft. Thomas	3168	55	1.67
Flatwoods Rd	From Race Track Rd. to Burns Rd	4	1.50	\$ 435,600.00	Unincorporated	7920	55	2.67
Flagg Springs (Route 10)	From Short Cut Rd. (A. A. Hwy. Connector) to Daniels Road	1	0.50	\$ 145,200.00	Unincorporated	2640	55	2.00
Painter Rd	From Washington Tr. Rd to #3735	1	0.65	\$ 188,760.00	California/Unincorporated	3432	55	1.54
		28	9.15	\$ 2,657,160.00		48312		3.06

Subdistrict XX
 Project Summary #12
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037558

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Four Mile Pike	Nelson to Woodrun Dr.	2	1.00	\$ 290,400.00	Alexandria	5280	55	2.00
Riley Road (old)	From 4 mile (upper end) to 2nd house	2	0.10	\$ 29,040.00	Unincorporated	528	55	20.00
A.A.Hwy	Smith Road to Grandview Road	9	6.70	\$ 1,945,680.00	Will/Cld Sprng/Alex/Cal/Ment	35376	55	1.34
Lick Hill	AA Highway to dead end	1	0.10	\$ 29,040.00	California/Unincorporated	528	55	10.00
Country Lake	AA Highway to dead end	4.00	0.10	\$ 29,040.00	California/Unincorporated	528	55	40.00
US 27	CC Small Engine to south Licking pike	1	0.95	\$ 275,880.00	Unincorporated	5016	55	1.05
Gubser Mill Road	California Cross Road to dead end	1	0.80	\$ 232,320.00	California/Unincorporated	4224	55	1.25
		20	9.75	\$ 2,831,400.00		51480		2.05

Subdistrict YY
 Project Summary #13
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037558

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
A.A.Hwy	Grandview Road to Murman Road (overpass)	7	6.90	\$ 2,003,760.00	Will/Cid Sprng/Alex/Cal/Ment	36432	55	1.01
Rt.8	New Richmond Road to (south) D.E. of 3"	1	1.40	\$ 406,560.00	Unincorporated	7392	55	0.71
Low Gap Rd	From #878 to Tollgate (Alex-Licking Pike)	0	0.30	\$ 87,120.00	Unincorporated	1584	55	0.00
West Main Street (Alex.)	1/2 mile from city building towards Licking Pike	0.00	0.50	\$ 145,200.00	Alexandria	2640	55	0.00
Shaw-Hess Rd	From #10280 to Persimmon Gr. Pk.	0	0.45	\$ 130,680.00	Unincorporated	2376	55	0.00
		8	9.55	\$ 2,773,320.00		50424		0.84

Subdistrict ZZ
 Project Summary #14
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037558

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
A.A.Hwy	Dry Creek to Ivy Ridge	0	1.00	\$ 290,400.00	Cold Spring	5280	55	0.00
A.A.Hwy	Pendleton Cnty line to Smith Road	0	1.80	\$ 522,720.00	Will/Cld Sprng/Alex/Cal/Ment	9504	55	0.00
Creektrace Rd. (KY Rt. 536)	From U.S. 27 to Licking Pike	0	0.80	\$ 232,320.00	Unincorporated	4224	55	0.00
Licking Pike	Banklick to 0.9 miles north (St. John's Church)	0	0.90	\$ 261,360.00	Wilder	4752	55	0.00
Licking Pike	From end of line at Tipphauer to Murnan Rd	0	0.50	\$ 145,200.00	Unincorporated	2640	55	0.00
Losey Rd.	#901 to #912	0	0.40	\$ 116,160.00	Unincorporated	2112	55	0.00
Riley Road (old)	From 2nd house to 4 mile (lower end)	0	0.35	\$ 101,640.00	Unincorporated	1848	55	0.00
River Road	Last house to Rt. 8	0	0.50	\$ 145,200.00	Ft. Thomas	2640	55	0.00
Rt.8	??? South to Tower Hill	0	1.00	\$ 290,400.00	Dayton/Ft. Thomas	5280	55	0.00
Rt.8	River Rd. to Blangey Rd.	0	0.30	\$ 87,120.00	Brent	1584	55	0.00
Ten Mile Road	Ritter to 2802 Ten Mile Rd. (Schack farm)	0.00	0.50	\$ 145,200.00	Unincorporated	2640	55	0.00
		0	8.05	\$ 2,337,720.00		42504		0.00

Project Summary #PCWD
 Pendleton County Water District
 Pendleton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037050

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Aulick Rd.	From End of PCWD service Area to Muinn Rd.	12	0.70	\$ 203,280.00	Unincorporated	3696	55	17.14
Aulick Rd.	From Muinn Rd. to Demossville Rd.	3	0.40	\$ 116,160.00	Unincorporated	2112	55	7.50
Demossville Rd.	from Aulick to dead end	20	1.10	\$ 319,440.00	Unincorporated	5808	55	18.18
Hissem Rd.	From Fairlane to Nagel	8	0.90	\$ 261,360.00	Unincorporated	4752	55	8.89
Hissem Rd.	From Nagel to Aulick	11	0.50	\$ 145,200.00	Unincorporated	2640	55	22.00
Hissem Rd.	From Fairlane to County Line	2	0.40	\$ 116,160.00	Unincorporated	2112	55	21.43
Muinn Rd.	Aulick to dead end	15	0.70	\$ 203,280.00	Unincorporated	3696	55	14.29
Nagel Rd.	From Ridge View Estates to Hissem Rd.	10	0.70	\$ 203,280.00	Unincorporated	3696	55	14.29
Newkirk Road	From Fischer to Peach Grove Road (KY 154)	3	0.30	\$ 87,120.00	Unincorporated	1584	55	10.00
		84	5.70	\$ 1,655,280.00		30096		14.74

Subdistrict D Phase V
 Northern Kentucky Water District
 Campbell County Unserved Streets
 FUNDED - Completed 2003
 WRIS Project Number:

<u>Street</u>	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ per Foot	Customers Per mile
Licking Pike (from Walker Dr. to Poplar Thicket or #4006 Steffen Road (From Licking Pike to from Licking Pike to 1050 feet		18 6 24	1.46 0.20 1.66	\$ 331,015.87 \$ 40,455.36 \$ 371,471.23	Alexandria Alexandria	7709 1056 8765	42.94 38.31	12.33 30.00

Subdistrict F
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 Year Project Funded
 WRIS Project Number: WX21037552

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ per Foot	Customers Per mile
Grandview Rd.	Including Amy Lou Dr.	48	1.70	\$ 493,680.00	Alexandria	8976	55	28.24
Heck Rd.	Upper Tug Fork to dead end	12	0.70	\$ 203,280.00	Alexandria	3696	55	17.14
Licking Pike	From Evergreen Subdivision to Cold Stream (Ripple Cr.Rd)	4	0.40	\$ 116,160.00	Unincorporated	2112	55	10.00
Licking Pike	From Tollgate (Alex-Licking) to Rifle-Range Rd.	31	1.70	\$ -	Unincorporated	8976	55	18.24
Licking Pike	Licking Pike (From Rifle-Range Rd. to Sub D)	8	0.85	\$ 246,840.00	Unincorporated	4488	55	9.41
Flagg Springs (Route 10)	From Smith Rd. to Short Cut Rd. (A. A. Hwy. Connector)	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
Steffen Rd.	#634 to dead end	11	0.50	\$ -	Unincorporated	2640	55	22.00
West Main Street (Alex.)	1/2 mile from Licking Pike towards Alex.	10	0.50	\$ 360,096.00	Unincorporated	5808	55	16.36
2 Water Fill Stations	Cold Spring and Wilder	139	7.35	\$ 1,867,226.00		41976		

Campbell County Projects
0-2 Year Project PARTIALLY FUNDED
WRIS Project Number: WX21037561

City of Wilder - Three Mile Road/Gibson Lane Water Project

This project will construct a water line on Three Mile Road and Gibson Lane from I-275 to Licking Pike.

\$200,000

5/16/2007

Project Profile Water Quality Infrastructure Rehabilitation and Upgrade - Water Works Road
Northern Kentucky Water District
Campbell County Projects
0-2 Year Project PARTIALLY FUNDED
WRIS Project Number: WX21037562

\$200,000

City of Newport - Water Work Road water main replacement project

This project will replace the existing dual 20" critical transmission water lines on Water Works Road in Newport, Ky.

Project Profile Water Quality Infrastructure Rehabilitation and Upgrade - Newport Pavillion

Northern Kentucky Water District
Campbell County Projects
0-2 Year Project PARTIALLY FUNDED
WRIS Project Number: WX21037563

\$200,000

City of Newport -Newport Pavillion water line project

This project will replace the existing water lines to feed the Newport Pavillion development project in Newport, Ky.

TABLE OF CONTENTS

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Section Two: Opinion of Probable Cost

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VIOX & VIOX

Civil Engineers, Surveyors, and Landscape Architects

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Erlanger, Kentucky 41018

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Fax: 859.727.8452
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October 25, 2005

Northern Kentucky Water District
P.O. Box 17010
Covington, KY 41017
Fax: 859 578-7893

ATTN: Mr. John Scheben, Supervisor

RE: Preliminary Engineering Report
Campbell County Projects
(Emergency Interconnection, Enlargement
and System Reliability Projects)
Project Number WX21037203

Dear Mr. Scheben:

Submitted herein, as requested by the District, are our findings related to the above referenced future project.

The project includes an 11.15 mile waterline extension to benefit 255 unserved households and an emergency interconnection to East Pendleton County Water District; and two water main replacements and enlargements that will improve system pressure and reliability.

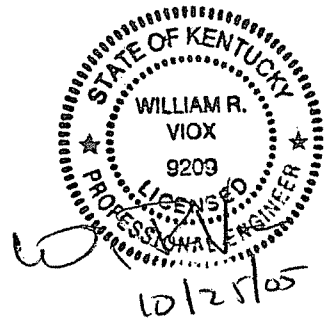
This Preliminary Engineering Report includes a field reconnaissance and review of the existing conditions with the professional staff at Northern Kentucky Water District. The report includes an opinion of probable cost to design and construct future project number WX21037203.

The principals at Viox & Viox, Inc., along with our staff, were directly involved in this Preliminary Engineering Report. We have attempted to include all pertinent and necessary information needed for your review and consideration, while keeping the document as concise as possible.

If you have any questions, please call James H. Viox III, P.E., P.L.S. or myself.

Respectfully Submitted,

William R. Viox, P.E., P.L.S.
Vice-President
Viox & Viox, Inc.



SECTION ONE:

PRELIMINARY ENGINEERING REPORT

**Preliminary Engineering Report
Project Number WX21037203**

Introduction

The Northern Kentucky Water District commissioned Viox & Viox, Inc. to explore and complete a Preliminary Engineering Report for the titled future project. Viox has provided the District with both preliminary and detailed analysis of system improvements for many years. The resumes of team members can be reviewed in Section Three (3) of this document. This document describes the Existing Conditions, Future Recommendations, and Opinion of Probable Costs. This report is preliminary in nature and not a result of final detailed design and analysis.

Existing Conditions

The Northern Kentucky Water District owns and maintains waterlines within Campbell County. It is the District's goal to provide potable water and fire protection to residents within the project area. Currently, there are 255 unserved households in the project area. Waterline extensions to the unserved households also make it possible to provide an emergency interconnection to East Pendleton County Water District. Within the future project area there is 2,000 feet of 4 inch transite water main. This undersized main does not meet the District goals related to fire protection. The ultimate elimination of transite mains and the safe disposal of transite materials should always be strongly considered when possible and practical.

Future Project Considerations

This future project allows the opportunity to provide service to unserved neighborhoods, an emergency interconnection to an adjoining water district, upsizing of existing main, and removal of transite materials. Specifically, the project includes two (2) concentrations of activities. The two portions of this future project are:

- (1) The unserved portion of this project includes 11.15 miles of waterline extension to serve 255 unserved households at an estimated cost of \$4,258,000. The average number of households served per mile for this project is 22.87 houses per mile. This project will also allow the District to provide an emergency interconnection to the East Pendleton County Water District. This component will be partially funded by a \$30 monthly customer surcharge and will be part of the District's Subdistrict system designated as Subdistrict H.
- (2) The underserved portion of this project includes two main replacement and enlargement components. The first involves the replacement of approximately 2,000 feet of 4 inch transite water main with new 8 inch water main and is estimated to cost \$265,000. The second involves the replacement of approximately 9,700 feet of 120

year old 30 inch water main with new 42 inch water main to improve pressure and system reliability. This improvement will impact over 50 percent of the District's nearly 80,000 customers at an estimated cost of \$5,253,000.

This project will impact over 60% of the Northern Kentucky Water District's nearly 80,000 customer base. The District is seeking \$4,500,000.00 of state budget funding and will provide a match for the remaining \$5,276,000.00 necessary to complete the project. The District is committing these funds through Bond Anticipation Notes and other local funding sources. Detailed design will begin upon receiving state budget funding.

SECTION TWO:
OPINION OF PROBABLE COST

**Opinion of Probable Cost
Project Number WX21037203**

This Preliminary Engineer's Estimate of Opinion of Probable Cost was accomplished by field reconnaissance, review with Staff of the District, and experience with design and construction of water projects within this region. This estimate is not the result of final design.

<u>Street</u>	<u>Comment</u>	<u>Estimated Project Cost</u>
Rifle Range Road	(Licking to Bridge)	\$ 401,340
Creektrace Road	(Pond Creek from Indian Trace to Bridge)	\$ 150,500
Creektrace Road	(Pond Creek) (John Miller Road to Indian Trace)	\$ 76,107
Creektrace Road	(Pond Creek) (Licking Pike to John Miller Road)	\$ 431,625
Indian Trace Road	(Creek Trace (Pond Cr.) to Jo Ann)	\$ 223,195
Indian Trace Road	(JoAnn to End of Road)	\$ 325,900
Jo Ann Lane	(Indian Trace to Dead-End)	\$ 117,020
Lauren	(From Creek Trace (KY 536) to End)	\$ 103,955
12" Upgrade Along Creektrace Road - 2.3 Mile		\$ 266,316
Schababerle Hill	(Wesley Chapel Road to Daniels Road)	\$ 185,505
Wesley Chapel Road	(Schababerle Hill to Flagg Springs Pike) (Rt. 10)	\$ 487,635
Wesley Chapel Road	(Calif. Crossroads to Schababerle Hill)	\$ 318,288
Maddox Road	(Madonna to Dead-End)	\$ 224,295
Cory	(Maddox to Dead-End)	\$ 61,210
John Miller Road		\$ 156,880
Enzweiler Road		\$ 70,310
Orlando		<u>\$ 49,220</u>
Total		\$4,258,245

Cost Estimate:

Construction	\$3,649,301
Engineering (4%)	\$ 145,972
Geo. Engineering (1.125%)	\$ 41,055
Geo. Inspection (0.06%)	\$ 21,896
KIA Cost (0.005%)	\$ 15,091
Interim Financing	\$ 15,000
Legal	\$ 5,000
Contingencies (10%)	<u>\$ 364,930</u>
Total	\$4,258,245

Source of Funds:

KIA / State Budget Funding	\$3,018,287
Campbell County Fiscal Court	\$ 25,000
Northern KY Water District Bond Issue	
NKWD Contribution	\$ 250,000
NKWD Hydraulic Contribution	\$ 310,755
NKWD Customer Surcharge	\$5,131
	<u>\$ 654,203</u>
Total	\$4,258,245

SECTION THREE:

REPORT TEAM

Viox & Viox, Inc.
Report Team

JAMES H. VIOX, III, P.E., P.L.S. (PRINCIPAL)

Jim Viox graduated from Virginia Polytechnic Institute with a Bachelor of Science in Civil Engineering in 1965. In 1968, Jim became a partner with Viox & Viox. He has been the primary design engineer for the firm since that time. He is responsible for all of the planning and design, and grading and utility design produced by the firm. He is actively involved in the community and serves as the City Engineer for Erlanger and Wilder, Kentucky. In 2003, Jim received the "Donald M. Wiedeman Award" for community service.

WILLIAM R. VIOX, P.E., P.L.S. (PRINCIPAL)

Bill Viox graduated from Louisiana Technical University with a Bachelor of Science in Civil Engineering in 1970. Bill began work as partner with Viox & Viox immediately following his graduation. Bill is responsible for the day-to-day operation of the firm and all quality control reviews performed by the office. He oversees all submittals, quantity take-offs, and professional estimates produced by Viox & Viox. His primary area of expertise is land development and public projects. Bill serves as the City Engineer for Florence, Kentucky. In 2000, Bill received the Northern Kentucky Home Builders Association "Donald M. Wiedeman Award" for community service.

MARY ETINGHER, P.L.S.

Ms. Etingher received an Associate Degree of Applied Science in Civil Engineering Technology from Cincinnati State in 1990. While at Cincinnati State, Mary was a recipient of a Merit Scholarship based on academic achievement. Mary began her career with Viox & Viox in 1988 as a co-op, and she became a full-time design technician after her graduation. Mary is extremely versatile and has extensive experience in boundary surveys, construction staking, and civil design. She is proficient in the use of AutoDesk Land Desktop and Civil Design 2005 (AutoCAD) design and surveying software. Mary became a registered Kentucky Land Surveyor in 2003.

MEGAN de SOLA, AICP

Ms. de Sola graduated with a Bachelor of Public Administration from the University of Mississippi in 1994. In 2002, Megan received a Master of Community Planning from the University of Cincinnati, as well as a Certificate in Historic Preservation. While at U.C., Megan was awarded the AICP Planning Student Award. Megan began working at Viox & Viox as a high school student in 1989. She became a full-time employee in 1996 as Viox & Viox's Financial Manager. Upon receiving her degree in Planning, Megan began a new position at Viox & Viox as Director of Planning Services. In 2005, Megan became a member of the American Institute of Certified Planners (AICP). She is currently responsible for all project proposals, project tracking, and the project application and submittal process to all public agencies.

SECTION FOUR:

EXHIBITS



VIOX & VIOX

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ENGINEERS ESTIMATE NORTHERN KENTUCKY WATER DISTRICT 8" WATER MAIN SUB-DISTRICT H # 1- RIFLE RANGE ROAD (LICKING TO BRIDGE)

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	5,380	LF	\$43.00	\$231,340.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	10	EA	\$350.00	\$3,500.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	6	EA	\$3,000.00	\$18,000.00
6" Resilient Seated Gate Valves & Boxes	4	EA	\$700.00	\$2,800.00
8" Resilient Seated Gate Valves & Boxes	3	EA	\$850.00	\$2,550.00
8" Resilient Seated Gate Valve & Box w/Test Tap	2	EA	\$950.00	\$1,900.00
Air Relief Valves	1	EA	\$1,500.00	\$1,500.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	4	EA	\$100.00	\$400.00
8" Pipe Plugs & Blocks	1	EA	\$150.00	\$150.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	1,316	SY	\$60.00	\$78,960.00
Mill & Resurface (Minimum 1 Lane)	2,960	SY	\$14.00	\$41,440.00
Driveway Restoration	70	SY	\$50.00	\$3,500.00
Concrete Encasement	180	LF	\$80.00	\$14,400.00
Total Estimated Contractor				\$401,340.00
				\$4,515.08
Geotechnical @ 1.125%				\$16,053.60
Engineering @ 4%				\$40,134.00
Contingencies @ 10%				
Total Estimated Cost				\$462,042.68



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
2 - CREEK TRACE ROAD
(POND CREEK FROM INDIAN TRACE TO BRIDGE)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	2,720	LF	\$43.00	\$116,960.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	5	EA	\$350.00	\$1,750.00
8" X 8" X 8" Tees & Blocks	2	EA	\$325.00	\$650.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	3	EA	\$3,000.00	\$9,000.00
6" Resilient Seated Gate Valves & Boxes	2	EA	\$750.00	\$1,500.00
8" Resilient Seated Gate Valves & Boxes	6	EA	\$850.00	\$5,100.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	2	EA	\$100.00	\$200.00
8" Pipe Plugs & Blocks	3	EA	\$150.00	\$450.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	55	SY	\$60.00	\$3,300.00
Mill & Resurface (Minimum 1 Lane)	110	SY	\$14.00	\$1,540.00
Driveway Restoration	135	SY	\$50.00	\$6,750.00
Concrete Encasement	30	LF	\$80.00	\$2,400.00
Total Estimated Contractor				\$150,500.00
Geotechnical @ 1.125%				\$1,693.13
Engineering @ 4%				\$6,020.00
Contingencies @ 10%				\$15,050.00
Total Estimated Cost				\$173,263.13



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
3 - CREEK TRACE ROAD
(POND CREEK) (JOHN MILLER ROAD TO INDIAN TRACE)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	1,410	LF	\$43.00	\$60,630.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	3	EA	\$350.00	\$1,050.00
8" X 8" X 8" Tees & Blocks	1	EA	\$325.00	\$325.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	2	EA	\$3,000.00	\$6,000.00
6" Resilient Seated Gate Valves & Boxes	1	EA	\$750.00	\$750.00
8" Resilient Seated Gate Valves & Boxes	3	EA	\$850.00	\$2,550.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	1	EA	\$100.00	\$100.00
8" Pipe Plugs & Blocks	2	EA	\$150.00	\$300.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	19	SY	\$60.00	\$1,140.00
Mill & Resurface (Minimum 1 Lane)	133	SY	\$14.00	\$1,862.00
Driveway Restoration	10	SY	\$50.00	\$500.00
Remove 8" Pipe Plug & Block	1	LF	\$500.00	\$500.00
Total Estimated Contractor				\$76,107.00
Geotechnical @ 1.125%				\$856.20
Engineering @ 4%				\$3,044.28
Contingencies @ 10%				\$7,610.70
Total Estimated Cost				\$87,618.18



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
12" WATER MAIN
SUB-DISTRICT H
4A- CREEK TRACE ROAD
(LICKING PIKE TO VISALIA BRIDGE)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
12" DIP Class 50 w/Polywrap & Fittings	12,630	LF	\$64.00	\$808,320.00
12" X 12" X 6" Ductile-Iron Anchoring Tees & Blocks	14	EA	\$475.00	\$6,650.00
12" X 12" X 8" Tees & Blocks	4	EA	\$485.00	\$1,940.00
12" X 12" X 12" Tee & Block {cut into ex. Main}	1	EA	\$1,000.00	\$1,000.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	14	EA	\$3,000.00	\$42,000.00
8" Resilient Seated Gate Valves & Boxes	3	EA	\$850.00	\$2,550.00
12" Resilient Seated Gate Valves & Boxes	15	EA	\$1,600.00	\$24,000.00
12" Resilient Seated Gate Valve & Box w/Test Tap	1	EA	\$1,750.00	\$1,750.00
8" Pipe Plugs & Blocks	4	EA	\$300.00	\$1,200.00
12" Pipe Plug & Block	1	EA	\$400.00	\$400.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	89	SY	\$60.00	\$5,340.00
Mill & Resurface (Minimum 1 Lane)	332	SY	\$14.00	\$4,648.00
Driveway Restoration	255	SY	\$50.00	\$12,750.00
Concrete Encasement	150	LF	\$80.00	\$12,000.00
Total Estimated Contractor				\$924,548.00
Geotechnical				\$0.00
Engineering @ 8%				\$73,963.84
Contingencies @ 10%				\$92,454.80
Total Estimated Cost				\$1,090,966.64



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
4 - CREEK TRACE ROAD
(POND CREEK) (LICKING PIKE TO JOHN MILLER ROAD)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	8,500	LF	\$43.00	\$365,500.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	17	EA	\$350.00	\$5,950.00
8" X 8" X 8" Tees & Blocks	1	EA	\$325.00	\$325.00
12"X12"X8" Tee & Block {cut into ex. 12" main}	1	EA	\$1,000.00	\$1,000.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	9	EA	\$3,000.00	\$27,000.00
6" Resilient Seated Gate Valves & Boxes	8	EA	\$750.00	\$6,000.00
8" Resilient Seated Gate Valves & Boxes	6	EA	\$850.00	\$5,100.00
8" Resilient Seated Gate Valve & Box w/Test Tap	1	EA	\$950.00	\$950.00
12" Resilient Seated Gate Valves & Boxes	2	EA	\$1,600.00	\$3,200.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	8	EA	\$100.00	\$800.00
8" Pipe Plugs & Blocks	2	EA	\$150.00	\$300.00
Driveway Restoration	110	SY	\$50.00	\$5,500.00
Concrete Encasement	120	LF	\$80.00	\$9,600.00
Total Estimated Contractor				\$431,625.00
Geotechnical @ 1.125%				\$4,855.78
Engineering @ 4%				\$17,265.00
Contingencies @ 10%				\$43,162.50
Total Estimated Cost				\$496,908.28



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
5 - INDIAN TRACE ROAD
(CREEK TRACE (POND CREEK) TO JOANN)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	3,230	LF	\$43.00	\$138,890.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	6	EA	\$350.00	\$2,100.00
8" X 8" X 8" Tees & Blocks	1	EA	\$325.00	\$325.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	3	EA	\$3,000.00	\$9,000.00
6" Resilient Seated Gate Valves & Boxes	3	EA	\$850.00	\$2,550.00
8" Resilient Seated Gate Valves & Boxes	4	EA	\$850.00	\$3,400.00
8" Resilient Seated Gate Valve & Box w/ Test Tap	1	EA	\$950.00	\$950.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	3	EA	\$100.00	\$300.00
8" Pipe Plugs & Blocks	2	EA	\$150.00	\$300.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	578	SY	\$60.00	\$34,680.00
Mill & Resurface (Minimum 1 Lane)	1,300	SY	\$14.00	\$18,200.00
Driveway Restoration	72	SY	\$50.00	\$3,600.00
Concrete Encasement	100	LF	\$80.00	\$8,000.00
Total Estimated Contractor				\$223,195.00
Geotechnical @ 1.125%				\$2,510.94
Engineering @ 4%				\$8,927.80
Contingencies @ 10%				\$22,319.50
Total Estimated Cost				\$256,953.24



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
6 - INDIAN TRACE ROAD
(JOANN TO END OF ROAD)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	4,650	LF	\$43.00	\$199,950.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	9	EA	\$350.00	\$3,150.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	5	EA	\$3,000.00	\$15,000.00
6" Resilient Seated Gate Valves & Boxes	4	EA	\$750.00	\$3,000.00
8" Resilient Seated Gate Valves & Boxes	3	EA	\$850.00	\$2,550.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	4	EA	\$100.00	\$400.00
8" Pipe Plugs & Blocks	1	EA	\$150.00	\$150.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	1,000	SY	\$60.00	\$60,000.00
Mill & Resurface (Minimum 1 Lane)	2,250	SY	\$14.00	\$31,500.00
Driveway Restoration	90	SY	\$50.00	\$4,500.00
Concrete Encasement	60	LF	\$80.00	\$4,800.00
Total Estimated Contractor				\$325,900.00
Geotechnical @ 1.125%				\$3,666.38
Engineering @ 4%				\$13,036.00
Contingencies @ 10%				\$32,590.00
Total Estimated Cost				\$375,192.38



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
7 - JOANN LANE
(INDIAN TRACE TO DEAD-END)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	2,140	LF	\$43.00	\$92,020.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	4	EA	\$350.00	\$1,400.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	2	EA	\$3,000.00	\$6,000.00
6" Resilient Seated Gate Valves & Boxes	2	EA	\$750.00	\$1,500.00
8" Resilient Seated Gate Valves & Boxes	1	EA	\$850.00	\$850.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
8" Pipe Plugs & Blocks	1	EA	\$150.00	\$150.00
6" Pipe Plugs & Blocks	2	EA	\$100.00	\$200.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	45	SY	\$60.00	\$2,700.00
Mill & Resurface (Minimum 1 Lane)	200	SY	\$14.00	\$2,800.00
Driveway Restoration	140	SY	\$50.00	\$7,000.00
Air Relief Valve	1	EA	\$1,500.00	\$1,500.00
Total Estimated Contractor				\$117,020.00
Geotechnical @ 1.125%				\$1,316.48
Engineering @ 4%				\$4,680.80
Contingencies @ 10%				\$11,702.00
Total Estimated Cost				\$134,719.28



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
8 - LAUREN
(FROM CREEK TRACE (KY 536) TO END)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	1,900	LF	\$43.00	\$81,700.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	4	EA	\$350.00	\$1,400.00
8" X 8" X 8" Tees & Blocks	1	EA	\$325.00	\$325.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	2	EA	\$3,000.00	\$6,000.00
6" Resilient Seated Gate Valves & Boxes	2	EA	\$750.00	\$1,500.00
8" Resilient Seated Gate Valves & Boxes	4	EA	\$850.00	\$3,400.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	2	EA	\$100.00	\$200.00
8" Pipe Plugs & Blocks	2	EA	\$150.00	\$300.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	10	SY	\$60.00	\$600.00
Mill & Resurface (Minimum 1 Lane)	45	SY	\$14.00	\$630.00
Driveway Restoration	150	SY	\$50.00	\$7,500.00
Concrete Encasement		LF	\$80.00	\$0.00
Total Estimated Contractor				\$103,955.00
Geotechnical @ 1.125%				\$1,169.49
Engineering @ 4%				\$4,158.20
Contingencies @ 10%				\$10,395.50
Total Estimated Cost				\$119,678.19



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
9 - SCHABABERLE HILL
(WESLEY CHAPEL ROAD TO DANIELS ROAD)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	3,620	LF	\$43.00	\$155,660.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	7	EA	\$350.00	\$2,450.00
8" X 8" X 8" Tees & Blocks	1	EA	\$325.00	\$325.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	4	EA	\$3,000.00	\$12,000.00
6" Resilient Seated Gate Valves & Boxes	3	EA	\$750.00	\$2,250.00
8" Resilient Seated Gate Valves & Boxes	4	EA	\$850.00	\$3,400.00
Air Relief Valve	1	EA	\$1,500.00	\$1,500.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	3	EA	\$100.00	\$300.00
8" Pipe Plugs & Blocks	2	EA	\$150.00	\$300.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	60	SY	\$60.00	\$3,600.00
Mill & Resurface (Minimum 1 Lane)	130	SY	\$14.00	\$1,820.00
Driveway Restoration	20	SY	\$50.00	\$1,000.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Total Estimated Contractor				\$185,505.00
Geotechnical @ 1.125%				\$2,086.93
Engineering @ 4%				\$7,420.20
Contingencies @ 10%				\$18,550.50
Total Estimated Cost				\$213,562.63



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
10 - WESLEY CHAPEL ROAD
(SCHABABERLE HILL TO FLAGG SPRINGS PIKE) (ROUTE 10)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" PVC {C-900} Water Main & Fittings	9,560	LF	\$43.00	\$411,080.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	19	EA	\$350.00	\$6,650.00
8" X 8" X 8" Tees & Blocks	1	EA	\$325.00	\$325.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	10	EA	\$3,000.00	\$30,000.00
6" Resilient Seated Gate Valves & Boxes	9	EA	\$750.00	\$6,750.00
8" Resilient Seated Gate Valves & Boxes	7	EA	\$850.00	\$5,950.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	9	EA	\$100.00	\$900.00
8" Pipe Plugs & Blocks	2	EA	\$150.00	\$300.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	90	SY	\$60.00	\$5,400.00
Mill & Resurface (Minimum 1 Lane)	270	SY	\$14.00	\$3,780.00
Driveway Restoration	312	SY	\$50.00	\$15,600.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Total Estimated Contractor				\$487,635.00
Geotechnical @ 1.125%				\$5,485.89
Engineering @ 4%				\$19,505.40
Contingencies @ 10%				\$48,763.50
Total Estimated Cost				\$561,389.79



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
11 - WESLEY CHAPEL ROAD
(CALIFORNIA CROSSROADS TO SCHABABERLE HILL)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	6,000	LF	\$43.00	\$258,000.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	12	EA	\$350.00	\$4,200.00
8" X 8" X 8" Tees & Blocks (Cut Into Existing Main)	1	EA	\$550.00	\$550.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	6	EA	\$3,000.00	\$18,000.00
6" Resilient Seated Gate Valves & Boxes	6	EA	\$750.00	\$4,500.00
8" Resilient Seated Gate Valves & Boxes	8	EA	\$850.00	\$6,800.00
8" Resilient Seated Gate Valve & Box w/ Test Tap	1	EA	\$950.00	\$950.00
6" Pipe Plugs & Blocks	6	EA	\$100.00	\$600.00
8" Pipe Plugs & Blocks	2	EA	\$150.00	\$300.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	88	SY	\$60.00	\$5,280.00
Mill & Resurface (Minimum 1 Lane)	222	SY	\$14.00	\$3,108.00
Driveway Restoration	192	SY	\$50.00	\$9,600.00
Concrete Encasement	80	LF	\$80.00	\$6,400.00
Total Estimated Contractor				\$318,288.00
Geotechnical @ 1.125%				\$3,580.74
Engineering @ 4%				\$12,731.52
Contingencies @ 10%				\$31,828.80
Total Estimated Cost				\$366,429.06



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
12 - MADDOX ROAD
(MARTIN TO DEAD-END)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	4,420	LF	\$43.00	\$190,060.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	8	EA	\$350.00	\$2,800.00
8" X 8" X 8" Tees & Blocks	1	EA	\$325.00	\$325.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	4	EA	\$3,000.00	\$12,000.00
6" Resilient Seated Gate Valves & Boxes	4	EA	\$750.00	\$3,000.00
8" Resilient Seated Gate Valves & Boxes	4	EA	\$850.00	\$3,400.00
8" Tapping Sleeve & Valve	1	EA	\$3,500.00	\$3,500.00
6" Pipe Plugs & Blocks	4	EA	\$100.00	\$400.00
8" Pipe Plugs & Blocks	2	EA	\$150.00	\$300.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	85	SY	\$60.00	\$5,100.00
Mill & Resurface (Minimum 1 Lane)	190	SY	\$14.00	\$2,660.00
Driveway Restoration	15	SY	\$50.00	\$750.00
Total Estimated Contractor				\$224,295.00
Geotechnical @ 1.125%				\$2,523.32
Engineering @ 4%				\$8,971.80
Contingencies @ 10%				\$22,429.50
Total Estimated Cost				\$258,219.62

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ENGINEERS ESTIMATE NORTHERN KENTUCKY WATER DISTRICT 8" WATER MAIN SUB-DISTRICT H # 13 - CORY (MADDOX TO DEAD-END)

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" PVC {C-900} Water Main & Fittings	1,660	LF	\$43.00	\$71,380.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	3	EA	\$350.00	\$1,050.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	3	EA	\$3,000.00	\$9,000.00
8" Resilient Seated Gate Valves & Boxes	1	EA	\$850.00	\$850.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
8" Pipe Plugs & Blocks	1	EA	\$150.00	\$150.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	10	SY	\$60.00	\$600.00
Mill & Resurface (Minimum 1 Lane)	45	SY	\$14.00	\$630.00
Driveway Restoration	133	SY	\$50.00	\$6,650.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Total Estimated Contractor				\$91,210.00
Geotechnical @ 1.125%				\$1,026.11
Engineering @ 4%				\$3,648.40
Contingencies @ 10%				\$9,121.00
Total Estimated Cost				\$105,005.51



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
14 - JOHN MILLER ROAD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	3,000	LF	\$43.00	\$129,000.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	6	EA	\$350.00	\$2,100.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	3	EA	\$3,000.00	\$9,000.00
6" Resilient Seated Gate Valves & Boxes	3	EA	\$750.00	\$2,250.00
8" Resilient Seated Gate Valves & Boxes	2	EA	\$850.00	\$1,700.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plugs & Blocks	3	EA	\$100.00	\$300.00
8" Pipe Plugs & Blocks	1	EA	\$150.00	\$150.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	120	SY	\$60.00	\$7,200.00
Mill & Resurface (Minimum 1 Lane)	270	SY	\$14.00	\$3,780.00
Driveway Restoration	10	SY	\$50.00	\$500.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Total Estimated Contractor				\$156,880.00
Geotechnical @ 1.125%				\$1,764.90
Engineering @ 4%				\$6,275.20
Contingencies @ 10%				\$15,688.00
Total Estimated Cost				\$180,608.10



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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
15 - ENZWEILER ROAD**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" DIP Class 50 w/Polywrap & Fittings	1,270	LF	\$43.00	\$54,610.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	3	EA	\$350.00	\$1,050.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	2	EA	\$3,000.00	\$6,000.00
6" Resilient Seated Gate Valve & Box	1	EA	\$750.00	\$750.00
8" Resilient Seated Gate Valve & Box	1	EA	\$850.00	\$850.00
Connect to 8" Water Main	1	EA	\$400.00	\$400.00
6" Pipe Plug & Block	1	EA	\$100.00	\$100.00
8" Pipe Plug & Block	1	EA	\$150.00	\$150.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	45	SY	\$60.00	\$2,700.00
Mill & Resurface (Minimum 1 Lane)	100	SY	\$14.00	\$1,400.00
Driveway Restoration	36	SY	\$50.00	\$1,800.00
Remove 8" Pipe Plug & Block	1	EA	\$500.00	\$500.00
Total Estimated Contractor				\$70,310.00
Geotechnical @ 1.125%				\$790.99
Engineering @ 4%				\$2,812.40
Contingencies @ 10%				\$7,031.00
Total Estimated Cost				\$80,944.39



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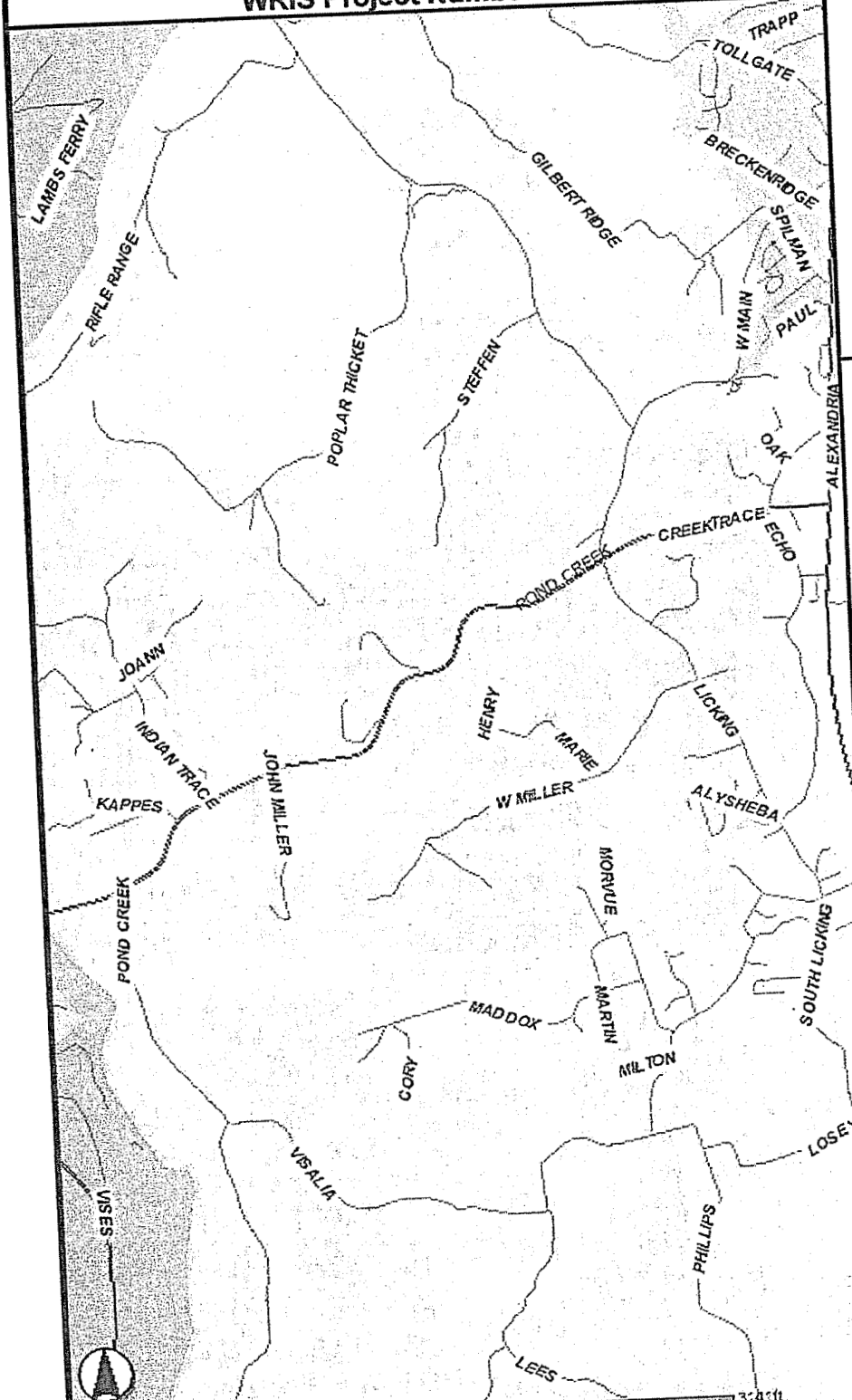
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**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
8" WATER MAIN
SUB-DISTRICT H
16 - ORLANDO**

ITEM	QUANTITY	UNIT	UNIT COST	COST
8" PVC {C-900} Water Main & Fittings	740	LF	\$43.00	\$31,820.00
8" X 8" X 6" Ductile-Iron Anchoring Tees & Blocks	2	EA	\$350.00	\$700.00
Fire Hydrant Assembly Incl. 6" Ductile-Iron Resilient Seated Gate Valve & Valve Box, 6" Ductile-Iron Anchor. Coupling, Fire Hydrant, Blocking & Necessary Extensions	1	EA	\$3,000.00	\$3,000.00
6" Resilient Seated Gate Valve & Box	1	EA	\$750.00	\$750.00
8" Resilient Seated Gate Valve & Box	1	EA	\$850.00	\$850.00
8" Tapping Sleeve & Valve	1	EA	\$3,500.00	\$3,500.00
6" Pipe Plug & Block	1	EA	\$100.00	\$100.00
8" Pipe Plug & Block	1	EA	\$150.00	\$150.00
Road Restoration Conforming to Existing Materials and Thickness (4' Wide)	50	SY	\$60.00	\$3,000.00
Mill & Resurface (Minimum 1 Lane)	125	SY	\$14.00	\$1,750.00
Driveway Restoration	72	SY	\$50.00	\$3,600.00
Total Estimated Contractor				\$49,220.00
Geotechnical @ 1.125%				\$553.73
Engineering @ 4%				\$1,968.80
Contingencies @ 10%				\$4,922.00
Total Estimated Cost				\$56,664.53

WRIS Project Number: WX21037203 - Sub-District H



Legend

Buildings	Comprehensive Plan
Building	Recreation
Swimming Pool	Agricultural and Rural
Linear Corridor	Commercial Office
Garage Pad	Commercial Retail
Tax	Industrial
Roads	Other Community Facilities
Parcels	Public and Electric
Subdivisions	Highway
2 Ft Contours	Recreation and Open Space
Zoning	Residential 14 FT TO 20 FT
	Residential 16 FT TO 20 FT
	Residential 21 FT TO 24 FT
	Residential 24 FT TO 28 FT
	Residential 28 FT TO 32 FT
	Residential 32 FT TO 36 FT
	Residential 36 FT TO 40 FT
	Residential 40 FT TO 44 FT
	Residential 44 FT TO 48 FT
	Residential 48 FT TO 52 FT
	Residential 52 FT TO 56 FT
	Residential 56 FT TO 60 FT
	Residential 60 FT TO 64 FT
	Residential 64 FT TO 68 FT
	Residential 68 FT TO 72 FT
	Residential 72 FT TO 76 FT
	Residential 76 FT TO 80 FT
	Residential 80 FT TO 84 FT
	Residential 84 FT TO 88 FT
	Residential 88 FT TO 92 FT
	Residential 92 FT TO 96 FT
	Residential 96 FT TO 100 FT
	School Parks
	Official Development Data
	Water

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Zoning and comprehensive plan data provided by:

NKAPC
Northern Kentucky Area Planning Commission

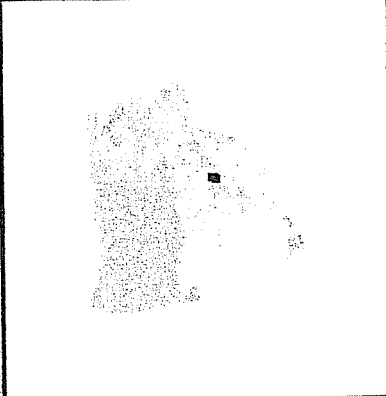
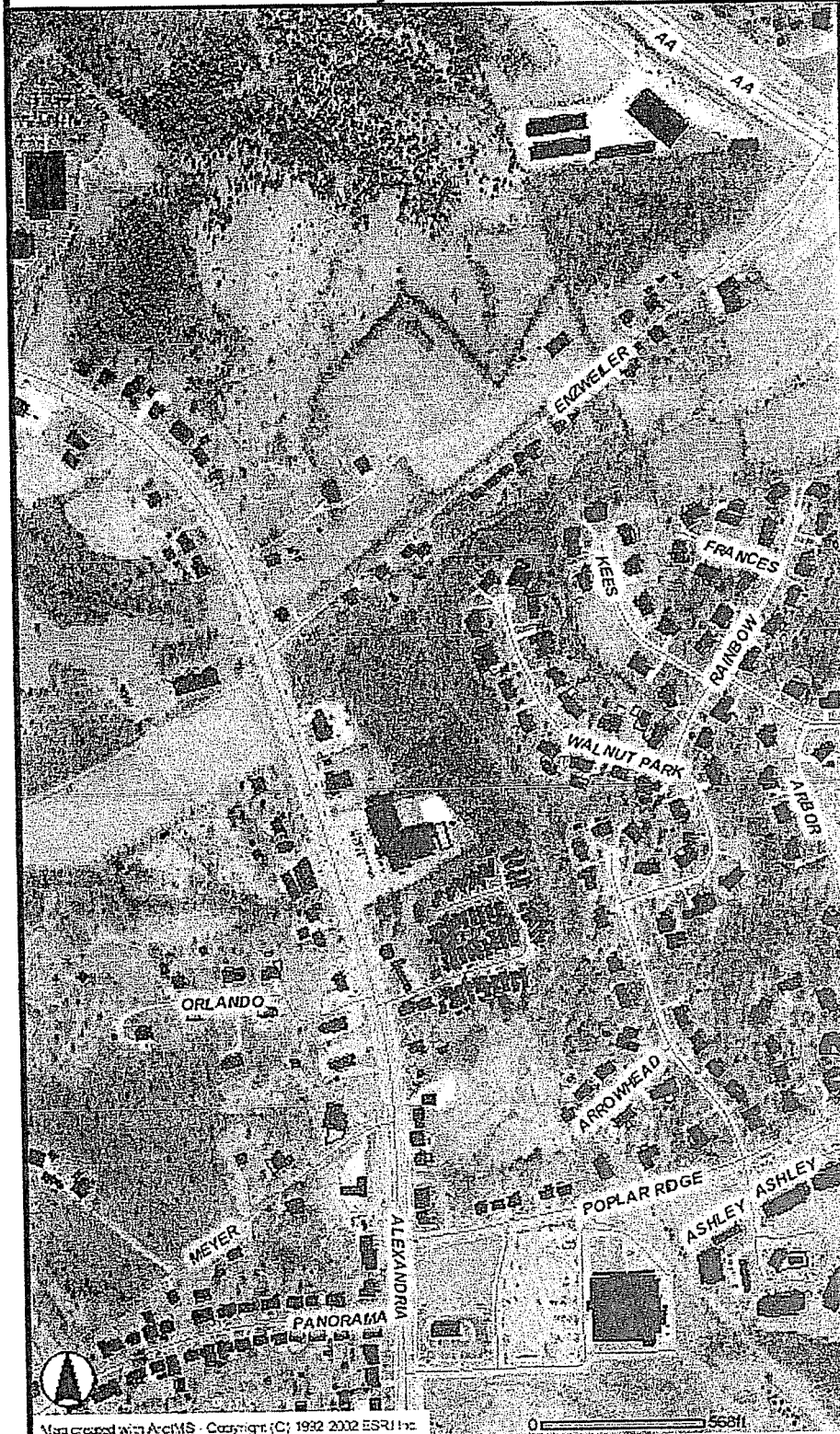
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WRIS Project Number: WX21037203



Legend

- | | |
|---|---|
| <ul style="list-style-type: none"> Buildings Swimming Pools User Contribution Delineation Tax Roads Parcels Subdivisions 2 Ft Contours Zoning | <ul style="list-style-type: none"> Comprehensive Plan Recommended Land Use RURAL RESIDENTIAL URBAN RESIDENTIAL COMMERCIAL INDUSTRIAL OTHER COMMUNITY FACILITIES SPECIAL DISTRICT RAILROAD RESIDENTIAL MEDIUM DENSITY RESIDENTIAL SINGLE-FAMILY RESIDENTIAL MEDIUM DENSITY RESIDENTIAL SINGLE-FAMILY RESIDENTIAL SINGLE-FAMILY RESIDENTIAL SINGLE-FAMILY RESIDENTIAL SINGLE-FAMILY RESIDENTIAL SINGLE-FAMILY RESIDENTIAL SINGLE-FAMILY RIGHT OF WAY SCHOOL ROAD SPECIAL DEVELOPMENT AREA WATER |
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Campbell County Unserved Street Listing

Sorted "Density"

Full Listing	Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Orlando		House #22 to D.E. (#15 has spiderline)	6	0.1	32,736	Alexandria	528	62	60.00
JoAnn Lane		Indian Trace to dead end	19	0.4	130,944	Unincorporated	2112	62	47.50
Lauren		Creek Trace (Rt. 536) to D.E.	18	0.4	130,944	Unincorporated	2112	62	45.00
Cory		Maddox to D.E.	12	0.3	98,208	Unincorporated/California/Uninc	1584	62	40.00
Country Lake		AA Highway to dead end	4	0.1	29,040	Unincorporated	528	55	40.00
Creekrace Rd. (Pond Creek)		From Indian Trace Rd. to Bridge	20	0.5	163,680	Unincorporated	2640	62	32.50
Rifle Range Rd.		From Licking Pike to bridge	26	0.8	261,888	Unincorporated	4224	62	30.00
Creekrace Rd. (Pond Creek)		From John Miller Rd. to Indian Trace Rd.	6	0.2	65,472	Unincorporated	1056	62	28.33
Enzweiler Road		From last fire hydrant to dead end - East of AA hwy	17	0.6	196,416	Unincorporated	3168	62	28.00
Blangey Rd.		Blangey Rd.	14	0.5	145,200	Brent	2640	55	26.67
Overlook		Fire hydrant to Licking Pike (#118 served)	4	0.15	43,560	Newport	792	55	26.67
Reis Lane (Decker Rd.)		Reis Ridge (Decker) to Dead end	8	0.3	96,624	Unincorporated	1584	61	25.00
Indian Trace Rd.		Indian Trace Rd. (From Creek Trace (Pond Cr.) to JoAnn)	15	0.6	196,416	Unincorporated	3168	62	25.00
Schababerle Hill		From Wesley Chapel Rd. to Daniels Rd	22	0.65	212,784	Unincorporated	3432	62	24.62
Bakerfield Rd.		Off of Boone Smith Rd.	16	0.9	261,360	Unincorporated	4752	55	24.44
Anderson Trace		Barrs Branch to D.E.	10	0.45	130,680	Alexandria	2376	55	22.22
Trapp-Murman		Johnson to D.E.	10	0.45	130,680	Unincorporated	2376	55	22.22
Upper Lick Branch Rd.		From Grandview to driveway past #2274	11	0.5	145,200	Unincorporated	2640	55	22.00
Hisssem Rd.		From Nagel to Aulick	15	0.7	203,280	Unincorporated	3696	55	21.43
Mulinn Rd.		Aulick to dead end	22	1.1	319,440	Unincorporated	5808	55	20.00
Harrisburg Hill		From Lees to Pleasant Rdg. Rd.	10	0.5	145,200	Unincorporated	2640	62	20.00
Harrisburg Hill		From Pleasant Ridge to dead end	18	0.9	294,624	Unincorporated	4752	62	20.00
Indian Trace Rd.		Indian Trace Rd. (From JoAnn to End of road)	10	0.5	163,680	Unincorporated	2640	62	20.00
John Miller		From Creek Trace to dead end	8	0.4	116,160	Unincorporated	2112	55	20.00
Kappas Drive		Lauren to Dead End	2	0.1	29,040	Unincorporated	528	55	20.00
Kennedy		From Daniels to dead end	4	0.2	58,080	Unincorporated	1056	55	20.00
Low Gap Rd		From #954 to #878	8	0.4	116,160	Melbourne	2112	55	20.00
Mystic Rose (Gunkle Rd. #2)		Gunkle Rd. to dead end	2	0.1	29,040	Unincorporated	528	55	20.00
Pleasant Road		from Wagner Rd. To end of road	10	0.5	145,200	Unincorporated	2640	61	20.00
Pleasant Rdg. Rd.		From Visalia Rd to Lees Rd.	10	0.5	161,040	Unincorporated	2640	61	20.00
Reis Ridge		From Shaw Goetz to Reis Lane (Decker Rd)	10	0.5	161,040	Unincorporated	2640	55	20.00
Reis Ridge		From Reis Lane (Decker Rd) to end of road	2	0.1	29,040	Unincorporated	528	55	20.00
Riley Road (old)		From 4 mile (upper end) to 2nd house	5	0.25	72,600	Unincorporated	1320	55	20.00
Stonehouse Rd. (4&12 Mile)		Lower Grandview to A.A. Hwy	25	1.3	377,520	Unincorporated	6864	55	19.23
Dodsworth Ln.		Dodsworth Ln.							

Wesley Chapel Rd.	From Schababerle Hill to Flagg Springs Pike (Route 10)	33	1.8	589,248	Unincorporated	9504	62	18.33
Demossville Rd.	from Auilick to dead end	20	1.1	319,440	Unincorporated	5808	55	18.18
Shaw Goetz Rd.	From Reis Ridge Rd. to Flagg Springs Pike (Rt 10)	20	1.1	354,288	Unincorporated	5808	61	18.18
Auilck Rd.	From End of PCWD service Area to Murnin Rd.	12	0.7	203,280	Unincorporated	3696	55	17.14
Boone Smith Rd.	From Bakerfield Rd. to PCWD end of line (#873)	12	0.7	203,280	Unincorporated	3696	55	17.14
Lees Road	From Tarvin Rd. to Harrisburg Hill Rd.	5	0.3	87,120	Unincorporated	1584	55	16.67
Lower Grandview Rd.	From Stone House to dead end	18	1.1	360,096	Unincorporated	5808	62	16.36
Wesley Chapel Rd.	From Calif. Cr. Rds. To Schababerle Hill	32	2	580,800	Unincorporated	10560	55	16.00
Burns Rd.	From Flatwoods Rd. to St. Route 154	16	1	327,360	Unincorporated	5280	62	16.00
Daniels Rd.	From Schababerle Hill to #3185	4	0.25	72,600	Ft. Thomas	1320	55	16.00
Tower Hill Rd.	From Rt. 8 to Watchpoint	11	0.7	203,280	Unincorporated	3696	55	15.71
Baynum Hill Rd.	Baynum Hill Rd.	11	0.7	229,152	Claryville	3696	62	15.56
Maddox Rd	Madonna to dead end	7	0.45	130,680	California/Uninc	2376	55	15.56
California Cross Rds.	From Bezold Rd to #2038	17	1.1	319,440	Alexandria	5808	55	15.45
Barrs Branch Rd.	From End of line on Barrs Br. To Flagg Springs Pike (Rt 1	17	1.1	319,440	Unincorporated	5808	55	15.45
Pleasant Rdg. Rd.	From Lees Rd. to Harrisburg Hill Rd.	20	1.3	377,520	Unincorporated	6864	55	15.38
Visalia Road	Pleasant Ridge to Pond Creek	15	1	290,400	Unincorporated	5280	55	15.00
Bezold Rd.	From Burns Rd to California Cr. Rds.	3	0.2	58,080	Unincorporated	1056	55	15.00
Boone Smith Rd.	From Pleasant Rdg Rd to Bakerfield Rd	9	0.6	174,240	Unincorporated	3168	55	15.00
Clay Rdg. Rd.	From Wolf Rd. to Pleasant Rdg Rd.	12	0.8	232,320	Unincorporated	4224	55	15.00
Clay Rdg. Rd.	From Pleasant Rdg Rd. to Morningview Rd	12	0.8	232,320	Unincorporated	4224	55	15.00
Haubner Rd.	from Fischer to dead end	15	1	290,400	Unincorporated	5280	55	15.00
Hidden Valley	from Murnan to dead end	15	1	290,400	Unincorporated	5280	55	15.00
Lees Road	From Pleasant Rdg. Rd. To Tarvin Rd.	9	0.6	174,240	Brent	3168	55	15.00
Rt.8	Winters Lane to End of line near Ky-1998	6	0.4	116,160	California/Uninc	2112	55	15.00
Rt.8	From end of line #7610 to Oneonta Rd.	15	1	290,400	Melbourne	5280	55	15.00
Truesdell Rd.	Box 7568 to Oneota	9	0.6	174,240	Unincorporated	3168	55	15.00
Wish Rd.	From Fischer to dead end	9	0.6	174,240	Unincorporated	3168	55	15.00
Wolf Road	From Clay Rdg. Rd. to end of road	19	1.3	377,520	Unincorporated -2	6864	55	14.62
Pleasant Rdg. Rd.	From Boone Smith Road to Clay Rdg. Rd.	10	0.7	203,280	Unincorporated	3696	55	14.29
Nagel Rd.	From Ridge View Estates to Hissem Rd.	15	1	290,400	Unincorporated	5280	55	15.00
Poplar Thicket Rd.	Licking Pike to #446	2	0.15	43,560	Unincorporated	792	55	13.33
Blue Sky Lane	Poplar Thicket to Dead End	16	1.2	348,480	Unincorporated	6336	55	13.33
Burns Rd.	from Flatwoods Rd. to Bezold Rd.	8	0.6	174,240	Melbourne	3168	55	13.33
Gunkle Rd. (Gunkle #1)	Nine Millie Road to dead end	2	0.15	43,560	Unincorporated	792	55	13.33
Shaw-Hess Rd	From end of line on Shaw Hess to #10280	10	0.8	232,320	California/Uninc	4224	55	12.50
Oneonta Rd.	From Rt.8 to Truesdale	15	1.2	348,480	Unincorporated	6336	55	12.50
Pond Creek Road	From Visalia Rd. to #1707	25	2	580,800	Unincorporated	10560	61	12.31
Pond Creek Road	From Bridgita Rd. to #11707	16	1.3	418,704	Unincorporated	6864	61	12.22
Poplar Thicket Rd.	#466 to Dead End	11	0.9	261,360	Unincorporated	4752	55	11.67
Stonhouse Rd. (4&12 Mile)	A.A. Hwy. to Flagg Springs Pike (Route 10)	7	0.6	174,240	Alexandria	3168	55	11.67
Wagoner (Dead Timber Rd. #2)	from end of line To Newberry (Wagner)	8	0.7	225,456	Wildier	3696	61	11.43
3 Mile Road	Gibson Road to Tessner	8	0.7	203,280	Unincorporated	3696	55	11.43
Bob-White Lane	Bob-White Lane	8	0.7	203,280	Unincorporated	3696	55	11.43
Tippenhauer Rd.	From #211 to end of road	16	1.4	406,560	Cold Spring	7392	55	11.43

Fisher Rd	From Wish Rd. to Haubner Rd.	11	1	290,400	Unincorporated	5280	55	11.00
Vineyard (Gunkle Rd. #3)	From Ten Mile (#6752) to #6566	7	0.65	188,760	Melbourne	3432	55	10.77
Decker Rd.	From Bezold Rd. to dead end	2	0.2	58,080	Unincorporated	1056	55	10.00
Kennedy	From Flaig Springs to dead end	2	0.2	58,080	Unincorporated	1056	55	10.00
Kenton Station Rd.	From Lees to Pleasant Rdg. Rd.	9	0.9	261,360	Unincorporated	4752	55	10.00
Koehler Rd	From Calif. Cr. Rds. to Flagg Springs (Route 10)	9	0.9	261,360	California/Uninc	4752	55	10.00
Ky. State Route 154	From Burns to PCWD Service area.	10	1	290,400	Unincorporated	5280	55	10.00
Lick Hill	AA Highway to dead end	1	0.1	29,040	California/Uninc	528	55	10.00
Losey Rd.	Licking Pike to #901	3	0.3	87,120	Unincorporated	1584	55	10.00
Naises	From Rt. 8 to dead end	2	0.2	58,080	Unincorporated	1056	55	10.00
Newkirk Road	From Fischer to Peach Grove Road (KY 154)	3	0.3	87,120	Unincorporated	1584	55	10.00
Oneonta Rd.	From Truesdale to Washington Tr. Rd.	7	0.7	203,280	Unincorporated	3696	55	10.00
Washington Tr. Rd. South End	End of 3" line to A.A. Hwy.	8	0.8	232,320	California/Uninc	4224	55	10.00
Sly Road	From Flatwoods Rd. to End of PCWD Line at #1204	19	2	580,800	Unincorporated	10560	55	9.50
Painter Rd	From #3735 to Route 8	8	0.85	246,840	California/Uninc	4488	55	9.41
Fisher Rd	From Haubner Rd. to #13634	13	1.4	406,560	Unincorporated	7392	55	9.29
Fender Rd.	From Fairlane to Nagel	8	0.9	261,360	Melbourne	4752	55	8.89
Hissem Rd.	From bridge to end of road	8	0.9	261,360	Unincorporated	4752	55	8.89
Rifle Range Rd.	From bridge to end of road	17	2	580,800	Unincorporated	10560	55	8.50
Morningview Rd.	Clay Ridge to dead end.	15	1.8	522,720	Unincorporated	9504	55	8.33
Pleasant Rdg. Rd.	From Kenton Station Rd. to Boone Smith Road	5	0.6	174,240	Unincorporated	3168	55	8.33
Fisher Rd	From Bezold Rd to Wish Rd.	2	0.25	72,600	Unincorporated	1320	55	8.00
Licking Pike	Aspen to North	4	0.5	145,200	Wildier	2640	55	8.00
Aulick Rd.	From Muinn Rd. to Demrossville Rd.	3	0.4	116,160	Unincorporated	2112	55	7.50
Lees Road	From Harrisburg Hill Rd. to Kenton Station	3	0.4	116,160	Unincorporated	2112	55	7.50
Clay Rdg. Rd.	From Morningview Rd. Griffen Fords Rd.	5	0.7	203,280	Unincorporated	3696	55	7.14
Rt.8	Oneonta to Painter Rd.	11	1.6	464,640	California/Uninc	8448	55	6.88
Burger Road	Gunkle Rd. to dead end	4	0.6	174,240	Unincorporated	3168	55	6.67
California Cross Rds.	From Washington Tr. Rd. to #3765	4	0.6	174,240	Calif. (Residents	3168	55	6.67
Flagg Springs (Route 10)	From Daniels Road to Pendellon Co. Line	4	0.6	174,240	Unincorporated	3168	55	6.67
Branch Lick (Lower Lick Branch)	From Stone House to dead end	4	0.6	174,240	Unincorporated	3168	55	6.67
Creekrace Rd. (Pond Creek)	From Licking Pike to John Miller Rd.	5	0.8	232,320	Unincorporated	4224	55	6.25
Shaw Goetz Rd.	From Reis Ridge Rd. to California Cross Rds.	10	1.6	523,776	Unincorporated	8448	62	6.25
Rt.8	End of existing line (#11927) to county line	11	1.8	522,720	Unincorporated	9504	55	6.11
Wagoner (Dead Timber Rd. #2)	From Newberry Road (Dead Timber Rd.) to Picnic	6	1	290,400	Mentor	5280	55	6.00
Stonehouse Rd. (4&12 Mile)	From Newberry Road (Dead Timber Rd.) to Picnic	10	1.7	493,680	California/Uninc	8976	55	5.88
Upper Lick Branch Rd.	From driveway past #2274 to AA Hwy	2	0.35	101,640	Unincorporated	1848	55	5.71
Daniels Rd.	From #3185 to Flagg Springs Pike (Route 10)	2	0.35	101,640	Unincorporated	1848	55	5.71
California Cross Rds.	From Shaw Goetz Rd. to #2038	6	1.1	319,440	Unincorporated	5808	55	5.45
Hissem Rd.	From Fairlane to County Line	3	0.6	174,240	California/Uninc	3168	55	5.00
Newberry (Dead Timber Rd. #2)	from Wagner Rd. To end of road	2	0.4	116,160	Unincorporated	2112	55	5.00
Owl Creek Rd.	Owl Creek Rd.	3	0.6	174,240	California/Uninc	3168	55	5.00
Pond Creek Road	From #11707 to Kenton station Rd.	6	1.2	348,480	Silver Grove	6336	55	5.00
Wolf Road	From Kenton Station Rd. to Clay Rdg. Rd.	6	1.2	348,480	Unincorporated	7392	55	5.00
Tarvin Rd. (Schmudde)	From Phillips Creek Rd. (Schmudde) to Licking Pike	7	1.4	406,560	Unincorporated	7392	55	5.00
		3	0.7	203,280	Unincorporated	3696	55	4.29

Phillips Cr. Rd. (Schmudde)	Box 11053 to Tarvin Road	4	1	290,400	Unincorporated	5280	55	4.00
Tarvin Rd. (Schmudde)	From Lees Rd to Phillips Creek Rd. (Schmudde)	2	0.5	145,200	Unincorporated	2640	55	4.00
Pleasant Rdg. Rd.	From Harrisburg Hill Rd. to Kenton Station Rd.	4	1.1	319,440	Unincorporated	5808	55	3.64
Schababerle Hill	From Daniels Rd. to Flag Springs Pike (Route 10)	5	1.4	406,560	Unincorporated	7392	55	3.57
US 27	Riley School to CC Small Engine	1	0.3	87,120	Unincorporated	1584	55	3.33
Vineyard (Gunkle Rd. #3)	From #6566 to #6436 (to end of line)	1	0.3	87,120	Melbourne	1584	55	3.33
Kenton Station Rd.	From Pleasant Rdg. Rd. to Pond Cr. Rd.	3	1	290,400	Unincorporated	5280	55	3.00
Rt.8	Lester Ln. to #617	3	1	290,400	Ft. Thomas	5280	55	3.00
Flatwoods Rd	From Race Track Rd. to Burns Rd	4	1.5	435,600	Unincorporated	7920	55	2.67
Flag Springs (Route 10)	From Short Cut Rd. (A. A. Hwy. Connector) to Daniels Ro	1	0.5	145,200	Unincorporated	2640	55	2.00
Four Mile Pike	Nelson to Woodrun Dr.	2	1	290,400	Alexandria	5280	55	2.00
Rt.8	Tower Hill to Lester Ln.	1	0.6	174,240	Ft. Thomas	3168	55	1.67
Painter Rd	From Washington Tr. Rd to #3735	1	0.65	188,760	California/Uninc	3432	55	1.54
A.A.Hwy	Smith Road to Grandview Road	9	6.7	1,945,680	Will/Cld Sprng/Al	35376	55	1.34
Gubser Mill Road	California Cross Road to dead end	1	0.8	232,320	California/Uninc	4224	55	1.25
US 27	CC Small Engine to south Licking pike	1	0.95	275,880	Unincorporated	5016	55	1.05
A.A.Hwy	Grandview Road to Murrman Road (overpass)	7	6.9	2,003,760	Will/Cld Sprng/Al	36432	55	1.01
Rt.8	New Richmond Road to (south) D.E. of 3"	1	1.4	406,560	Unincorporated	7392	55	0.71
A.A.Hwy	Dry Creek to Ivy Ridge	0	1	290,400	Cold Spring	5280	55	0.00
A.A.Hwy	Pendleton Cnty line to Smith Road	0	1.8	522,720	Will/Cld Sprng/Al	9504	55	0.00
Creekrace Rd. (KY Rt. 536)	From U.S. 27 to Licking Pike	0	0.8	232,320	Unincorporated	4224	55	0.00
Licking Pike	Banklick to 0.9 miles north (St. John's Church)	0	0.9	261,360	Wilder	4752	55	0.00
Licking Pike	From end of line at Tripphauer to Murrman Rd	0	0.5	145,200	Unincorporated	2640	55	0.00
Lozey Rd.	#901 to #812	0	0.4	116,160	Unincorporated	2112	55	0.00
Low Gap Rd	From #878 to Tollgate (Alex-Licking Pike)	0	0.3	87,120	Unincorporated	1584	55	0.00
Riley Road (old)	From 2nd house to 4 mile (lower end)	0	0.35	101,640	Unincorporated	1848	55	0.00
River Road	Last house to Rt. 8	0	0.5	145,200	Ft. Thomas	2640	55	0.00
Rt.8	??? South to Tower Hill	0	1	290,400	Dayton/Ft. Thorr	5280	55	0.00
Rt.8	#617 to River Road	0	1.3	377,520	Ft. Thomas	6864	55	0.00
Rt.8	River Rd. to Blangey Rd.	0	0.3	87,120	Brent	1584	55	0.00
Shaw-Hess Rd	From #10280 to Persimmon Gr. Pk.	0	0.45	130,680	Unincorporated	2376	55	0.00
Ten Mile Road	Ritter to 2802 Ten Mile Rd. (Schack farm)	0	0.5	145,200	Unincorporated	2640	55	0.00
West Main Street (Alex.)	1/2 mile from city building towards Licking Pike	0	0.5	145,200	Alexandria	2640	55	0.00
	Total	1333	132.15	38964816		697752		

Campbell/Kenton

2020 Water Management
Planning Council

2006 Project Profiles Submittal Summaries

Kenton County Area

Project: Primary Bullock Pen Water Line Extension Phase 6
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY
 WRIS Project Number: WX21117012

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bagby Road	US 25 to Parker Grove	37	2.40	\$ 696,960.00	SKC	12672	55	15.42
Carlisle Road	KY 14 to Parker Grove	45	1.90	\$ 551,760.00	SKC	10032	55	23.68
Courtney Road	Eads Road to Boone County Line	27	0.70	\$ 203,280.00	SKC	3696	55	38.57
Lunsford Road	Off KY 14 (Bullock Pen)	15	0.70	\$ 203,280.00	SKC	3696	55	21.43
Menefee Road	Shady Lane to county line	1	0.30	\$ 87,120.00	SKC	1584	55	3.33
Parker Grove	KY 14 to Shady Lane - Grant County Line	34	2.20	\$ 638,880.00	SKC	11616	55	15.45
Paxton Road	End of Sub C #1723 to Parker Grove	13	1.50	\$ 435,600.00	SKC	7920	55	8.67
Peoples Cemetary	Bagby Rd to dead end (Bullock Pen)	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
Shady Lane	Bagby Rd to county line	0	0.50	\$ 145,200.00	SKC	2640	55	0.00
Stephenson Road	Off KY 14 (Bullock Pen)	16	1.10	\$ 319,440.00	SKC	5808	55	14.55
Key West Road	US 25 to D.E. (Bullock Pen)	1	0.20	\$ 58,080.00	SKC	1056	55	5.00
		192	11.70	\$ 3,397,680.00		61776		16.41

Bullock , Water District Phase 9
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117205

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Anderson Road	Gardnersville to D.E.	10	0.90	\$ 261,360.00	SKC	4752	55	11.11
Eads Road	I-71775 to #504	6	1.35	\$ 392,040.00	SKC	7128	55	4.44
Gardnersville Road	End of Sub C to Anderson Road	3	0.60	\$ 174,240.00	SKC	3168	55	5.00
Grassy Creek Road	Gardnersville to D.E.	15	1.20	\$ 348,480.00	SKC	6336	55	12.50
Gripshover	County line to D.E.	1	0.60	\$ 174,240.00	SKC	3168	55	1.67
		35	4.65	\$ 1,350,360.00		24552		7.53

Subdistr. F
 Project Summary #2
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117300

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Wright Road	Graven to D.E.	4	0.10	\$ 29,040.00	SKC	528	55	40.00
Graven Road	End of Sub C to Wright Road	3	0.25	\$ 72,600.00	SKC	1320	55	12.00
Cherry	Off KY 17, North of Apple	6	0.20	\$ 58,080.00	Independence	1056	55	30.00
Forest View Lane	Cleveland Avenue to D.E.	3	0.10	\$ 29,040.00	Taylor Mill	528	55	30.00
Oak Island	Moffett to #14056	3	0.10	\$ 29,040.00	SKC	528	55	30.00
Stafford Heights Lane	Off Harris Pike	6	0.20	\$ 58,080.00	Independence	1056	55	30.00
Webster Road	Richardson Road to D.E.	18	0.70	\$ 203,280.00	Independence	3696	55	25.71
Kenton Station Road	KY 177 to D.E. (Thornhill)	5	0.20	\$ 58,080.00	SKC	1056	55	25.00
Tamarita Lane	Harris to KY 16	3	0.12	\$ 34,848.00	Independence	634	55	25.00
White Villa Estates	Lakeshore, Maple, North Lake Rd	26	1.10	\$ 354,288.00	SKC	5808	61	23.64
Far Hills Drive	From end of 16" to D.E.	1	0.05	\$ 14,520.00	Independence	264	55	20.00
Lakeview Drive	Off Taylor Mill Road, South of Harris	2	0.10	\$ 29,040.00	SKC	528	55	20.00
Goshorn Road	Fiskburg to D.E.	16	0.80	\$ 232,320.00	SKC	4224	55	20.00
Ishmael	End of existing hydrant to #14072	2	0.10	\$ 29,040.00	SKC	528	55	20.00
Mason Road	hydrant at #460 to Decoursey	4	0.20	\$ 58,080.00	Taylor Mill	1056	55	20.00
Sawgrass Road	Off Green Road	2	0.10	\$ 29,040.00	SKC	528	55	20.00
Bird Road	D.E. near Wynnewood to end of road	6	0.30	\$ 87,120.00	SKC	1584	55	20.00
Marshall Road	KY 177 to Klette	14	0.80	\$ 232,320.00	Covington	4224	55	17.50
Ernst Bridge Road	From RR bridge to #4425 (Ryland CC)	7	0.40	\$ 116,160.00	SKC	2112	55	17.50
Justice Lane	Last hydrant to D.E.	5	0.30	\$ 87,120.00	Independence	1584	55	16.67
Scenic Ridge Drive	Off Pelly Road	5	0.30	\$ 87,120.00	Independence	1584	55	16.67
Gleason Road	KY 17 to D.E.	5	0.30	\$ 87,120.00	SKC	1584	55	16.67
Gene Street	Off Walton Nicholson Road	4	0.25	\$ 72,600.00	SKC	1320	55	16.00
Dixon Drive	Rich Road to #14038	22	1.00	\$ 290,400.00	SKC	5280	55	22.00
		172	8.07	\$ 2,378,376.00		42610		21.31

Subdist. .4
 Project Summary #3
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117302

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Holdsbranch	End of existing pipe to D.E. of street	6	0.40	\$ 116,160.00	Taylor Mill	2112	55	15.00
Horsebranch	Orphanage to #760	3	0.20	\$ 58,080.00	Crestview Hills	1056	55	15.00
James Road	South of Moffett	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
Old Fowler Creek Road	Off KY 17	3	0.20	\$ 58,080.00	Covington	1056	55	15.00
Taylor Mill Road	#4860 to Grand	6	0.40	\$ 116,160.00	Taylor Mill	2112	55	15.00
Worthington Drive	Off KY 17, South of Hands Pike	3	0.20	\$ 58,080.00	Covington	1056	55	15.00
Steep Creek	KY 177 to #3704 at bridge	14	1.00	\$ 290,400.00	SKC	5280	55	14.00
Case Road	Steep Creek to KY 177	4	0.30	\$ 87,120.00	SKC	1584	55	13.33
Rich Road	End of Sub C to #3493	4	0.50	\$ 145,200.00	SKC	2640	55	8.00
Rich Road	#3493 to Hempling	1	0.20	\$ 58,080.00	SKC	1056	55	5.00
Rich Road	Hempling to Little Cruises	1	0.40	\$ 116,160.00	SKC	2112	55	2.50
Rich Road	Little Cruises to Fiskburg	15	1.00	\$ 290,400.00	SKC	5280	55	15.00
Rich Road	Fiskburg to KY 177 to Rouse	9	0.60	\$ 174,240.00	SKC	3168	55	15.00
Rouse	KY 177 to Rich	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
KY 177	KY 14 to #15168	16	0.60	\$ 174,240.00	SKC	3168	55	26.67
KY 177	#14669 at bridge to Rich Road	17	1.30	\$ 377,520.00	Kenton	6864	55	13.08
Fontanna	KY 177	16	0.60	\$ 174,240.00	SKC	3168	55	26.67
		124	8.30	\$ 2,410,320.00		43824		14.94

Subdist. J
 Project Summary #4
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117303

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bethel Grove Road	End of Sub E to D.E.	3	0.22	\$ 63,888.00	Visalia	1162	55	13.64
Steep Creek	Marshall to #3382 at bridge	8	0.60	\$ 174,240.00	SKC	3168	55	13.33
James Road	North of Moffett from Amer Legion to D.E.	4	0.30	\$ 87,120.00	SKC	1584	55	13.33
Oak Island	#14056 to Hempling	0	0.70	\$ 203,280.00	SKC	3696	55	0.00
Hempfling Road	Navaho to Oak Island	10	0.60	\$ 174,240.00	SKC	3168	55	16.67
Hempfling Road	Navaho Road to slide area	18	0.80	\$ 232,320.00	SKC	4224	55	22.50
Conley Road	KY 177 to #3953	6	0.30	\$ 87,120.00	SKC	1584	55	20.00
Conley Road	Kenton Station to #3953	9	1.00	\$ 290,400.00	SKC	5280	55	9.00
Locust Lane	KY 17 to D.E.	2	0.15	\$ 43,560.00	SKC	792	55	13.33
River Road (Route 8)	Chevron to #486 (towards Bromley)	11	0.90	\$ 261,360.00	Villa Hills	4752	55	12.22
Mann Road	Visalia to #11606	9	0.70	\$ 203,280.00	SKC	3696	55	12.86
Pruett	Marshall to Petty	5	0.40	\$ 116,160.00	SKC	2112	55	12.50
Fowler Creek Road	Old Madison to new Madison connector rd	15	1.20	\$ 348,480.00	Independence	6336	55	12.50
		100	7.87	\$ 2,285,448.00		41554		12.71

Subdis. Q
 Project Summary #5
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117304

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Harrisburg Road	Klein to D.E.	5	0.40	\$ 116,160.00	SKC	2112	55	12.50
Webster Road	South of Independence Station to D.E.	5	0.40	\$ 116,160.00	Independence	2112	55	12.50
Little Cruises Creek Rd	KY 17 to Rich Road	33	2.60	\$ 755,040.00	SKC	13728	55	12.69
Elliot Road	KY 17 to D.E.	18	1.50	\$ 435,600.00	SKC	7920	55	12.00
Fiskburg Road	Pfanstiehl to Alexander	6	0.50	\$ 145,200.00	SKC	2640	55	12.00
Fiskburg Road	Goshorn to Pfanstiehl Road	1	0.10	\$ 29,040.00	SKC	528	55	10.00
Cody Road	Flagstone to #5555	7	0.60	\$ 174,240.00	Independence	3168	55	11.67
Wright Road	Banklick to Graven	14	1.20	\$ 348,480.00	SKC	6336	55	11.67
Mann Road	Steep Creek to 11606	9	0.80	\$ 232,320.00	SKC	4224	55	11.25
Trace Run Road	Off of Moffett	11	0.80	\$ 232,320.00	SKC	4224	55	13.75
		109	8.90	\$ 2,584,560.00		46992		12.25

Subdis:
 Project Summary #6
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117650

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Webster Road	North of Independence Station	2	0.20	\$ 58,080.00	Independence	1056	55	10.00
Fuchs Road	Garvey Avenue to D.E.	1	0.10	\$ 29,040.00	Elsmere	528	55	10.00
Hempfling Road	Sub C D.E. to slide area #2713	7	0.70	\$ 203,280.00	SKC	3696	55	10.00
Alexander Road	Fiskburg Road to KY 177	34	3.10	\$ 900,240.00	SKC	16368	55	10.97
Independence Station Rd	Justice to RR Tracks	3	0.30	\$ 87,120.00	Independence	1584	55	10.00
KY 177	End of Sub E, past Conley to 13361	15	1.50	\$ 435,600.00	Visalia	7920	55	10.00
Moffett Road	Armstrong to #3630	3	0.30	\$ 87,120.00	SKC	1584	55	10.00
Nelson Road	Narrows to Deer Chase	1	0.10	\$ 29,040.00	Erlanger	528	55	10.00
Rosanna Lane	Off of Callant	4	0.40	\$ 116,160.00	SKC	2112	55	10.00
Spruce View Drive	Walton Nicholson to D.E.	2	0.20	\$ 58,080.00	SKC	1056	55	10.00
Steep Creek	#3382 at bridge to #3709 at bridge	10	1.00	\$ 290,400.00	SKC	5280	55	10.00
		82	7.90	\$ 2,294,160.00		41712		10.38

Subdistri.
 Project Summary #7
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117307

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Wayman Branch	Between old T.M. system and NKWD sys	5	0.50	\$ 145,200.00	Taylor Mill	2640	55	10.00
Hempfling Road	Oak Island to Rich	12	1.30	\$ 377,520.00	SKC	6864	55	9.23
Locust Pike/Lawnmower Rd	Feiser Road to # 9684	21	2.50	\$ 726,000.00	Ryland Heights	13200	55	8.40
Kenton Station Road	Martin to Rector	17	1.80	\$ 522,720.00	SKC	9504	55	9.44
Saint Marys Road	Alexander to KY 177	7	0.80	\$ 232,320.00	SKC	4224	55	8.75
Eads Road	US 25 to I-71/75	6	0.70	\$ 203,280.00	SKC	3696	55	8.57
		68	7.60	\$ 2,207,040.00		40128		8.95

Subdisti .A
 Project Summary #8
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117301

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Pfanstiehl Road	Fiskburg to D.E.	12	1.40	\$ 406,560.00	SKC	7392	55	8.57
Alexander Road	KY 177 to D.E.	8	1.00	\$ 290,400.00	SKC	5280	55	8.00
Vises's Trail	From KY177 go North 0.77 miles(south en	6	0.77	\$ 223,608.00	SKC	4066	55	7.79
KY 177	St. Mary Rd to Alexander Road	10	1.30	\$ 377,520.00	SKC	6864	55	7.69
Armstrong Road	Off Moffett to D.E.	3	0.40	\$ 116,160.00	SKC	2112	55	7.50
Porter Road	Hydrant at #8924 to hydrant at #9028	2	0.28	\$ 81,312.00	Ryland Heights	1478	55	7.14
Washboard Road	KY 177 to D.E.	4	0.40	\$ 116,160.00	SKC	2112	55	10.00
KY 177	#14443 south of Kenton Station to bridge	3	0.60	\$ 174,240.00	Kenton	3168	55	5.00
Erlanger Road	Turfway to dead end	2	0.30	\$ 87,120.00	Erlanger	1584	55	6.67
Fiskburg Road	Alexander to Rich Road	4	0.60	\$ 174,240.00	SKC	3168	55	6.67
Hergott Drive	Off KY 17, Norther of Callant	4	0.60	\$ 174,240.00	SKC	3168	55	6.67
		58	7.65	\$ 2,221,560.00		40392		7.58

Subdistr. B
 Project Summary #9
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number:

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
McHugh Lane	Off Independence Station Road	2	0.30	\$ 87,120.00	Independence	1584	55	6.67
River Road (Route 8)	Amsterdam to Chevron	11	1.90	\$ 551,760.00	Villa Hills	10032	55	5.79
Lamb's Ferry Road	Whites Road to Whites Road	10	1.80	\$ 522,720.00	Ryland Heights	9504	55	5.56
Montague Road	Fire Hydrant to #1760	2	0.33	\$ 95,832.00	Covington	1742	55	6.06
Decoursey	I-275 to hydrant at #7900	4	0.70	\$ 203,280.00	Fairview	3696	55	5.71
Kensington Road	Off Green Road	2	0.20	\$ 58,080.00	SKC	1056	55	10.00
Lipscomb	Lieberman to D.E.	2	0.40	\$ 116,160.00	Covington	2112	55	5.00
Narrows Road	Thorn tree to Nelson (served by spiderline)	1	0.20	\$ 58,080.00	Erlanger	1056	55	5.00
Eubanks Road	Erlanger-Cris. Spgs. Road to D.E.	2	0.40	\$ 116,160.00	Crescent Spgs	2112	55	5.00
Navaho Road	Hempling to D.E.	1	0.20	\$ 58,080.00	SKC	1056	55	5.00
Campbell Drive	US 25 to D.E.	3	0.70	\$ 203,280.00	SKC	3696	55	4.29
Decoursey	Marshall to end of Sub-R	3	0.70	\$ 203,280.00	Ryland Heights	3696	55	4.29
		43	7.83	\$ 2,273,832.00		41342		5.49

Subdist. C
 Project Summary #10
 Northern Kentucky Water District
 Kenton County Unserved Streets
 WRIS Project Number: WX2111

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Madison Pike	Old Richardson Road to Far Hills	3	0.70	\$ 203,280.00	Independence	3696	55	4.29
Independence Road	#1068 to End of Sub C	0	0.27	\$ 78,408.00	SKC	1426	55	0.00
Fowler Creek Road	Cox to Stephens	2	0.50	\$ 145,200.00	Independence	2640	55	4.00
KY 177	Ryland Lakes C.C. to #11282	5	1.40	\$ 406,560.00	SKC	7392	55	3.57
Wehrman Road	KY 16 to D.E.	1	0.30	\$ 87,120.00	Independence	1584	55	3.33
Stephens Drive	Don Victor to Oliver	1	0.40	\$ 116,160.00	Independence	2112	55	2.50
Locust Pike	#9684 To end of Sub R near Whites	0	0.50	\$ 145,200.00	Ryland Heights	2640	55	0.00
Pin Oak Lane	Erlanger showcase cinema drive to D.E. (1	0.50	\$ 145,200.00	Erlanger	2640	55	2.00
Fowler Creek Road	New Madison connector road to Pelly	1	0.60	\$ 174,240.00	Covington	3168	55	1.67
Moffett Road	Kenton Station to #3630	1	0.60	\$ 174,240.00	SKC	3168	55	1.67
Marshall Road	Coleman to Stewart	1	0.80	\$ 232,320.00	Ryland Heights	4224	55	1.25
Amsterdam Road	12" CC to Sanitation Plant Entrance	0	0.65	\$ 188,760.00	Villa Hills	3432	55	0.00
Decoursey	Grand to I-275	0	0.60	\$ 174,240.00	Covington	3168	55	0.00
		16	7.82	\$ 2,270,928.00		41290		2.05

Subdistri)
 Project Summary #11
 Northern Kentucky Water District
 Kenton County Unserved Streets
 WRIS Project Number:

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Horsebranch	#760 Horsebranch to Thomas More Parkv	0	1.06	\$ 307,824.00	Crestview Hills	5597	55	0.00
Independence Station Rd	Canberra to R.R. Tracks	0	0.40	\$ 116,160.00	Independence	2112	55	0.00
KY 177	Alexander Road to Pendleton County Line	0	0.30	\$ 87,120.00	SKC	1584	55	0.00
KY 177	#15168 to St. Marys Road	0	0.60	\$ 174,240.00	SKC	3168	55	0.00
Narrows Road	Richardson to Thornmtree	0	0.20	\$ 58,080.00	Erlanger	1056	55	0.00
Narrows Road	Nelson to D.E. at Erlanger Fire	0	0.20	\$ 58,080.00	Erlanger	1056	55	0.00
Rice Road #1	Off Mills Road	0	0.25	\$ 72,600.00	Independence	1320	55	0.00
Sleepy Hollow Road	Existing D.E. near Diamond Ct. to Ludlow	0	1.00	\$ 290,400.00	Covington	5280	55	0.00
		0	4.01	\$ 1,164,504.00		21173		0.00

Subdistr. :
 Project Summary #10
 Northern Kentucky Water District
 Kenton County Unserved Streets
 WRIS Project Number:

<u>Street</u>	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Jones Road	American Legion to D.E.	36	1.40	\$ 406,560.00	SKC	7392	55	25.71
Northcut Road	Jones Road to D.E.	8	0.40	\$ 116,160.00	SKC	2112	55	20.00
		44	1.80	\$ 522,720.00		9504		24.44

CONSTRUCTION COMPLETED - SOME FUNDING LEFT OVER

Project 5 Gary Subdistrict E
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT
 WRIS Project Number: WX21117200

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bethel Grove Road	Vise's Trail to #12104	20	0.49	\$ 102,841.20	Visalia	2587	39.75	40.82
Brandy Lane	Bethel Grove to Licking Station	5	0.08	\$ 16,790.40	Visalia	422	39.75	62.50
Bromley-Cres. Springs	Amsterdam to north 0.53 miles toward Brc	17	0.59	\$ 123,829.20	Crescent Spgs	3115	39.75	28.81
Fiskburg Road	KY 17 to Goshorn (KY17 to 1.2 miles)	29	1.21	\$ 253,954.80	SKC	6389	39.75	23.97
Ishmail Road	Kenton Area	7	0.20	\$ 41,976.00	Kenton	1056	39.75	35.00
Kenton Station Road	Rector to Conley	10	0.77	\$ 161,607.60	SKC	4066	39.75	12.99
Kenton Station Road	Conley to Moffett	6	0.50	\$ 104,940.00	SKC	2640	39.75	12.00
Kenton Station Road	Moffett to KY 177	5	0.28	\$ 58,766.40	SKC	1478	39.75	17.86
KY 177	KY 536 North to #11282	8	0.36	\$ 75,556.80	Visalia	1901	39.75	22.22
KY 177	KY 536 to Visalia Road	13	0.45	\$ 94,446.00	Visalia	2376	39.75	28.89
KY 177	Visalia Road south to #12246	16	0.44	\$ 92,347.20	Visalia	2323	39.75	36.36
KY 177	Kenton Station south to #14443	34	1.28	\$ 268,646.40	Kenton	6758	39.75	26.56
KY 177	Kenton Station north to #13361	36	1.34	\$ 281,239.20	Kenton	7075	39.75	26.87
Licking Station	Bethel Grove to D.E.	12	0.23	\$ 48,272.40		1214	39.75	52.17
Oliver Road	Stephens to Harris	30	0.95	\$ 199,386.00		5016	39.75	31.58
Oliver Road	McCullum to Stephens	3	0.35	\$ 73,458.00		1848	39.75	8.57
St Johns Road	Bromley Crs. Springs to 0.37 miles	5	0.37	\$ 77,655.60		1954	39.75	13.51
Vise's Trail	KY 177 to Visalia Rd. to South .23 miles(n	13	0.40	\$ 83,952.00		2112	39.75	32.50
Whitaker/McDonald	Off of Old KY 17	6	0.17	\$ 35,679.60		898	39.75	35.29
		275	10.46	\$ 2,195,344.80		55229		

CC RUCTION COMPLETED - SOME FUNDING LEFT OVER

Project: 7th Subdistrict R (Fairview/Ryland Heights)
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT
 WRIS Project Number: WX21117202

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
KY 177	End of Sub-R (near Kaiser) to Wolf Road	22	0.77	\$ 172,869.31	Fairview	4066	42.52	28.57
KY 177	Wolf to Marshall (bridge)	18	0.92	\$ 206,496.58	Ryland Heights	4858	42.51	19.57
KY 177	910' to short marshall, 500' short marshall	2	0.1	\$ 22,445.28		528	42.51	20.00
Porter Road		2	0.16	\$ 35,912.45		845	42.51	12.50
Tecumseh	Porter to D.E.	8	0.35	\$ 78,558.48		1848	42.51	22.86
		52	2.30	\$ 516,282.10		12144		

Project : Primary Klette Road Project
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year FUNDED PROJECT - Under Construction 9/05
 WRIS Project Number: WX21117250

<u>Street</u>	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Klette Road	#3335 to Rice Road	15	1.16	\$ 341,212.61	Independence	6125	55.71	12.93
Klette Road	Rice to Marshall	7	1.21	\$ 355,920.05	Independence	6389	55.71	5.79
Rice Road #2	Off Klette Road	16	0.45	\$ 132,366.96	Independence	2376	55.71	35.56
		38	2.82	\$ 829,499.62		14890		

Project Secondary Subdistrict G & I
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY - FUNDED
 WRIS Project Number: WX21117004

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Banklick Road	Maher to Independence	17	0.90	\$ 289,872.00	Independence	4752	61	18.89
Banklick Road	Bramlage to Walton-Nicholson	15	1.40	\$ 450,912.00	Independence	7392	61	10.71
Banklick Road	Independence to Bramlage	1	0.40	\$ 128,832.00	Independence	2112	61	2.50
Bramlage Road	Banklick to Wilson	23	0.90	\$ 261,360.00	Independence	4752	55	25.56
Bullock Pen Road	From #1980 BP RD to #1590 BP RD (#19	20	0.80	\$ 232,320.00	Erlanger	4224	55	25.00
Cody Road	#5414 to #5364	6	0.50	\$ 145,200.00	Independence	2640	55	12.00
Estate Lane	Visalia Road (KY 536) to D.E.	8	0.30	\$ 87,120.00	SKC	1584	55	26.67
Fowler Creek Road	Pelly to Cox	19	1.30	\$ 377,520.00	Independence	6864	55	14.62
Holly Hock	Wolf to D.E.	5	0.10	\$ 32,208.00	Covington	528	61	50.00
Independence Road	Banklick to #1068	4	0.23	\$ 66,792.00	SKC	1214	55	17.39
Klein Road	Visalia to D.E.	27	1.00	\$ 290,400.00	SKC	5280	55	27.00
Lieberman Drive	Lipscomb to Dead end	11	0.35	\$ 112,728.00	Covington	1848	61	31.43
Misty Lane	Off KY 17, North of Hands Pike	5	0.10	\$ 29,040.00	Covington	528	55	50.00
Petty Road	Marshall to End of Sub A	26	1.00	\$ 290,400.00	SKC	5280	55	26.00
Pleasure Isle Drive	New KY 17 to D.E.	10	0.19	\$ 55,176.00	Erlanger	1003	55	52.63
Sugar Camp Road	From #2870 to Fowler Creek	10	0.40	\$ 128,832.00	Covington	2112	61	25.00
Upton Drive	Cody to D.E.	4	0.25	\$ 72,600.00	Independence	1320	55	16.00
Webster Road	Off Cody Road - hydrant at #351 to D.E.	5	0.20	\$ 58,080.00	Independence	1056	55	25.00
Wolf	Holly Hock to D.E.	7	0.40	\$ 128,832.00	Covington	2112	61	17.50
Water fill stations	Ryland and Piner			\$ 51,965.00				
		216	10.72	\$ 3,290,189.00		56602		

Project i e Kenton County Water Unserved and Underserved Project 1
Northern Kentucky Water District
Kenton County Projects
0-2 Year Project PARTIALLY FUNDED
WRIS Project Number: WX21117203

\$9,773,000

Underserved and Unserved Projects

This project profile summarizes a critical unserved and underserved \$9,700,000 project that will impact over 60% of the District's nearly 80,000 customer base. This project will also include an additional interconnection between the Bullock Pen Water District and the Northern Kentucky Water District. The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$4,500,000 of State Budget funding and will provide a match for the remaining \$5,273,000 necessary to complete the project. The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding.

- 1) The unserved portion of this project includes 5 miles of waterline extension to serve 92 households at a project cost of \$3,100,000. The average number of households served per mile for this project is 18.22 per mile. This project will also improve pressure to two wholesale customers and provide an additional interconnection between the Bullock Pen Water District and the Northern Kentucky Water District. This component will be partially funded by a \$30 monthly customer surcharge and will be part of the District's Subdistrict system designated as Subdistrict I.
- 2) The underserved portion of this project includes several components. The first is a 36 inch River Crossing that will provide an additional river crossing across the Licking River for security and redundancy purposes in the event the District loses service from its existing 36 inch Licking River Crossing. This component will impact over 50% of the District's nearly 80,000 customers at an estimated cost of \$2,200,000. The second is the addition of U. V. Treatment at the District's Taylor Mill Treatment Plant to meet EPA regulations regarding Contact Time (CT) at an estimated cost of \$2,500,000. The next component is the construction of a back-up power generator to power the District's Dudley Pumping Station for security purposes at an estimated cost of \$1,500,000. The final component of the underserved portion of the project involves the replacement of a 4,000 foot section of transit (A.C.) water main in Edgewood at an estimated cost of \$473,000.

Project e Water Quality Infrastructure Rehabilitation and Upgrade
 Northern Kentucky Water District
 Kenton County Projects
 0-2 Year Project PARTIALLY FUNDED
 WRIS Project Number: WX21117204

\$5,000,000

Water Main Replacement Consensus Project

This project profile summarizes a critical underserved \$5,000,000 project that involves the replacement of water mains located in the urban core of the Northern Kentucky Water District's Kenton County Service Area. The location of this project is in Covington and involves the replacement of several water lines with a high incidence of breakage. The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$2,500,000 of State Budget funding and will provide a match for the remaining \$2,500,000 necessary to complete the project. The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding.

<u>Street</u>	<u>Comment:</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>
Main Street	2nd Street to 3rd Street	\$ 105,000.00	Covington	350	300
Bakewell	W2nd Street to W9th Street	\$ 765,000.00	Covington	3000	255
Benton Road	Highland to Phelps	\$ 335,500.00	Covington	3050	110
Pointe Benton Road	Benton to end of street (inc cc)	\$ 239,250.00	Covington	2175	110
Edgecliff	Monroe to end of street	\$ 178,200.00	Covington	1620	110
Philadelphia	W9th Street to Pike Street	\$ 200,250.00	Covington	890	225
Pike Street	Western to 9th	\$ 800,000.00	Covington	3200	250
Prospect	Robbins to E. 11th	\$ 78,750.00	Covington	450	175
Wheeler	E 11th Street to E 13th Street	\$ 297,500.00	Covington	1700	175
East 9th	Madison to Prospect	\$ 385,000.00	Covington	1540	250
East 39th	Winston to Huntington	\$ 423,000.00	Covington	1880	225
Covington Avenue	Johnson to Russell	\$ 95,400.00	Covington	530	180
West 5th	Madison to Philadelphia	\$ 681,250.00	Covington	2725	250
East 5th	Madison to Sanford	\$ 295,000.00	Covington	1180	250
West 4th Street	Johnson to Russell	\$ 121,250.00	Covington	485	250
		\$ 5,000,350.00			

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Since 1945



VIOX & VIOX

Civil Engineers, Surveyors, and Landscape Architects

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 859.727.3293
Fax: 859.727.8452
www.vioxinc.com

November 1, 2005

Northern Kentucky Water District
P.O. Box 17010
Covington, KY 41017
Fax: 859 578-7893

ATTN: Mr. John Scheben, Supervisor

RE: Preliminary Engineering Report
Kenton County Projects for
Underserved and Unserved Areas
Project Number WX21117203

Dear Mr. Scheben:

As a directive from Northern Kentucky Water District, Viox & Viox, Inc. completed the Preliminary Engineering Report for the above referenced future project.

The project includes waterline extension to unserved areas of Kenton County, interconnection to Bullock Pen Water District, river crossing to prevent lost service, ultra violet (U.V.) treatment, back up power generation, and replacement of transite main.

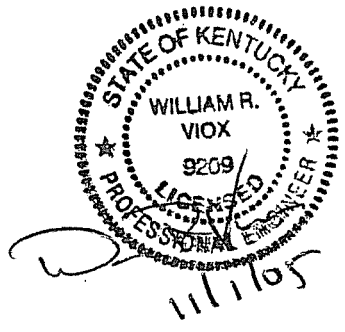
This Preliminary Engineering Report includes a field reconnaissance and review with District staff. The report includes an opinion of probable cost to design and construct future project number WX21117203.

The principals at Viox & Viox, Inc., along with our staff, were directly involved in this Preliminary Engineering Report. We have attempted to include all pertinent and necessary information needed for your review and consideration, while keeping the document as concise as possible.

If you have any questions, please call James H. Viox III, P.E., P.L.S. or myself.

Respectfully Submitted,

William R. Viox, P.E., P.L.S.
Vice-President
Viox & Viox, Inc.



SECTION ONE:

PRELIMINARY ENGINEERING REPORT

**Preliminary Engineering Report
Project Number WX21117203**

Introduction

The Northern Kentucky Water District commissioned Viox & Viox, Inc. to explore and complete a Preliminary Engineering Report for the titled future project. Viox has provided the District with both preliminary and detailed analysis of system improvements for many years. The resumes of team members can be reviewed in Section Three (3) of this document. This document describes the Existing Conditions, Future Recommendations, and Opinion of Probable Costs. This report is preliminary in nature and not a result of final detailed design and analysis.

Existing Conditions

The Northern Kentucky Water District provides potable water to nearly 80,000 customers. There are several components that make up the total future project number WX2117203. Currently, there are 92 households unserved by water, low pressure issues with two wholesale customers, lack of an interconnection to the adjoining water district, a loss of service risk at a river crossing, additional treatment necessary at one of the District's treatment plants to meet E.P.A. guidelines, back up power risk at a pumping station and replacement of transite pipe.

Future Project Considerations

This future project contains several components within the general portions of the total project. These portions and components are as follows:

- (1) The unserved portion of this project includes 5 miles of waterline extension to serve 92 households. The average number of households served per mile for this project is 18.22 per mile. This project will also improve pressure to two wholesale customers and provide an additional interconnection between Bullock Pen Water District and the Northern Kentucky Water District. This component will be partially funded by a \$30 monthly customer surcharge and will be part of the District's Subdistrict system designated as Subdistrict I.

- (2) The underserved portion of this project includes several components. The first is a 36 inch River Crossing that will provide an additional river crossing across the Licking River for security and redundancy purposes in the event the District loses service from its existing 36 inch Licking River Crossing. This component will impact over 50% of the District's nearly 80,000 customers. The second is the addition of U.V. Treatment at the District's Taylor Mill Treatment Plant to meet EPA regulations regarding Contact Time (CT). The next component is the construction of a back-up power generator to power the District's Dudley Pumping Station for security purposes. The final

component of the underserved portion of the project involves the replacement of a 4,000 foot section of transite (A.C.) pipe in Edgewood.

The Northern Kentucky Water District is seeking \$4,500,000.00 of state budget funding and will provide a match for the remaining \$5,273,000.00 necessary to complete the project. The District is committing these funds through Bond Anticipation Notes and other local funding sources. Detailed design will begin upon receiving state budget funding.

SECTION TWO:

OPINION OF PROBABLE COST

**Opinion of Probable Cost
Project Number WX21117203**

This Preliminary Engineer's Estimate of Opinion of Probable Cost was accomplished by field reconnaissance, review with Staff of the District, and experience with design and construction of water projects within this region. This estimate is not the result of final design.

<u>Item:</u>	<u>Cost</u>
5 Miles of Waterline (92 households)	\$3,100,000
36" River Crossing	\$2,200,000
U.V. Treatment at Taylor Mill T.P.	\$2,500,000
Back Up Power Generator at Dudley Pumping Station	\$1,500,000
Replace 4,000 LF Transite Pipe	<u>\$ 473,000</u>
Total	\$9,773,000

SECTION THREE:
REPORT TEAM

Viox & Viox, Inc.
Report Team

JAMES H. VIOX, III, P.E., P.L.S. (PRINCIPAL)

Jim Viox graduated from Virginia Polytechnic Institute with a Bachelor of Science in Civil Engineering in 1965. In 1968, Jim became a partner with Viox & Viox. He has been the primary design engineer for the firm since that time. He is responsible for all of the planning and design, and grading and utility design produced by the firm. He is actively involved in the community and serves as the City Engineer for Erlanger and Wilder, Kentucky. In 2003, Jim received the "Donald M. Wiedeman Award" for community service.

WILLIAM R. VIOX, P.E., P.L.S. (PRINCIPAL)

Bill Viox graduated from Louisiana Technical University with a Bachelor of Science in Civil Engineering in 1970. Bill began work as partner with Viox & Viox immediately following his graduation. Bill is responsible for the day-to-day operation of the firm and all quality control reviews performed by the office. He oversees all submittals, quantity take-offs, and professional estimates produced by Viox & Viox. His primary area of expertise is land development and public projects. Bill serves as the City Engineer for Florence, Kentucky. In 2000, Bill received the Northern Kentucky Home Builders Association "Donald M. Wiedeman Award" for community service.

MARY ETINGHER, P.L.S.

Ms. Etingher received an Associate Degree of Applied Science in Civil Engineering Technology from Cincinnati State in 1990. While at Cincinnati State, Mary was a recipient of a Merit Scholarship based on academic achievement. Mary began her career with Viox & Viox in 1988 as a co-op, and she became a full-time design technician after her graduation. Mary is extremely versatile and has extensive experience in boundary surveys, construction staking, and civil design. She is proficient in the use of AutoDesk Land Desktop and Civil Design 2005 (AutoCAD) design and surveying software. Mary became a registered Kentucky Land Surveyor in 2003.

MEGAN de SOLA, AICP

Ms. de Sola graduated with a Bachelor of Public Administration from the University of Mississippi in 1994. In 2002, Megan received a Master of Community Planning from the University of Cincinnati, as well as a Certificate in Historic Preservation. While at U.C., Megan was awarded the AICP Planning Student Award. Megan began working at Viox & Viox as a high school student in 1989. She became a full-time employee in 1996 as Viox & Viox's Financial Manager. Upon receiving her degree in Planning, Megan began a new position at Viox & Viox as Director of Planning Services. In 2005, Megan became a member of the American Institute of Certified Planners (AICP). She is currently responsible for all project proposals, project tracking, and the project application and submittal process to all public agencies.

SECTION FOUR:

EXHIBITS



VIOX & VIOX

Civil Engineers, Surveyors, and Landscape Architects

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 859.727.3293

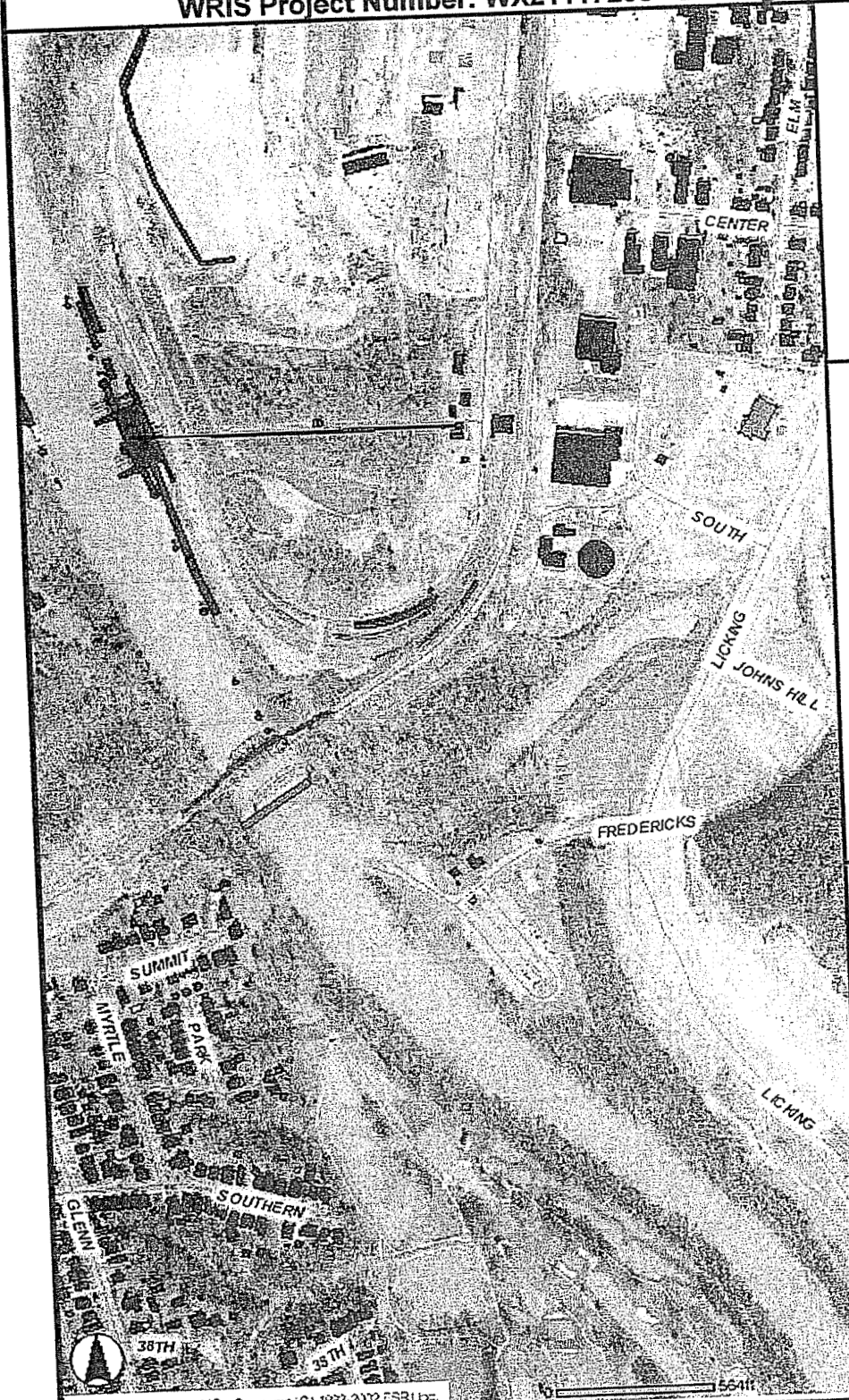
Fax: 859.727.8452

www.vioxinc.com

**ENGINEERS ESTIMATE
NORTHERN KENTUCKY WATER DISTRICT
36" WATER MAIN
LICKING PIKE TO SUMMIT DRIVE
(LICKING RIVER CROSSING)**

ITEM	QUANTITY	UNIT	UNIT COST	COST
36" Ductile Iron Pipe, Class 50 w/Polywrap & Fittings	2,000	LF	\$200.00	\$400,000.00
36" Ductile Iron Boltless Internal Restrained Joint Pipe, Restrained Class 52 w/Polywrap & Restrained Fittings (250 PSI Working Pressure)	625	LF	\$300.00	\$187,500.00
36" Ductile Iron, Class 52 by Directional Drilling	425	LF	\$2,800.00	\$1,190,000.00
36" X 36" X 36" Tees & Blocks Cut Into Main	2	EA	\$18,000.00	\$36,000.00
36" Ductile Iron Butterfly Valves	5	EA	\$8,500.00	\$42,500.00
24" Ductile Iron Butterfly Valves	2	EA	\$13,000.00	\$26,000.00
36" X 36" X 6" Ductile Iron Anchoring Tees & Blocks Cut Into Main	2	EA	\$8,000.00	\$16,000.00
Fire Hydrant Assemblies	2	EA	\$3,000.00	\$6,000.00
Concrete to Ductile Iron Adapters	4	EA	\$4,500.00	\$18,000.00
36" - 24" Reducers	2	EA	\$7,200.00	\$14,400.00
Street Restoration	200	SY	\$60.00	\$12,000.00
Parking Lot Gravel Restoration	100	SY	\$50.00	\$5,000.00
SUB-TOTAL ESTIMATED COSTS				\$1,953,400.00
Geotechnical Engineering				\$30,000.00
Engineering @ 6%				\$117,204.00
Contingencies @ 5%				\$97,670.00
TOTAL ESTIMATED COSTS				\$2,198,274.00

WRIS Project Number: WX21117203 - Licking River Crossing

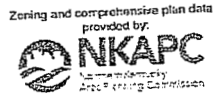


Legend

Buildings	Comprehensive Plan
31 use	Recreational Land Use
32 use	OFFICE, PROFESSIONAL, RETAIL, OFFICE
33 use	COMMERCIAL, RETAIL, OFFICE
34 use	COMMERCIAL, RETAIL
35 use	INDUSTRIAL
36 use	OTHER COMMERCIAL FACILITIES
37 use	SPECIAL USE DISTRICT
38 use	RAILROAD
39 use	RECREATION AND OPEN SPACE
40 use	RESIDENTIAL 10 TO 20
41 use	RESIDENTIAL 21 TO 40
42 use	RESIDENTIAL 41 TO 70
43 use	RESIDENTIAL 71 TO 100
44 use	RESIDENTIAL OVER 100
45 use	RESIDENTIAL UNDER 20
46 use	RIGHT OF WAY
47 use	SCHOOL PARK
48 use	SPECIAL DEVELOPMENT AREA
49 use	49 use



All data used on this map property of the LINK-GIS Partnership except:



Parcel data provided by Kenton County and Campbell County PVAs:



Data accurate for planning purposes only.

Map created with ArcGIS. Copyright © 1992-2012 ESRI Inc.

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District F

Campbell County
184-188

Engineering Reports

Engineers Final Estimate

Bid Tabulation and Engineer's Recommendation

System Hydraulic Model

Project Map

Project Specifications
(See Attached Specifications)

Case No. 200-_____
Exhibit C

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District F

Campbell County
184-188

Engineer's Final Estimate

*Subdistrict F Water System Improvements
Northern Kentucky Water District
Final Construction Cost Estimate
April 24, 2006*

**BID PACKAGE A
Grandview Road/Amy Lou Drive Areas**

<i>Item No.</i>	<i>Item</i>	<i>Qty.</i>	<i>Unit</i>	<i>Unit Price</i>	<i>Total Price</i>
1	- General Conditions/Mobilization/Demobilization	1	LS	\$ 12,500	\$ 12,500
2	- 8-inch PVC C900 Watermain	3,682	LF	\$ 25	\$ 92,050
3	- 8-inch DI Class 50 Watermain	3,689	LF	\$ 35	\$ 129,115
4	- 8-inch Gate Valves	8	EA	\$ 1,800	\$ 14,400
5	- Fire Hydrants and Valve	10	EA	\$ 2,250	\$ 22,500
6	- Air Release Valve	1	EA	\$ 1,500	\$ 1,500
7	- 8-inch DI Class 50 Watermain, Open Cut Thru Road	57	LF	\$ 85	\$ 4,845
8	- 8-inch PVC C900 Watermain, Open Cut Thru Road	188	LF	\$ 65	\$ 12,220
9	- Connection to Existing Mains (incl valve)	3	EA	\$ 7,500	\$ 22,500
10	- Mill and Re-Pave Full Width of Road	451	SY	\$ 50	\$ 22,550
11	- Concrete Driveway Replacement	90	LF	\$ 60	\$ 5,400
12	- Bituminous Pavement Replacement	180	LF	\$ 40	\$ 7,200
13	- Erosion Control Measures	1	LS	\$ 10,000	\$ 10,000
14	- Miscellaneous Construction (15%)	1	LS	\$ 53,517	\$ 53,517
Area Construction Sub-Total					\$ 410,297

Heck Road Area

<i>Item No.</i>	<i>Item</i>	<i>Qty.</i>	<i>Unit</i>	<i>Unit Price</i>	<i>Total Price</i>
1	- General Conditions/Mobilization/Demobilization	1	LS	\$ 5,000	\$ 5,000
2	- 8-inch PVC C900 Watermain	1,940	LF	\$ 25	\$ 48,500
3	- 8-inch DI Class 50 Watermain	1,355	LF	\$ 35	\$ 47,425
4	- 8-inch Gate Valve	2	EA	\$ 1,800	\$ 3,600
5	- Fire Hydrants and Valve	4	EA	\$ 2,250	\$ 9,000
6	- 8-inch PVC C900 Watermain, Open Cut Thru Road	120	LF	\$ 65	\$ 7,800
7	- 8-inch DI Class 50 Watermain, Open Cut Thru Road	245	LF	\$ 85	\$ 20,825
8	- Mill and Re-Pave Full Width of Road	245	SY	\$ 50	\$ 12,250
9	- Mill and Re-Pave Single Lane of Road	289	SY	\$ 50	\$ 14,450
10	- Concrete Driveway Replacement	25	LF	\$ 60	\$ 1,500
11	- Bituminous Pavement Replacement	105	LF	\$ 45	\$ 4,725
12	- Connection to Existing Mains (incl valve)	1	LS	\$ 7,500	\$ 7,500
13	- Erosion Control Measures	1	LS	\$ 3,500	\$ 3,500
14	- Miscellaneous Construction (15%)	1	LS	\$ 27,911	\$ 27,911
Area Construction Sub-Total					\$ 213,986

Bid Package A Estimated Construction Cost

\$ 624,283

BID PACKAGE B
West Main Street Area (KY 10)

Item No.	Item	Qty.	Unit	Unit Price	Total Price
1	- General Conditions/Mobilization/Demobilization	1	LS	\$ 7,500	\$ 7,500
2	- 8-inch Class 50 DI Watermain	2,560	LF	\$ 35	\$ 89,600
3	- 8-inch Gate Valve	2	EA	\$ 1,800	\$ 3,600
4	- Fire Hydrants and Valve	1	EA	\$ 2,250	\$ 2,250
5	- Leak Detection Assembly	1	EA	\$ 1,000	\$ 1,000
6	- 8-inch DI Class 50 Watermain, Open Cut Thru Road	230	LF	\$ 65	\$ 14,950
7	- 8-inch DI Class 50 Watermain, Directional Drill	150	LF	\$ 85	\$ 12,750
8	- Mill and Re-Pave Full Width of Road	200	SY	\$ 50	\$ 10,000
9	- Mill and Re-Pave Single Lane of Road	155	SY	\$ 50	\$ 7,750
10	- Connection to Existing Mains (incl valve)	2	EA	\$ 7,500	\$ 15,000
11	- Bituminous Pavement Replacement	50	LF	\$ 45	\$ 2,250
12	- Erosion Control Measures	1	LS	\$ 3,500	\$ 3,500
13	- Miscellaneous Construction (15%)	1	LS	\$ 25,523	\$ 25,523
Area Construction Sub-Total					\$ 195,673

Steffen Road Area

Item No.	Item	Qty.	Unit	Unit Price	Total Price
1	- General Conditions/Mobilization/Demobilization	1	LS	\$ 7,500	\$ 7,500
2	- 8-inch DI Class 50 Watermain	1,665	LF	\$ 35	\$ 58,275
3	- 8-inch PVC C900 Watermain	590	LF	\$ 25	\$ 14,750
4	- 8-inch Gate Valve	1	EA	\$ 1,800	\$ 1,800
5	- Fire Hydrants and Valve	3	EA	\$ 2,250	\$ 6,750
6	- 8-inch DI Class 50 Watermain, Open Cut Thru Road	255	LF	\$ 65	\$ 16,575
7	- Mill and Re-Pave Single Lane Width of Road	283	SY	\$ 50	\$ 14,150
8	- Connect to Existing System	1	EA	\$ 7,500	\$ 7,500
9	- Erosion Control Measures	1	LS	\$ 3,500	\$ 3,500
10	- Miscellaneous Construction (15%)	1	LS	\$ 19,620	\$ 19,620
Area Construction Sub-Total					\$ 150,420

Licking Pike Area (KY 915)

Item No.	Item	Qty.	Unit	Unit Price	Total Price
1	- General Conditions/Mobilization/Demobilization	1	LS	\$ 3,500	\$ 3,500
2	- 6-inch Gate Valve	1	EA	\$ 1,500	\$ 1,500
3	- 8-inch DI Class 50 Watermain	2,329	LF	\$ 35	\$ 81,515
4	- 8-inch Gate Valve	2	EA	\$ 1,800	\$ 3,600
5	- 12-inch DI Class 50 Watermain	12,471	LF	\$ 50	\$ 623,550
6	- 12-inch Gate Valve	12	EA	\$ 2,200	\$ 26,400
7	- Fire Hydrants	13	EA	\$ 2,250	\$ 29,250
8	- Air Release Valve	1	EA	\$ 1,500	\$ 1,500
9	- Leak Detection Assembly	2	EA	\$ 1,000	\$ 2,000
10	- 8-inch DI Class 50 Watermain, Open Cut Thru Road	61	LF	\$ 65	\$ 3,965
11	- 12-inch DI Class 50 Watermain, Open Cut Thru Road	689	LF	\$ 85	\$ 58,565
12	- 16-inch Steel Encasement Pipe, Open Cut Thru Stream	50	LF	\$ 125	\$ 6,250
13	- 24-inch Steel Encasement Pipe, Open Cut Thru Stream	40	LF	\$ 150	\$ 6,000
14	- Mill and Re-Pave Full Width of Road	111	SY	\$ 50	\$ 5,550
15	- Mill and Re-Pave Single Lane Width of Road	739	SY	\$ 50	\$ 36,950
16	- Connection to Existing Mains (incl valve)	3	EA	\$ 7,500	\$ 22,500
17	- Bituminous Pavement Replacement	125	LF	\$ 45	\$ 5,625
18	- Erosion Control Measures	1	LS	\$ 10,000	\$ 10,000
19	- Miscellaneous Construction (15%)	1	LS	\$ 137,733	\$ 137,733
Area Construction Sub-Total					\$ 1,065,953

Bid Package B Estimated Construction Cost

\$ 1,412,046

BID PACKAGE C
Flagg Springs Pike/Kennedy Road/Ivor Road Areas

<i>Item No.</i>	<i>Item</i>	<i>Qty.</i>	<i>Unit</i>	<i>Unit Price</i>	<i>Total Price</i>
1	- General Conditions/Mobilization/Demobilization	1	LS	\$ 10,000	\$ 10,000
2	- 8-inch DI Class 50 Watermain	5,320	LF	\$ 35	\$ 186,200
3	- 8-inch Gate Valve	5	EA	\$ 1,800	\$ 9,000
4	- Fire Hydrants	5	EA	\$ 2,250	\$ 11,250
5	- 8-inch DI Class 50 Watermain, Open Cut Thru Road	40	EA	\$ 65	\$ 2,600
6	- Mill and Re-Pave Full Width of Road	34	SY	\$ 50	\$ 1,700
7	- Connection to Existing Mains (incl valve)	1	EA	\$ 7,500	\$ 7,500
8	- Miscellaneous Construction (15%)	1	LS	\$ 34,238	\$ 34,238
Area Construction Sub-Total					\$ 262,488

Bid Package C Estimated Construction Cost

\$ 262,488

Total Preliminary Estimate of Construction Costs - All Areas

\$ 2,298,816

Case No. 200-_____
Exhibit C

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District F

Campbell County
184-188

Bid Tabulation and
Engineer's Recommendation

Bid Opening for
 Sub-District F
 May 10, 2006
 10:00 am

Company	Package A Bid Amount	Package B Bid Amount	Package C Bid Amount
Howell Contractors, Inc.	\$ 485,426.00	\$ 1,095,860.00	\$ 217,024.00
Coomer Contractors	\$ 548,008.00	\$ 1,418,529.00	\$ 195,305.00
Hartman & Smith Const. Co.	NO BID	NO BID	\$ 278,352.00
Generation 2 Construction	NO BID	NO BID	\$ 248,109.50
Paul Rack Excavating & Paving Co.	\$ 522,531.75	NO BID	\$ 295,150.90
Miami-Western Contractors, Inc.	\$ 592,446.00	\$ 1,286,028.00	NO BID
Fred A. Nemann Company	\$ 642,027.00	NO BID	NO BID
United Plumbing & Sewer Services	NO BID	NO BID	\$ 247,999.00
Jack Gemmer & Sons	NO BID	NO BID	\$ 245,690.00



May 16, 2006

Mr. John Scheben
Northern Kentucky Water District
2835 Crescent Springs Road
Erlanger, KY 41018

Re : Recommendation of Award
Subdistrict F Waterline Extensions
Campbell County, KY

Quest Engineers, Inc.

Lexington:
2517 Sir Barton Way
Lexington, KY 40509
859-223-3755
859-223-3150 (Fax)

Louisville:
One Riverfront Plaza
401 West Main Street
Suite 500
Louisville, KY 40202
502-584-4118
502-589-3009 (Fax)

Cincinnati:
1251 Kemper Meadow Drive
Suite 600
Cincinnati, OH 45240
513-851-9774
513-851-9207 (Fax)

Dear John,

As you are aware, bids were received and opened publicly on May 10, 2006 for the above project. Prospective bidders were requested to provide bids for items relating to the installation of approximately 37,570 linear feet of 8-inch and 12-inch waterlines together with all necessary appurtenances. The work was broken into 3 packages in order to encourage bidders of all sizes and to expedite the installation schedule. Bidders were encouraged to bid on single packages as well as the entire project.

We received responsive bids from nine construction firms for the various packages. The number of responsive bids received for each package is identified below:

- Bid Package "A" - 5 bids
- Bid Package "B" - 3 bids
- Bid Package "C" - 7 bids

All of the bids included the appropriate acknowledgment of addendum and a 10% bid bond. The unit price bids were close in each Bid Package which indicates the bidding was very competitive. In addition, each of the Bid Packages came in under Quest's estimate for the work. We believe this indicates that the contractors understood the scope of work and provided their best pricing. Quest has reviewed the math on each of the bids and found two errors. Neither error had an impact on the order of finish although one of the errors was by the low bidder on Bid Package "B" (Howell Contractors). This error will change the amount of the award by \$ 6,000. The other error was a substantial error on a unit price entry that caused a large change on the Bid Package "A" submittal of Paul Rack Excavating.

The bid results are summarized below. A certified bid tabulation is attached to this letter.

Results of Bid
Subdistrict F Waterline Extensions

<i>Bidder</i>	<i>Bid Package "A"</i>	<i>Bid Package "B"</i>	<i>Bid Package "C"</i>
Howell Contractors	\$485,426.00	\$1,101,860.00*	\$217,024.00
Coomer Contractors	\$548,008.00	\$1,418,529.00	\$195,305.00
Paul Rack Excavating & Paving	\$1,169,942.25*		\$295,150.90
Miami Western Contractors, Inc.	\$592,446.00	\$1,286,028.00	
Fred A Newman Company	\$642,027.00		
Jack Gemmer & Sons			\$245,690.00
United Plumbing			\$247,999.00
Generation 2 Construction, Inc.			\$248,109.50
Hartman & Smith Construction			\$278,352.00
<i>Engineers Estimate</i>	\$624,283.00	\$1,383,362.00	\$262,488.00

* Denotes mathematical error on bid form. This is the corrected amount.

Howell Contractors is the low bidder on Bid Packages "A" and "B" while Coomer Contractors is the low bidder on Bid Package "C". We understand from our discussions with Northern Kentucky Water District (NKWD) staff that both construction companies have successfully completed previous projects for the NKWD. Further, we understand that NKWD has been satisfied with the quality of their work on these projects. Based on this information, Quest recommends the Bid Packages be awarded to them at the contract prices identified above.

Once NKWD has reached a decision regarding the award of this project, please let us know and we will assist in preparing the contract documents. If you have any questions about this matter, please feel free to call me at (859) 223-3755.

Kindest regards,



Brent A. Tippey, P.E.
Project Manager

Attachments

Bid Tabulation
Subdistrict F Waterline Extension
Campbell County, Kentucky
Northern Kentucky Water District
Bids Received: May 10, 2006

Item No.	Description	Unit	Approx Qty	Howell Contractors, Inc.		Paul Rack Excavating & Paving Company*		Coomer Contractors	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	8" Class 50DI Water Line	LF	3,780	\$35.00	\$132,300.00	\$35.38	\$133,736.40	\$35.00	\$132,300.00
2	8" C-900 PVC Water Line	LF	3,755	32.00	120,160.00	35.38	132,851.90	30.00	112,650.00
3	8' Gate Valve	EA	8	900.00	7,200.00	950.00	7,600.00	2,000.00	16,000.00
4	Fire Hydrant Assembly	EA	9	2,500.00	22,500.00	2,900.00	26,100.00	2,900.00	26,100.00
5	Fire Hydrant Assembly, High Pressure Area	EA	1	2,700.00	2,700.00	3,100.00	3,100.00	3,100.00	3,100.00
6	Air Release Valve	EA	1	300.00	300.00	2,000.00	2,000.00	1,200.00	1,200.00
7	8" DI Class 50 Pipe (Open Cut Thru Road)	LF	57	62.00	3,534.00	100.00	5,700.00	100.00	5,700.00
8	8" PVC C900 Pipe (Open Cut Thru Road)	LF	188	59.00	11,092.00	100.00	18,800.00	100.00	18,800.00
9	Mill and Re-Pave Full Width of Road	Sq Yds	451	15.00	6,765.00	1,450.00	653,950.00	30.00	13,530.00
10	Concrete Driveway Replacement	LF	90	30.00	2,700.00	22.00	1,980.00	100.00	9,000.00
11	Bituminous Pavement Replacement	LF	180	30.00	5,400.00	19.00	3,420.00	55.00	9,900.00
12	Connect to Existing System	EA	3	2,200.00	6,600.00	100.00	300.00	700.00	2,100.00
13	Erosion Control Measures	LS	1	1,000.00	1,000.00	3,000.00	3,000.00	1,500.00	1,500.00
Grandview Road/Amy Lou Drive Subtotal					322,251.00		992,538.30		351,880.00

*Denotes significant mathematical error in line item #9 and Grandview Road/Amy Lou Drive Subtotal price.

Item No.	Description	Unit	Approx Qty	Howell Contractors, Inc.		Paul Rack Excavating & Paving Company**		Coomer Contractors	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	8" Class 50DI Water Line	LF	1,355	\$35.00	\$47,425.00	\$36.03	\$48,820.65	\$35.00	\$47,425.00
2	8" C-900 PVC Water Line	LF	2,010	32.00	64,320.00	36.03	72,420.30	30.00	60,300.00
3	8' Gate Valve	EA	2	900.00	1,800.00	950.00	1,900.00	2,000.00	4,000.00
4	Fire Hydrant Assembly	EA	5	2,500.00	12,500.00	2,900.00	14,500.00	2,900.00	14,500.00
5	8" DI Class 50 Pipe (Open Cut Thru Road)	LF	245	62.00	15,190.00	75.00	18,375.00	100.00	24,500.00
6	8" PVC C900 Pipe (Open Cut Thru Road)	LF	120	59.00	7,080.00	75.00	9,000.00	100.00	12,000.00
7	Mill and Re-Pave Full Width of Road	Sq Yds	245	15.00	3,675.00	14.50	3,552.50	42.00	10,290.00
8	Mill and Re-Pave Single Lane or Road	Sq Yds	289	15.00	4,335.00	14.50	4,190.50	42.00	12,138.00
9	Concrete Driveway Replacement	LF	25	30.00	750.00	22.00	550.00	100.00	2,500.00
10	Bituminous Pavement Replacement	LF	105	30.00	3,150.00	19.00	1,995.00	55.00	5,775.00
11	Connect to Existing System	EA	1	2,200.00	2,200.00	100.00	100.00	700.00	700.00
12	Erosion Control Measures	LS	1	750.00	750.00	2,000.00	2,000.00	2,000.00	2,000.00
Heck Road Subtotal					163,175.00		177,403.95		196,128.00
Grandview Road/Amy Lou Drive Subtotal					322,251.00		992,538.30		351,880.00
BID PACKAGE "A" TOTAL BID					485,426.00		1,169,942.25		548,008.00

**Denotes significant mathematical error in Grandview Road/Amy Lou Drive Subtotal and Bid Package "A" Total Bid.

Bid Tabulation
Subdistrict F Waterline Extension
Campbell County, Kentucky
Northern Kentucky Water District
Bids Received: May 10, 2006

Item No.	Description	Unit	Approx Qty	Miami Western Contractors, Inc.		Fred A Newman Company	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	8" Class 50DI Water Line	LF	3,780	\$42.00	\$158,760.00	\$48.00	\$181,440.00
2	8" C-900 PVC Water Line	LF	3,755	39.00	146,445.00	43.00	161,465.00
3	8' Gate Valve	EA	8	1,250.00	10,000.00	1,200.00	9,600.00
4	Fire Hydrant Assembly	EA	9	2,940.00	26,460.00	3,750.00	33,750.00
5	Fire Hydrant Assembly, High Pressure Area	EA	1	3,240.00	3,240.00	4,100.00	4,100.00
6	Air Release Valve	EA	1	975.00	975.00	1,500.00	1,500.00
7	8" DI Class 50 Pipe (Open Cut Thru Road)	LF	57	66.00	3,762.00	60.00	3,420.00
8	8" PVC C900 Pipe (Open Cut Thru Road)	LF	188	63.00	11,844.00	54.00	10,152.00
9	Mill and Re-Pave Full Width of Road	Sq Yds	451	10.00	4,510.00	20.00	9,020.00
10	Concrete Driveway Replacement	LF	90	70.00	6,300.00	50.00	4,500.00
11	Bituminous Pavement Replacement	LF	180	30.00	5,400.00	21.00	3,780.00
12	Connect to Existing System	EA	3	3,320.00	9,960.00	1,500.00	4,500.00
13	Erosion Control Measures	LS	1	10,000.00	10,000.00	1,000.00	1,000.00
Grandview Road/Amy Lou Drive Subtotal					397,656.00		428,227.00

Item No.	Description	Unit	Approx Qty	Miami Western Contractors, Inc.		Fred A Newman Company	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	8" Class 50DI Water Line	LF	1,355	\$42.00	\$56,910.00	\$49.00	\$66,395.00
2	8" C-900 PVC Water Line	LF	2,010	39.00	78,390.00	44.00	88,440.00
3	8' Gate Valve	EA	2	1,250.00	2,500.00	1,200.00	2,400.00
4	Fire Hydrant Assembly	EA	5	2,940.00	14,700.00	3,750.00	18,750.00
5	8" DI Class 50 Pipe (Open Cut Thru Road)	LF	245	66.00	16,170.00	60.00	14,700.00
6	8" PVC C900 Pipe (Open Cut Thru Road)	LF	120	63.00	7,560.00	54.00	6,480.00
7	Mill and Re-Pave Full Width of Road	Sq Yds	245	10.00	2,450.00	20.00	4,900.00
8	Mill and Re-Pave Single Lane or Road	Sq Yds	289	10.00	2,890.00	20.00	5,780.00
9	Concrete Driveway Replacement	LF	25	70.00	1,750.00	50.00	1,250.00
10	Bituminous Pavement Replacement	LF	105	30.00	3,150.00	21.00	2,205.00
11	Connect to Existing System	EA	1	3,320.00	3,320.00	1,500.00	1,500.00
12	Erosion Control Measures	LS	1	5,000.00	5,000.00	1,000.00	1,000.00
Heck Road Subtotal					194,790.00		213,800.00
Grandview Road/Amy Lou Drive Subtotal					397,656.00		428,227.00
BID PACKAGE "A" TOTAL BID					592,446.00		642,027.00

Bid Tabulation
Subdistrict F Waterline Extension
Campbell County, Kentucky
Northern Kentucky Water District
Bids Received: May 10, 2006

Item No.	Description	Unit	Approx Qty	Howell Contractors, Inc.		Miami Western Contractors, Inc.		Coomer Contractors	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	12" Class 50 DI Water Line	LF	12,690	\$47.00	\$596,430.00	\$52.00	\$659,880.00	\$57.00	\$723,330.00
2	8" Class 50 DI Water Line	LF	2,325	36.00	83,700.00	48.00	111,600.00	38.00	88,350.00
3	12" Gate	EA	12	1,600.00	19,200.00	2,000.00	24,000.00	3,000.00	36,000.00
4	8" Gate	EA	2	900.00	1,800.00	1,250.00	2,500.00	2,000.00	4,000.00
5	6" Gate Valve	EA	1	650.00	650.00	975.00	975.00	1,500.00	1,500.00
6	Fire Hydrant Assembly, High Pressure Areas	EA	10	3,000.00	30,000.00	3,300.00	33,000.00	3,100.00	31,000.00
7	Air Release Valve	EA	1	1,000.00	1,000.00	975.00	975.00	1,200.00	1,200.00
8	12" DI Class 50 Pipe (Open Cut Thru Rd)	LF	689	55.00	37,895.00	60.00	41,340.00	150.00	103,350.00
9	8" DI Class 50 Pipe (Open Cut Thru Rd)	LF	61	45.00	2,745.00	50.00	3,050.00	120.00	7,320.00
10	24" Steel Encasement Pipe, Open Cut for Stream Crossing	LF	40	150.00	6,000.00	150.00	6,000.00	210.00	8,400.00
11	16" Steel Encasement Pipe, Open Cut for Stream Crossing	LF	50	115.00	5,750.00	120.00	6,000.00	180.00	9,000.00
12	Mill and Re-Pave Full Width of Road Using KDOT SuperPave Mixture	Sq Yds	111	15.00	1,665.00	12.00	1,332.00	42.00	4,662.00
13	Mill and Re-Pave Single Lane of Road Using KDOT SuperPave Mixture	Sq Yds	739	15.00	11,085.00	12.00	8,868.00	42.00	31,038.00
14	Bituminous Pavement Replacement	LF	125	30.00	3,750.00	30.00	3,750.00	55.00	6,875.00
15	Connect to Existing System	EA	4	4,500.00	18,000.00	3,320.00	13,280.00	700.00	2,800.00
16	Erosion and Control Measures	LS	1	2,000.00	2,000.00	20,000.00	20,000.00	4,500.00	4,500.00
KY 915 Subtotal					821,670.00		936,550.00		1,063,325.00

Item No.	Description	Unit	Approx Qty	Howell Contractors, Inc.***		Miami Western Contractors, Inc.		Coomer Contractors	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	8" Class 50 DI Water Line	LF	2,610	\$36.00	\$93,960.00	\$48.00	\$125,280.00	\$40.00	\$104,400.00
2	8" C-900 PVC Water Line	EA	2	900.00	1,800.00	1,250.00	2,500.00	2,000.00	4,000.00
3	8" Gate Valve	EA	1	9,000.00	9,000.00	3,300.00	3,300.00	3,200.00	3,200.00
4	Fire Hydrant Assembly	LF	230	45.00	10,350.00	50.00	11,500.00	120.00	27,600.00
5	8" DI Class 50 Pipe (Open Cut Thru Road)	LF	150	250.00	37,500.00	300.00	45,000.00	240.00	36,000.00
6	8" PVC C900 Pipe (Open Cut Thru Road)	Sq Yds	340	15.00	5,100.00	12.00	4,080.00	42.00	14,280.00
7	Mill and Re-Pave Full Width of Road	Sq Yds	264	15.00	3,960.00	12.00	3,168.00	42.00	11,088.00
8	Mill and Re-Pave Single Lane or Road	LF	50	30.00	1,500.00	30.00	1,500.00	55.00	2,750.00
9	Concrete Driveway Replacement	EA	2	2,200.00	4,400.00	3,320.00	6,640.00	700.00	1,400.00
10	Erosion Control Measures	LS	1	1,000.00	1,000.00	3,500.00	3,500.00	5,000.00	5,000.00
KY 10 Subtotal					168,570.00		206,468.00		209,718.00

***Denotes mathematical error in KY 10 Subtotal

Bid Tabulation
Subdistrict F Waterline Extension
Campbell County, Kentucky
Northern Kentucky Water District
Bids Received: May 10, 2006

Item No.	Description	Unit	Approx Qty	Howell Contractors, Inc.****		Miami Western Contractors, Inc.		Coomer Contractors	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	8" Class 50 DI Water Line	LF	1,700	\$36.00	\$61,200.00	\$48.00	\$81,600.00	\$38.00	\$64,600.00
2	8" C-900 PVC Water Line	LF	600	33.00	19,800.00	45.00	27,000.00	36.00	21,600.00
3	8" Gate Valve	EA	1	900.00	900.00	1,250.00	1,250.00	2,000.00	2,000.00
4	Fire Hydrant Assembly	EA	4	2,700.00	10,800.00	2,940.00	11,760.00	2,900.00	11,600.00
5	8" DI Class 50 Pipe (Open Cut Thru Rd)	LF	255	45.00	11,475.00	50.00	12,750.00	120.00	30,600.00
6	Mill and Re-Pave Single lane of Road	Sq Yds	283	15.00	4,245.00	10.00	2,830.00	42.00	
7	Connect to Existing System	EA	1	2,200.00	2,200.00	3,320.00	3,320.00	700.00	700.00
8	Erosion Control Measures	LS	1	1,000.00	1,000.00	2,500.00	2,500.00	2,500.00	2,500.00
Steffen Road Subtotal					111,620.00		143,010.00		145,486.00
KY 915 Subtotal					821,670.00		936,550.00		1,063,325.00
KY 10 Subtotal					168,570.00		206,468.00		209,718.00
BID PACKAGE "B" (KY 915/KY10/STEFFEN ROAD) TOTAL BID					1,101,860.00		1,286,028.00		1,418,529.00

****Denotes mathematical error in BID PACKAGE "B" (KY 915/KY10/STEFFEN ROAD) TOTAL BID

Item No.	Description	Unit	Approx Qty	Coomer Contractors		Howell Contractors, Inc.		Jack Gemmer and Sons	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	8" Class 50 DI Water Pipe	LF	5,395	\$29.00	\$156,455.00	\$36.00	\$194,220.00	\$41.00	\$221,195.00
2	8" Gate Valve	EA	5	2,000.00	10,000.00	900.00	4,500.00	750.00	3,750.00
3	Fire Hydrant Assembly, High Pressure Area	EA	5	3,100.00	15,500.00	2,500.00	12,500.00	2,500.00	12,500.00
4	8" DI Class 50 Pipe (Open Cut Thru Rd)	LF	40	200.00	8,000.00	45.00	1,800.00	90.00	3,600.00
5	Mill and Re-Pave Full Width of Road Using KDOT SuperPave Mixture	Sq Yds	67	50.00	3,350.00	12.00	804.00	35.00	2,345.00
6	Connect to Existing System	EA	1	1,000.00	1,000.00	2,200.00	2,200.00	300.00	300.00
7	Erosion Control Measures	LS	1	1,000.00	1,000.00	1,000.00	1,000.00	2,000.00	2,000.00
Flagg Springs Pike Subtotal (TOTAL BID PACKAGE C)					195,305.00		217,024.00		245,690.00

Bid Tabulation
Subdistrict F Waterline Extension
Campbell County, Kentucky
Northern Kentucky Water District
Bids Received: May 10, 2006

Item No.	Description	Unit	Approx Qty	United Plumbing		Generation 2 Construction, Inc.	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	8" Class 50 DI Water Pipe	LF	5,395	\$41.00	\$221,195.00	\$40.10	\$216,339.50
2	8" Gate Valve	EA	5	600.00	3,000.00	1,250.00	6,250.00
3	Fire Hydrant Assembly, High Pressure Area	EA	5	2,000.00	10,000.00	3,000.00	15,000.00
4	8" DI Class 50 Pipe (Open Cut Thru Rd)	LF	40	60.00	2,400.00	125.00	5,000.00
5	Mill and Re-Pave Full Width of Road Using KDOT SuperPave Mixture	Sq Yds	67	105.00	7,035.00	60.00	4,020.00
6	Connect to Existing System	EA	1	1,600.00	1,600.00	1,000.00	1,000.00
7	Erosion Control Measures	LS	1	2,769.00	2,769.00	500.00	500.00
Flagg Springs Pike Subtotal (TOTAL BID PACKAGE C)					247,999.00		248,109.50

Item No.	Description	Unit	Approx Qty	Hartman & Smith Construction Company		Paul Rack Excavating & Paving Company	
				Unit Price	Total Item Amount	Unit Price	Total Item Amount
1	8" Class 50 DI Water Pipe	LF	5,395	\$45.00	\$242,775.00	\$49.42	\$266,620.90
2	8" Gate Valve	EA	5	1,000.00	5,000.00	950.00	4,750.00
3	Fire Hydrant Assembly, High Pressure Area	EA	5	3,600.00	18,000.00	3,100.00	15,500.00
4	8" DI Class 50 Pipe (Open Cut Thru Rd)	LF	40	38.00	1,520.00	100.00	4,000.00
5	Mill and Re-Pave Full Width of Road Using KDOT SuperPave Mixture	Sq Yds	67	71.00	4,757.00	40.00	2,680.00
6	Connect to Existing System	EA	1	3,800.00	3,800.00	100.00	100.00
7	Erosion Control Measures	LS	1	2,500.00	2,500.00	1,500.00	1,500.00
Flagg Springs Pike Subtotal (TOTAL BID PACKAGE C)					278,352.00		295,150.90

I Hereby certify that this is a true and correct tabulation of bids

 Brent A. Tippey, P.E.
 Quest Engineers, Inc.

Case No. 200-_____
Exhibit C

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District F

Campbell County
184-188

System Hydraulic Model

FIRE FLOW CERTIFICATION

Subdistrict F

Grandview Road, Amy Lou Drive, Heck Road, KY 10, KY 915 North, KY 915
South, Steffen Road, Flagg Springs Pike
Campbell County, KY

I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using H2ONET, the program available from MWHSOFT. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

Subdistrict F

**Grandview Road, Amy Lou Drive, Heck Road, KY 10, KY 915 North, KY 915 South, Steffen Road, Flagg Springs Pike
Campbell County, KY**

I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100.

The maximum flow rate that can reliably be supplied to the main and meet 20 psi in the system under maximum hour conditions is as follows:

Grandview Road – 1,300 gpm
Amy Lou Drive – 1,200 gpm
Heck Road – 900 gpm
KY 10 – 2,100 gpm
KY 915 North – 3,500 gpm
Steffen Road – 1,300 gpm
KY 915 South – 3,500 gpm
Flagg Springs Pike – 500 gpm

At least 30 psi can be maintained under the peak domestic demand for the customers added. The peak domestic demand using the D.R. Taylor formula for the customers is as follows:

Grandview Road, 41 customer – 64.03 gpm
Amy Lou Drive, 7 customers – 26.46 gpm
Heck Road, 13 customers – 36.06 gpm
KY 10, 6 customers – 24.49 gpm
KY 915 North, 7 customers – 26.46 gpm
Steffen Road, 10 customers – 31.62 gpm
KY 915 South, 34 customers – 58.31 gpm
Flagg Springs Pike, 11 customers – 33.17 gpm

This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSoft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 8" and 12" water mains.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water levels in the Main Street and South County Tanks were one-half full.



Subdistrict F Water Mains
Output from H2ONET model - copied to Excel

Maximum Hour Run, Flagg Springs, 11 customers = 33.16 gpm

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
FLAGG1	33.16	610	772.10	70.27
5137	0	580	772.31	83.37

Maximum Hour Run, KY 915 South, 34 customers = 58.31 gpm

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
9636	5.39	520	1,022.27	217.73
22368	58.31	573	1,011.28	189.99

Maximum Hour Run, Steffen Road, 10 customers = 31.62 gpm

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
STEFFEN1	31.62	765	1,009.10	105.82
22366	0	722	1,009.19	124.5

Maximum Hour Run, KY 10, 6 customers = 24.49 gpm

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
22362	0	645	1,007.43	157.11
9414	24.49	746	1,004.38	112.01

Maximum Hour Run, KY 915 North, 7 customers = 26.46 gpm

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
4785	26.46	586	1,029.58	192.29
706	5.39	569	1,029.58	199.66

Maximum Hour Run, Grandview, 41 customers = 64.03 gpm

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
GRANDV3	21.34	625	972.98	150.85
4986	21.34	801	978.24	76.84
25360	21.34	655	972.99	137.85

Maximum Hour Run, Amy Lou Dr, 7 customers = 26.46 gpm

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
25346A	26.46	690	973.84	123.05
AMYLOU	0	715	973.85	112.21

Maximum Hour Run, Heck Road, 13 customers = 36.06 gpm

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
HECK2	36.06	820	1,005.39	80.37
HECK1	0	670	1,005.60	145.48

Pipe Information for flushing velocity at 2.5 fps

Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
915SOUTH	13,100.00	12	-881	2.5	120
915N	2,300.00	8	-392.25	2.5	120
HECK	4,500.00	8	392	2.5	120
STEFFEN	2,500.00	8	392	2.5	120
KY10	3,000.00	8	-392	2.5	120
FLAGG	5,300.00	8	392	2.5	120
GRANDV3	707	8	392	2.5	120
GRANDV2	1,500.00	8	398.4	2.54	120
GRANDV1	5,600.00	8	398.4	2.54	120
AMYLOU	300	8	392	2.5	120

Pipe ID	From Node	To Node
915SOUTH	22368	9636
915N	4785	706
HECK	HECK1	HECK2
STEFFEN	22366	STEFFEN1
KY10	9414	22362
FLAGG	5,137.00	FLAGG1
GRANDV3	25360	GRANDV3
GRANDV2	AMYLOU	25360
GRANDV1	4986	AMYLOU
AMYLOU	AMYLOU	25346A

Flushing velocity 2.5 fps for Flagg Springs

ID	Demand, gpm	Pressure, psi
FLAGG1	392	48.75
5137	0	70.43

Flushing velocity 2.5 fps for KY 915 South

ID	Demand, gpm	Pressure, psi
9636	5.39	214.39
22368	881	178.1

Flushing velocity 2.5 fps for Steffen Road

ID	Demand, gpm	Pressure, psi
STEFFEN1	392	96.96
22366	0	119.69

Flushing velocity 2.5 fps for KY 10

ID	Demand, gpm	Pressure, psi
22362	0	154.97
9414	392	106.28

Flushing velocity 2.5 fps for KY 915 North

ID	Demand, gpm	Pressure, psi
4785	392	185.85
706	5.39	196.99

Flushing velocity 2.5 fps for Grandview

ID	Demand, gpm	Pressure, psi
GRANDV3	392	127.04
4986	0.81	63.88
25360	6.4	115.19

Flushing velocity 2.5 fps for Amy Lou Dr

ID	Demand, gpm	Pressure, psi
25346A	392	107.66
AMYLOU	0	97.31

Flushing velocity 2.5 fps for Heck Road

ID	Demand, gpm	Pressure, psi
HECK2	392	66.78
HECK1	0	139.17

KY 915 South
KY 915 North
Heck Road
Steffen Road
KY 10
Flagg Springs
Grandview
Grandview
Grandview
Amy Lou Dr

4986

Grandview 7,400' - 8"

Amy Lou 300' - 8"

GRANDV1

GRANDV3

25360

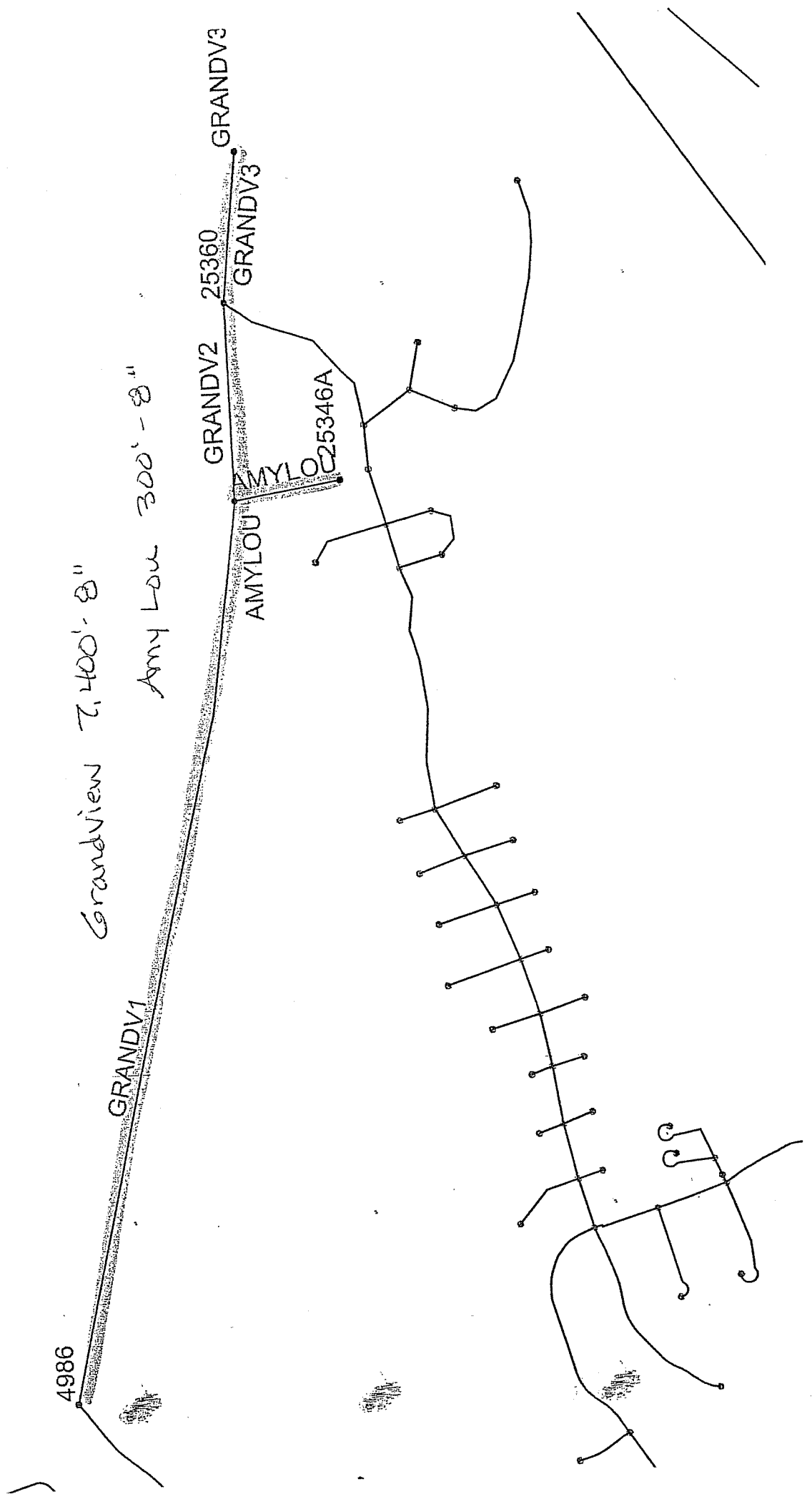
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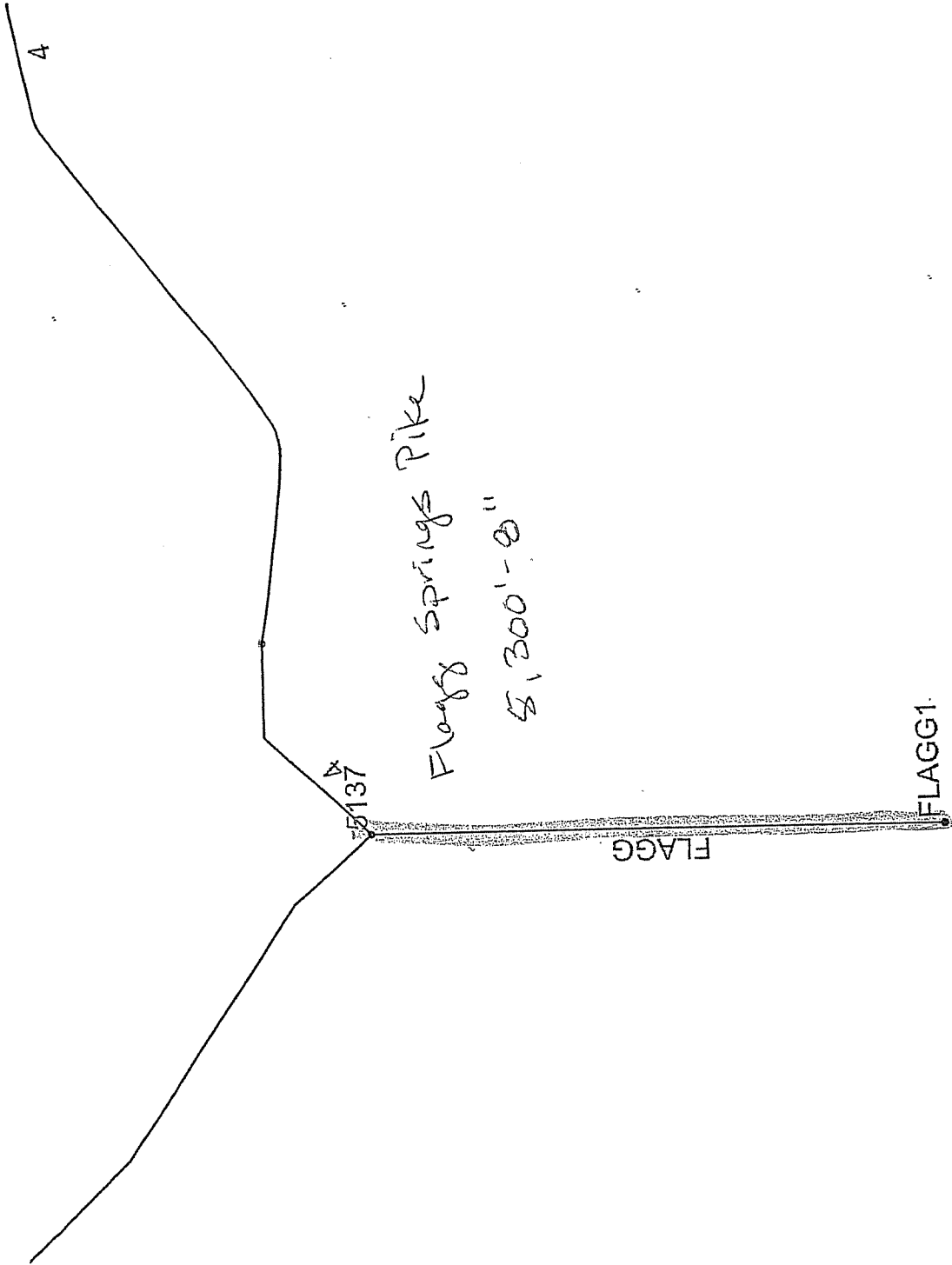
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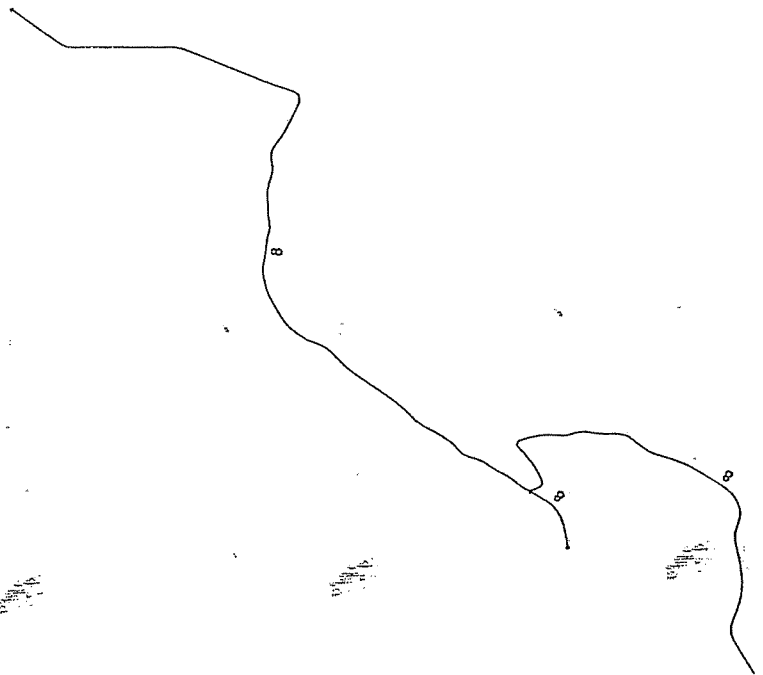
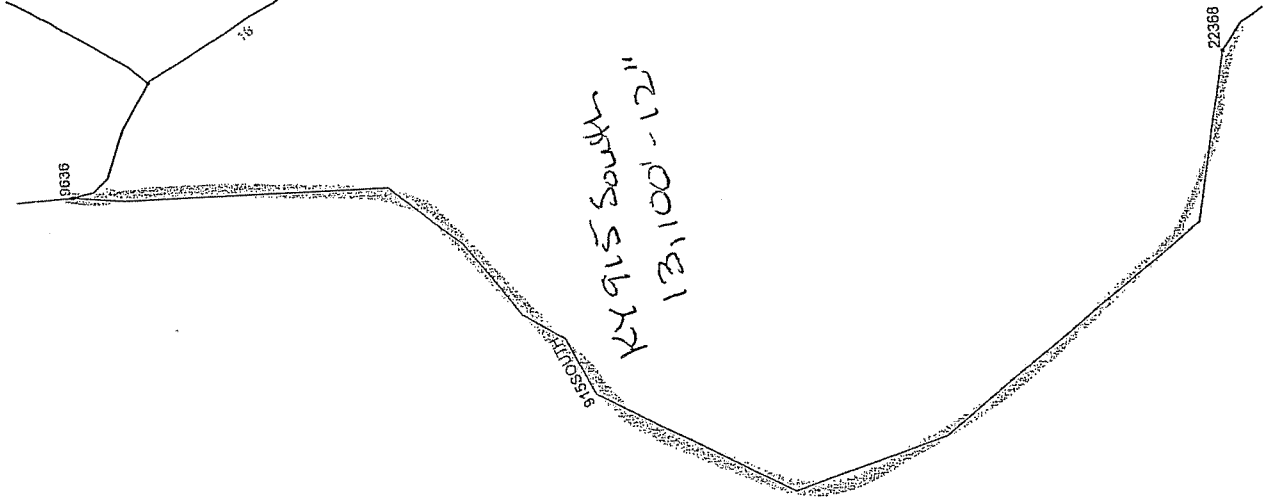
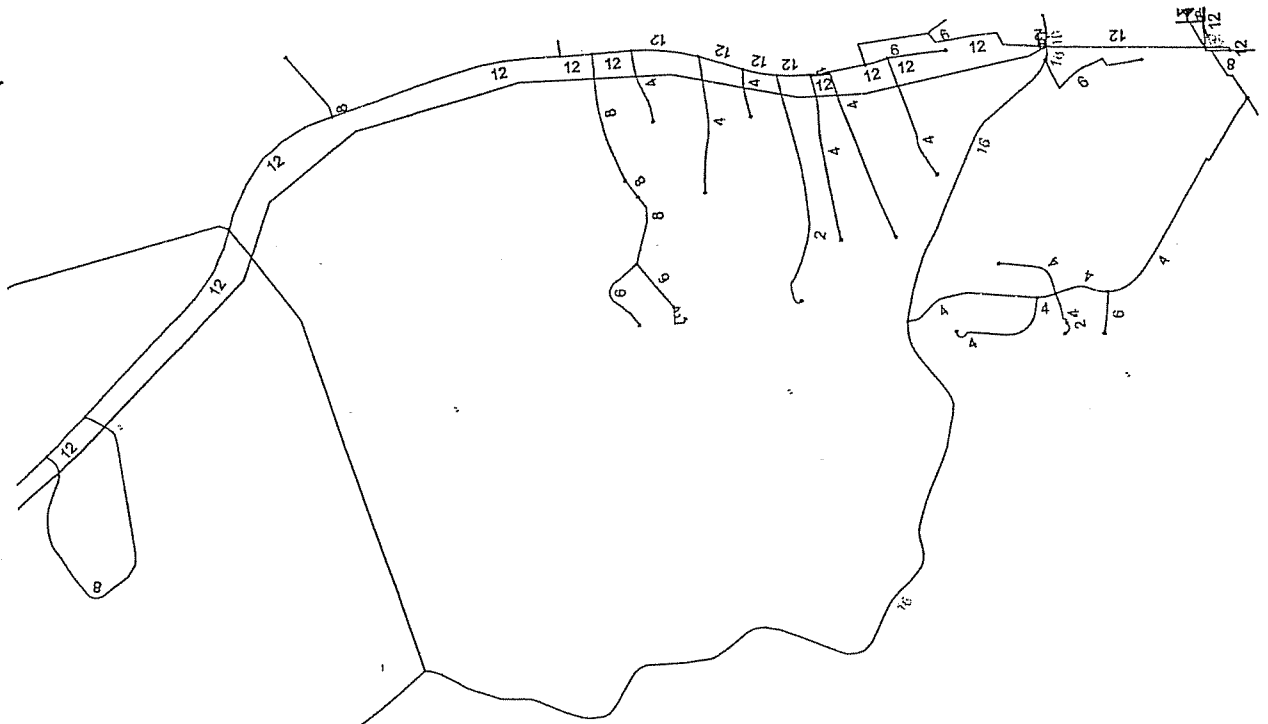
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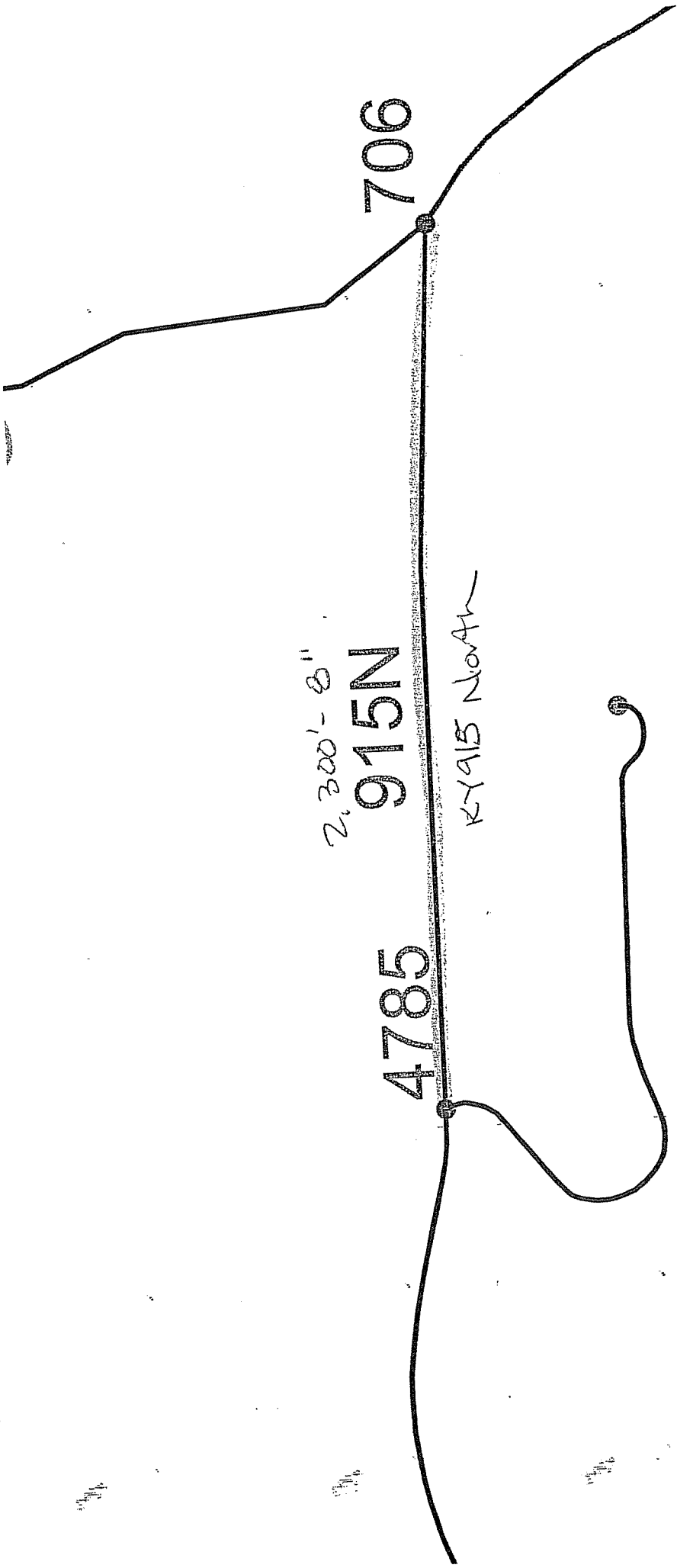
AMYLOU

25346A









706

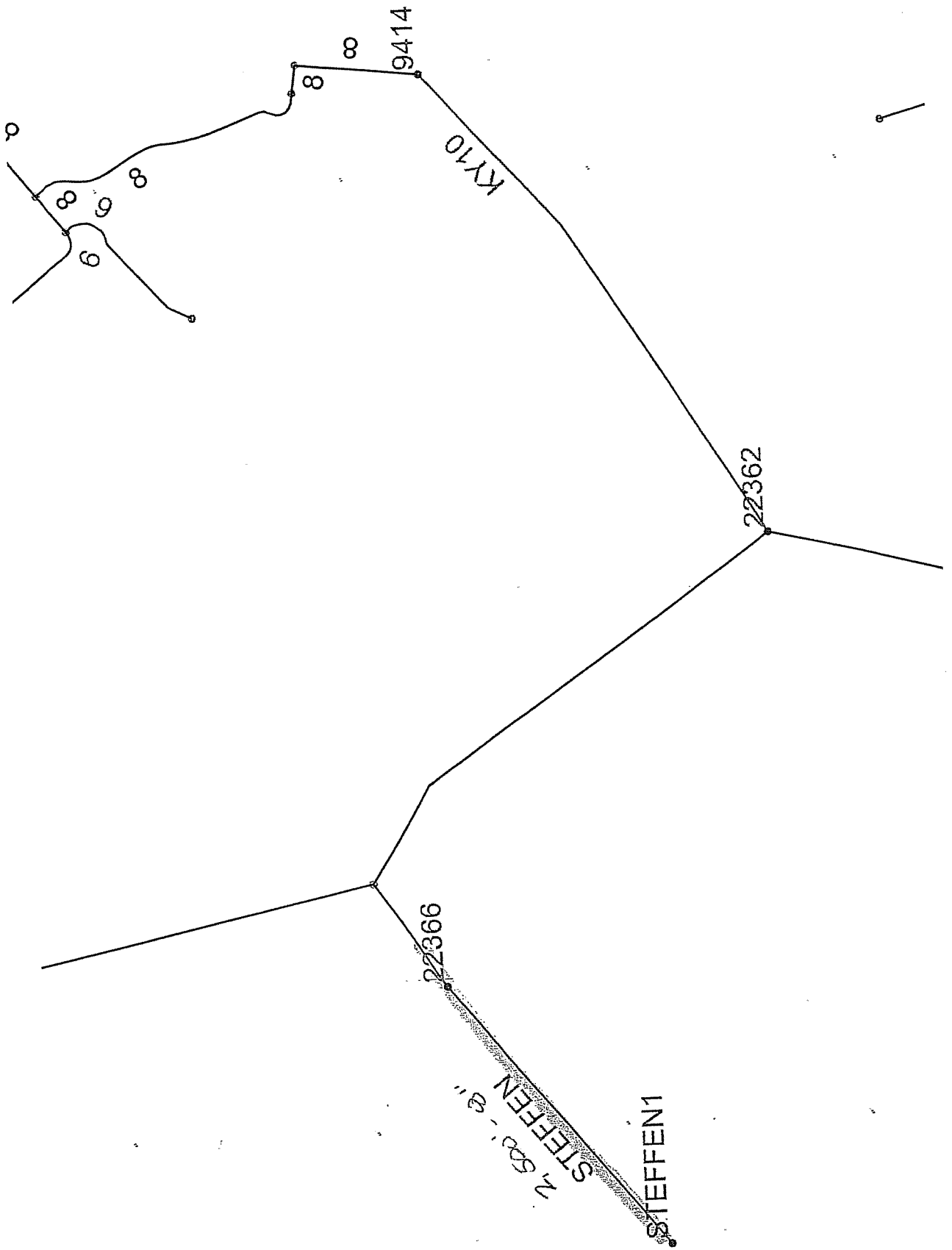
2,300' - 8"

915N

KY915 North

4785

8



9414

KY10

22362

22366

STEFFEN
2 500' - 4''

STEFFEN1

8

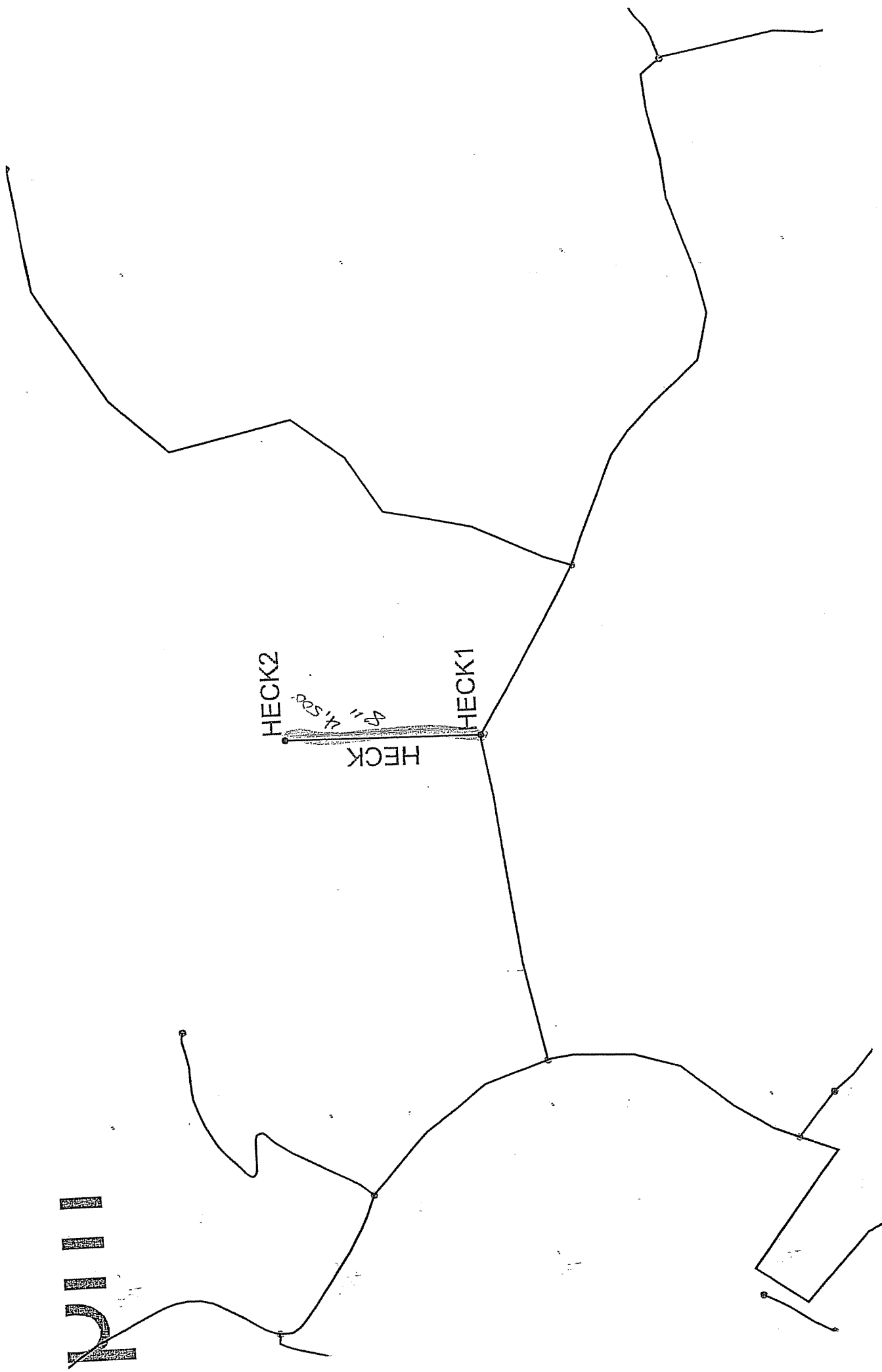
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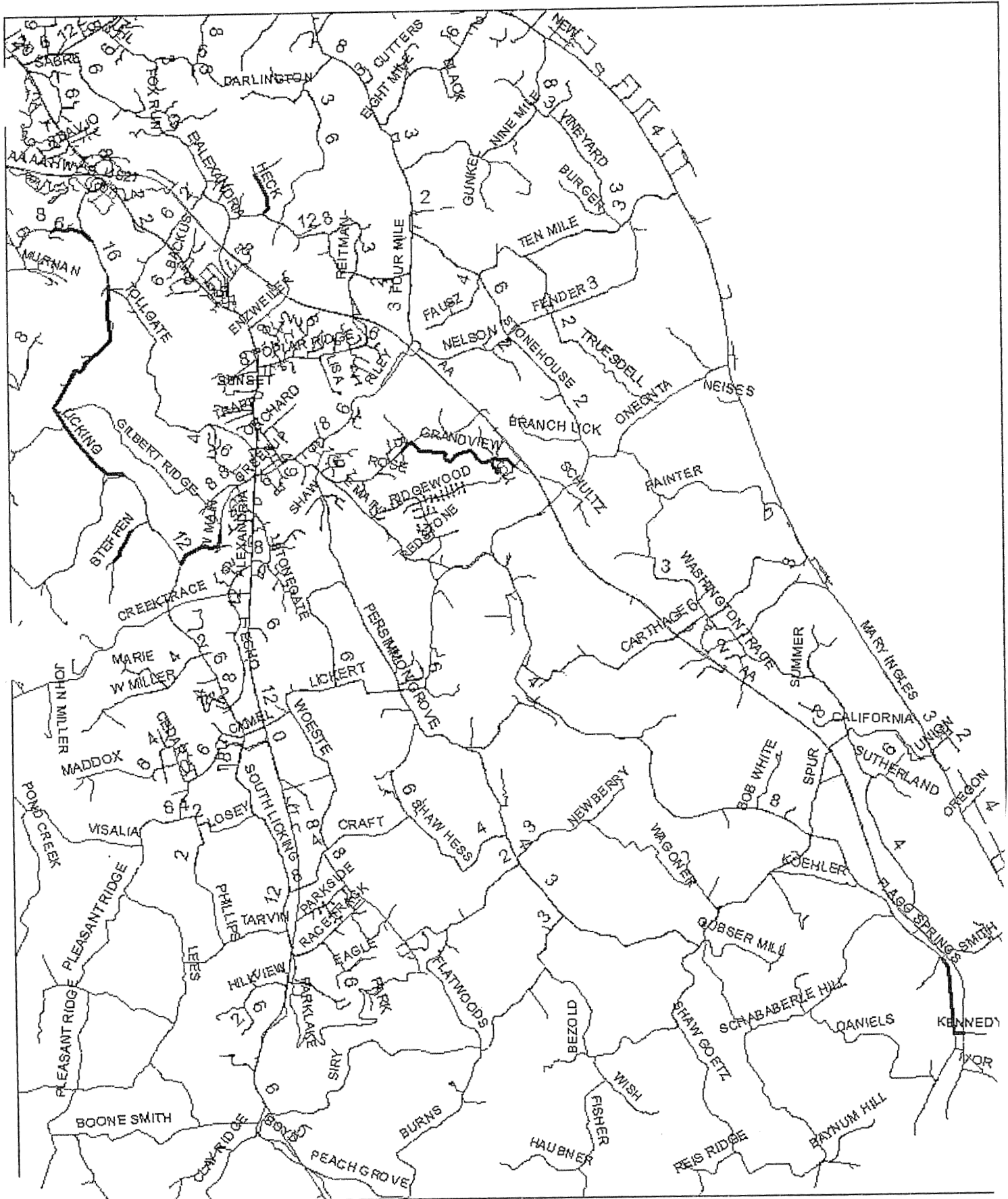
Case No. 200-_____
Exhibit C

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District F

Campbell County
184-188

Project Map



Legend

- Existing Water Mains
- Subdistrict F

Sub District F

ROSANNA WATER MAIN EXTENSION
MAY, 3 2007 @ THE DISTRICT'S CENTRAL FACILITY @ 2:30PM

ATTENDANCE: GERALD DAVIS, HOME OWNER & GREG NAPIER, NKY
WATER DISTRICT EMPLOYEE

MEETING SUMMARY:

I met with Mr. Davis on a possible water main extension for 2277 Rosanna Drive. He thought he would need three services, for him, his son and his daughter. I informed him that it would be approximately 2200' of water main. The cost estimate would be \$70.07 a foot. I showed him the attached breakdown sheet. He then asked if there were any other options. I informed him of the spiderline. It would have to be approved by our committee. He was also told that any property he would run his service across would need an easement or if you ran along the city or county right-of-way, then you would need approval from that governing body. I also informed we needed plat and deeds of his property and from any recorded easements for his service line. He said he would get back with me and let me know of his decision.

Meeting was over @ approximately 3:00 PM

Greg Napier

Average Cost Per Foot	50' Participation by District for each Customer	Total # of Customers	District's Total Portion of Project
\$70.07	\$3,503.50	3	\$10,510.50
Total Cost	\$3,503.50		
District's Total Portion of Cost	\$10,510.50		
Total	\$143,632.50		
# of Customers Connecting to Main	Total Customer Cost	Cost For Each Customer	
1	\$150,639.50	\$150,639.50	
2	\$147,136.00	\$73,568.00	
3	\$143,632.50	\$47,877.50	
4	\$140,129.00	\$35,032.25	
			Actual Sign Ups
	(Column B - \$3,503.50)/Column A = Column C		
	(3/4 service tap) cost may change yearly		
	Cost does not include \$750.00 Service Tap Fee for each house.		

Campbell/Kenton

2020 Water Management
Planning Council

2007 Project Profiles Submittal Summaries

Campbell County Area

Project Profile Campbell County Water Unserved and Underserved Project 1 (Costs are still being updated through a preliminary engineering report)

Northern Kentucky Water District
Campbell County Projects
0-2 Year Project HIGH PRIORITY
WRIS Project Number: WX21037203

\$10,423,000

Underserved and Unserved Water Project

This project profile summarizes a critical unserved and underserved \$10,208,000 project that will impact over 60% of the District's nearly 80,000 customer base.

This project will also allow the District to construct an emergency interconnection to the East Pendleton County Water District. The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$5,000,000 of State Budget funding and will provide a match for the remaining \$5,208,000 necessary to complete the project. Design will commence upon receiving State Budget Funding. The District is committing these funds through Bond Anticipation Notes and other local funding sources.

The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding. The District is seeking \$5,000,000 of State Budget funding and will provide a match for the remaining \$5,208,000 necessary to complete the project.

- 1) The unserved portion of this project includes 11.15 miles of waterline extension to serve 255 unserved households at an estimated cost of \$4,258,000. The average number of households served per mile for this project is 22.87 houses per mile. This project will also allow the District to provide an emergency interconnection to the East Pendleton County Water District estimated to cost \$50,000. This component will be partially funded by a \$30 monthly customer surcharge and will be part of the District's Subdistrict system designated as Subdistrict H.
- 2) The underserved portion of this project includes two main replacement and enlargement components. The second involves the replacement of approximately 9,700 feet of 120 year old 30 inch water main with new 42 inch water main to improve pressure and system reliability. This improvement will impact over 50 percent of the Districts nearly 80,000 customers at an estimated cost of \$5,900,000.

Project Profile Newport Wter Main Replacement Project
 Northern Kentucky Water District
 Campbell County Projects
 0-2 Year Project HIGH PRIORITY
 WRIS Project Number: WX21037204

\$5,000,000

This project profile summarizes a critical underserved \$5,000,000 project that involves the replacement of water mains located in the urban core of the Northern Kentucky Water District's Campbell County Service Area. The location of this project is in Newport and involves the replacement of several water lines with a high incidence of breakage. The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$2,500,000 of State Budget funding and will provide a match for the remaining \$2,500,000 necessary to complete the project.

The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding.

Comment:

Street

Street	Comment:	Estimated Project Cost	City	Feet of Main	Est \$ per Foot
3rd street		\$ 237,500.00	Newport	950	250
4th Street	Isabella Street to Columbia Street	\$ 1,086,250.00	Newport	3950	275
5th Street	Shomaker Lane to Park Avenue	\$ 312,500.00	Newport	1250	250
6th Street	Southgate Avenue to Central Avenue	\$ 560,000.00	Newport	2800	200
7th Street	Columbia Street to Park Avenue	\$ 453,750.00	Newport	1650	275
8th Street	D.E. West of Brighton Street to Liberty Street	\$ 300,000.00	Newport	1500	200
9th Street	Brighton Street to Central Avenue	\$ 180,000.00	Newport	900	200
10th Street	Brighton Street to Isabella Street	\$ 600,000.00	Newport	3000	200
11th Street	6th Street to 12th Street	\$ 430,000.00	Newport	2150	275
12th Street	8th Street to 8th Street	\$ 591,250.00	Newport	2150	275
13th Street	3rd Street to 8th Street	\$ 240,000.00	Newport	1200	200
14th Street	16th Street to 18th Street	\$ 4,991,250.00	Newport		
15th Street					
16th Street					
17th Street					
18th Street					
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100th Street					

Pendleton County Water District
 0-2 Year Project HIGH PRIORITY
 WRIS Project Number: WX21191408

Street

Comment:

12" Main to County Line
 New Master Meter Vault

Number of
 Unserved
 Households

Distance
 (Miles)

Estimated
 Project
 Cost

City

Feet
 of
 Main

Est \$
 per
 Foot

Customers
 Per mile

\$ 860,000.00

Subdistrict H
 Project Summary #1
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 year project HIGH PRIORITY
 WRIS Project Number: This subdistrict is part of WX21037203

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Orlando		6	0.10	\$ 59,041.86	Alexandria	528	111.82	60.00
Maddox Rd	House #22 to D.E. (#15 has spiderline)	11	0.70	\$ 350,440.50	Claryville	3696	94.82	15.71
Cory	Madonna to dead end	12	0.30	\$ 108,522.58	Unincorporated/Claryville	1584	68.51	40.00
Enzweiler Road	Maddox to D.E.	13	0.60	\$ 107,699.44	Alexandria	1270	84.8	21.87
Rifle Range Rd.	From last fire hydrant to dead end - East of AA hwy	26	0.80	\$ 576,730.00	Unincorporated	4224	136.54	32.50
Creektrace Rd. (Pond Creek)	From Licking Pike to bridge	10	1.60	\$ 686,887.56	Unincorporated	8448	81.31	6.25
Creektrace Rd. (Pond Creek)	From Licking Pike to John Miller Rd.	6	0.20	\$ 117,986.88	Unincorporated	1056	111.73	30.00
Creektrace Rd. (Pond Creek)	From John Miller Rd. to Indian Trace Rd.	20	0.50	\$ 231,286.00	Unincorporated	2640	87.61	40.00
Indian Trace Rd.	From Indian Trace Rd. to Bridge	18	0.90	\$ 474,027.19	Unincorporated	12144	27.22	20.00
Indian Trace Rd.	upgrade to 12" pipe	15	0.60	\$ 325,838.00	Unincorporated	4762	99.75	25.00
Indian Trace Rd.	Indian Trace Rd. (From JoAnn to End of road)	19	0.40	\$ 179,279.63	Unincorporated	3168	102.85	47.50
JoAnn Lane	Indian Trace Rd. (From Creek Trace (Pond Cr.) to JoAnn)	10	0.50	\$ 243,259.13	Unincorporated	2112	84.87	20.00
John Miller	Indian Trace to dead end	18	1.10	\$ 160,340.34	Unincorporated	2112	75.92	45.00
Lauren	From Creek Trace to dead end	18	1.80	\$ 492,170.89	Unincorporated	5808	84.74	16.36
Wesley Chapel Rd.	Creek Trace (Rt. 536) to D.E.	33	1.80	\$ 584,308.43	Unincorporated	9504	61.48	18.33
Wesley Chapel Rd.	From Calif. Cr. Rds. To Schababerle Hill	16	0.65	\$ 289,424.25	Unincorporated	3432	84.33	24.62
Schababerle Hill	From Schababerle Hill to Flegg Springs Pike (Route 10)	251	11.15	\$ 5,317,801.08	Unincorporated	69118		22.51
	From Wesley Chapel Rd. to Daniels Rd							

Subdistrict J
 Project Summary #2
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037520

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Overlook	Fire hydrant to Licking Pike (#118 served)	4	0.15	\$ 43,560.00	Newport	792	55	26.67
Blangey Rd.		14	0.50	\$ 145,200.00	Brent	2640	55	28.00
Barrs Branch to D.E.		10	0.45	\$ 130,680.00	Alexandria	2376	55	22.22
Johnson to D.E.		10	0.45	\$ 130,680.00	Unincorporated	5808	61	18.18
Anderson Trace		20	1.10	\$ 354,288.00	Unincorporated	1584	61	26.67
Trapp-Murman		8	0.30	\$ 96,624.00	Unincorporated	2640	61	20.00
Shaw Goetz Rd.	From Reis Ridge Rd. to Flagg Springs Pike (Rt 10)	10	0.50	\$ 161,040.00	Unincorporated	2640	61	20.00
Reis Lane (Decker Rd.)	Reis Ridge (Decker) to Dead end	10	0.50	\$ 161,040.00	Unincorporated	2376	55	22.22
Reis Ridge	From Reis Lane (Decker Rd) to end of road	10	0.45	\$ 130,680.00	Unincorporated	2112	55	20.00
Reis Ridge	From Shaw Goetz to Reis Lane (Decker Rd)	8	0.40	\$ 116,160.00	Unincorporated	1056	55	20.00
Upper Lick Branch Rd.	From Grandview to driveway past #2274	4	0.20	\$ 58,080.00	Unincorporated	528	55	20.00
Kappas Drive	Lauren to Dead End	2	0.1	\$ 29,040.00	Unincorporated	2112	55	20.00
Low Gap Rd	From #954 to #878	8	0.40	\$ 116,160.00	Melbourne	2640	55	20.00
Picnic Road	from Wagner Rd. To end of road	10	0.50	\$ 145,200.00	Unincorporated	5808	55	15.45
Mystic Rose (Gunkle Rd. #2)	Gunkle Rd. to dead end	17	1.10	\$ 319,440.00	Unincorporated			
Pleasant Rdg. Rd.	From Visalia Rd to Lees Rd.							
Pleasant Rdg. Rd.	From Lees Rd. to Harrisburg Hill Rd.	145	7.10	\$ 2,137,872.00		37488		20.42

Subdistrict L
 Project Summary #3
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037551

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Harrisburg Hill	From Lees to Pleasant Rdg. Rd.	22	1.10	\$ 319,440.00	Unincorporated	5808	55	20.00
Harrisburg Hill	From Pleasant Ridge to dead end	10	0.50	\$ 145,200.00	Unincorporated	2640	55	20.00
Lees Road	From Tarvin Rd. to Harrisburg Hill Rd.	12	0.70	\$ 203,280.00	Unincorporated	3696	55	17.14
Lees Road	From Pleasant Rdg. Rd. To Tarvin Rd.	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
Stonehouse Rd. (4&12 Mile)	From Pleasant Rdg. Rd. to Flagg Springs Pike (Route 10)	11	0.90	\$ 261,360.00	Unincorporated	4752	55	12.22
Stonehouse Rd. (4&12 Mile)	A.A. Hwy. to Flagg Springs Pike	5	0.25	\$ 72,600.00	Unincorporated	1320	55	20.00
Dodsworth Ln.	Lower Grandview to A.A. Hwy	25	1.30	\$ 377,520.00	Unincorporated	6864	55	19.23
Lower Grandview Rd.	Dodsworth Ln.	5	0.30	\$ 87,120.00	Unincorporated	1584	55	16.67
Lower Grandview Rd.	from Stone House to dead end	16	1.20	\$ 348,480.00	Unincorporated	6336	55	13.33
Burns Rd.	from Flatwoods Rd. to Bezold Rd.	121	7.25	\$ 2,105,400.00		38280		16.69

Subdistrict N
 Project Summary #4
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 Year Project MEDIUM PRIORITY
 WRIS Project Number: WX21037306

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Burns Rd.	From Flatwoods Rd. to St. Route 154	32	2.00	\$ 580,800.00	Unincorporated	10560	55	16.00
Daniels Rd.	From Schababerle Hill to #3185	16	1.00	\$ 327,360.00	Unincorporated	5280	62	16.00
Tower Hill Rd.	From Rt. 8 to Watchpoint	4	0.25	\$ 72,600.00	Ft. Thomas	1320	55	16.00
Baynum Hill Rd.	Baynum Hill Rd.	11	0.70	\$ 203,280.00	Unincorporated	3696	55	15.71
Barrs Branch Rd.	From End of line on Barrs Br. To Flagg Springs Pike (Rt	17	1.10	\$ 319,440.00	Alexandria	5808	55	15.45
Visalia Road	Pleasant Ridge to Pond Creek	20	1.30	\$ 377,520.00	Unincorporated	6864	55	15.38
Hidden Valley	from Murnan to dead end	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
Kennedy	From Flagg Springs to dead end	2	0.20	\$ 58,080.00	Unincorporated	1056	55	10.00
		117	7.55	\$ 2,229,480.00		39864		15.50

Subdistrict P
 Project Summary #5
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037305

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Bezold Rd.	From Burns Rd to California Cr. Rds.	15	1.00	\$ 290,400.00	Unincorporated	5280	55	15.00
California Cross Rds.	From Bezold Rd to #2038	7	0.45	\$ 130,680.00	California/Unincorporated	2376	55	15.56
Lees Road	From Harrisburg Hill Rd. to Kenton Station	3	0.40	\$ 116,160.00	Unincorporated	2112	55	7.50
Kenton Station Rd.	From Lees to Pleasant Rdg. Rd.	9	0.90	\$ 261,360.00	Unincorporated	4752	55	10.00
Pleasant Rdg. Rd.	From Kenton Station Rd. to Boone Smith Road	5	0.60	\$ 174,240.00	Unincorporated	3168	55	8.33
Bakerfield Rd.	Off of Boone Smith Rd.	22	0.90	\$ 261,360.00	Unincorporated	4752	55	24.44
Boone Smith Rd.	From Pleasant Rdg Rd to Bakerfield Rd	3	0.20	\$ 58,080.00	Unincorporated	1056	55	15.00
Boone Smith Rd.	From Bakerfield Rd.to PCWD end of line (#873)	12	0.70	\$ 203,280.00	Unincorporated	3696	55	17.14
Pleasant Rdg. Rd.	From Boone Smith Road to Clay Rdg. Rd.	19	1.30	\$ 377,520.00	Unincorporated	6864	55	14.62
Clay Rdg. Rd.	From Wolf Rd. to Pleasant Rdg Rd.	9	0.60	\$ 174,240.00	Unincorporated	3168	55	15.00
Clay Rdg. Rd.	From Pleasant Rdg Rd. to Morningview Rd	12	0.80	\$ 232,320.00	Unincorporated	4224	55	15.00
Wolf Road	From Clay Rdg. Rd. to end of road	9	0.60	\$ 174,240.00	Unincorporated	3168	55	15.00
Rt.8	Winters Lane to End of line near Ky-1998	9	0.60	\$ 174,240.00	Brent	3168	55	15.00
		134	9.05	\$ 2,628,120.00		47784		14.81

Subdistrict S
 Project Summary #6
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037554

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Rt.8	From end of line #7610 to Oneonta Rd.	6	0.40	\$ 116,160.00	California/Unincorporated	2112	55	15.00
Oneonta Rd.	From Rt.8 to Truesdale	10	0.80	\$ 232,320.00	California/Unincorporated	4224	55	12.50
Truesdale Rd.	Box 7568 to Oneonta	15	1.00	\$ 290,400.00	Meibourne	5280	55	15.00
Poplar Thicket Rd.	Licking Pike to #446	15	1.00	\$ 290,400.00	Unincorporated	5280	55	13.33
Blue Sky Lane	Poplar Thicket to Dead End	2	0.15	\$ 43,560.00	Unincorporated	792	61	12.31
Poplar Thicket Rd.	Poplar Thicket to Dead End	16	1.30	\$ 418,704.00	Unincorporated	6864	55	13.33
Gunkle Rd. (Gunkle #1)	#466 to Dead End	8	0.60	\$ 174,240.00	Meibourne	3168	55	13.33
Shaw-Hess Rd	Nine Mile Road to dead end	2	0.15	\$ 43,560.00	Unincorporated	792	55	12.50
Pond Creek Road	From end of line on Shaw Hess to #10280	15	1.20	\$ 348,480.00	Unincorporated	6336	55	12.50
Pond Creek Road	From Bridge to Visalia Rd.	25	2.00	\$ 580,800.00	Unincorporated	10560	55	11.67
Wagoner (Dead Timber Rd. #2)	From Visalia Rd. to #11707	7	0.60	\$ 174,240.00	Alexandria	3168	55	13.15
	from end of line To Newberry (Wagner)	121	9.20	\$ 2,712,864.00		48576		

Subdistrict U
 Project Summary #7
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037308

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Bob-White Lane	Bob-White Lane	8	0.70	\$ 203,280.00	Unincorporated	3696	55	11.43
Tippenhauer Rd.	From #211 to end of road	16	1.40	\$ 406,560.00	Cold Spring	7392	55	11.43
Fisher Rd	From Bezold Rd to Wish Rd.	2	0.25	\$ 72,600.00	Unincorporated	1320	55	8.00
Fisher Rd	From Wish Rd. to Haubner Rd.	11	1.00	\$ 290,400.00	Unincorporated	5280	55	11.00
Haubner Rd.	From Fischer to dead end	12	0.80	\$ 232,320.00	Unincorporated	4224	55	15.00
Wineyard (Gunkle Rd. #3)	From Fischer to dead end	9	0.60	\$ 174,240.00	Unincorporated	3168	55	15.00
Koehler Rd	From Fischer to dead end	7	0.65	\$ 188,760.00	Melbourne	3432	55	10.77
Losey Rd.	From Ten Mile (#5752) to #6566	9	0.90	\$ 261,360.00	California/Unincorporated	4752	55	10.00
Oneonta Rd.	From Burns to PCWD Service area.	10	1.00	\$ 290,400.00	Unincorporated	5280	55	10.00
Washington Tr.Rd.South End	From Calif. Cr. Rds. to Flagg Springs (Route 10)	3	0.30	\$ 87,120.00	Unincorporated	1584	55	10.00
	Licking Pike to #901	7	0.70	\$ 203,280.00	Unincorporated	3696	55	10.00
	From Truesdale to Washington Tr. Rd.	8	0.80	\$ 232,320.00	California/Unincorporated	4224	55	10.00
	End of 3" line to A.A. Hwy.	102	9.10	\$ 2,642,640.00				11.21

Subdistrict W
 Project Summary #8
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037557

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Decker Rd.	from Bezold Rd. to dead end	2	0.20	\$ 58,080.00	Unincorporated	1056	55	10.00
Stry Road	From Flatwoods Rd. to End of PCWD Line at #1204	19	2.00	\$ 580,800.00	Unincorporated	10560	55	9.50
Painter Rd	From #3735 to Route 8	8	0.85	\$ 246,840.00	California/Unincorporated	4488	55	9.41
Fisher Rd	From Haubner Rd. to #13634	13	1.40	\$ 406,560.00	Unincorporated	7392	55	9.29
Fender Rd.	Fender Rd.	8	0.90	\$ 261,360.00	Melbourne	4752	55	8.89
3 Mile Road	Gibson Road to Tessner	8	0.70	\$ 225,456.00	Wildier	3696	61	11.43
Rifle Range Rd.	From bridge to end of road	17	2.00	\$ 580,800.00	Unincorporated	10560	55	8.50
Licking Pike	Aspen to North	4	0.50	\$ 145,200.00	Wildier	2640	55	8.00
		79	8.55	\$ 2,505,096.00		45144		9.24

Subdistrict X
 Project Summary #9
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037555

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Morningview Rd.	Clay Ridge to dead end.	15	1.80	\$ 522,720.00	Unincorporated	9504	55	8.33
Clay Rdg. Rd.	From Morningview Rd. Griffen Fords Rd.	5	0.70	\$ 203,280.00	Unincorporated	3696	55	7.14
Rt.8	Oneonta to Painter Rd.	11	1.60	\$ 464,640.00	California/Unincorporated	8448	55	6.88
Neises	From Rt.8 to dead end	2	0.20	\$ 58,080.00	Unincorporated	1056	55	10.00
Burger Road	Gunkle Rd. to dead end	4	0.60	\$ 174,240.00	Unincorporated	3168	55	6.67
California Cross Rds.	From Washington Tr.Rd. to #3765	4	0.60	\$ 174,240.00	Residents are served from X-Cou	3168	55	5.45
Daniels Rd.	From #3185 to Flagg Springs Pike (Route 10)	6	1.10	\$ 319,440.00	Unincorporated	5608	55	6.67
Flagg Springs (Route 10)	From Daniels Road to Pendleton Co. Line	4	0.60	\$ 174,240.00	Unincorporated	3168	55	6.25
Branch Lick (Lower Lick Branch)	From Stone House to dead end	5	0.80	\$ 232,320.00	Unincorporated	4224	55	6.00
Rt.8	End of existing line (#11927) to county line	6	1.00	\$ 290,400.00	Mentor	5280	55	20.00
Kennedy	From Daniels to dead end	2	0.10	\$ 29,040.00	Unincorporated	528	55	7.03
		64	9.10	\$ 2,642,640.00		48048		

Subdistrict Y
 Project Summary #10
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037556

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Enzweiler Road	From last fire hydrant to dead end - East of AA hwy	4	0.6	\$ 42,116.62	Alexandria	1898	22.19	6.666666667
Shaw Goetz Rd.	From Reis Ridge Rd. to California Cross Rds.	11	1.80	\$ 522,720.00	Unincorporated	9504	55	6.11
Wagoner (Dead Timber Rd. #2)	From Newberry Road (Dead Timber Rd.) to Picnic	10	1.70	\$ 493,680.00	California/Unincorporated	8976	55	5.88
Stonehouse Rd. (4&12 Mile)	From Newberry Road (Dead Timber Rd.) to Picnic	2	0.35	\$ 101,640.00	Unincorporated	1848	55	5.71
Upper Lick Branch Rd.	From Oneonta Rd. to Lower Grandview	2	0.35	\$ 101,640.00	Unincorporated	1848	55	5.00
California Cross Rds.	From driveway past #2274 to AA Hwy	3	0.60	\$ 174,240.00	California/Unincorporated	3168	55	5.00
Newberry (Dead Timber Rd. #2)	From Shaw Goetz Rd. to #2038	3	0.60	\$ 174,240.00	California/Unincorporated	3168	55	5.00
Owl Creek Rd.	from Wagner Rd. To end of road	6	1.20	\$ 348,480.00	Silver Grove	6336	55	5.00
Pond Creek Road	From #11707 to Kenton station Rd.	6	1.20	\$ 348,480.00	Unincorporated	6336	55	5.00
Wolf Road	From Kenton Station Rd. to Clay Rddg. Rd.	7	1.40	\$ 406,560.00	Unincorporated	7392	55	3.57
Schababerle Hill	From Daniels Rd. to Flagg Springs Pike (Route 10)	5	1.40	\$ 406,560.00	Unincorporated	7392	55	3.57
		55	10.60	\$ 2,555,520.00		55968		5.19

Subdistrict Z
 Project Summary #11
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037009

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Tarvin Rd. (Schmudde)	From Phillips Creek Rd. (Schmudde) to Licking Pike	3	0.70	\$ 203,280.00	Unincorporated	3696	55	4.29
Phillips Cr. Rd. (Schmudde)	Box 11053 to Tarvin Road	4	1.00	\$ 290,400.00	Unincorporated	5280	55	4.00
Tarvin Rd. (Schmudde)	From Lees Rd to Phillips Creek Rd. (Schmudde)	2	0.50	\$ 145,200.00	Unincorporated	2640	55	4.00
Pleasant Rdg. Rd.	From Harrisburg Hill Rd. to Kenton Station Rd.	4	1.10	\$ 319,440.00	Unincorporated	5808	55	3.64
US 27	Riley School to CC Small Engine	1	0.30	\$ 87,120.00	Unincorporated	1584	55	3.33
Vineyard (Gunkle Rd. #3)	From #6566 to #6436 (to end of line)	1	0.30	\$ 87,120.00	Melbourne	1584	55	3.33
Kenton Station Rd.	From Pleasant Rdg. Rd. to Pond Cr.Rd.	3	1.00	\$ 290,400.00	Unincorporated	5280	55	3.00
Rt.8	Lester Ln. to #617	3	1.00	\$ 290,400.00	Ft. Thomas	5280	55	3.00
Rt.8	Tower Hill to Lester Ln.	1	0.60	\$ 174,240.00	Ft. Thomas	3168	55	1.67
Flatwoods Rd	From Race Track Rd. to Burns Rd	4	1.50	\$ 435,600.00	Unincorporated	7920	55	2.67
Flagg Springs (Route 10)	From Short Cut Rd. (A. A. Hwy. Connector) to Daniels Road	1	0.50	\$ 145,200.00	Unincorporated	2640	55	2.00
Painter Rd	From Washington Tr. Rd to #3735	1	0.65	\$ 188,760.00	California/Unincorporated	3432	55	1.54
		28	9.15	\$ 2,657,160.00		48312		3.06

Subdistrict XX
 Project Summary #12
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037558

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Four Mile Pike	Nelson to Woodrun Dr.	2	1.00	\$ 290,400.00	Alexandria	5280	55	2.00
Riley Road (old)	From 4 mile (upper end) to 2nd house	2	0.10	\$ 29,040.00	Unincorporated	528	55	20.00
A.A.Hwy	Smith Road to Grandview Road	9	6.70	\$ 1,945,680.00	Will/Cld Sprng/Alex/Cal/Ment	35376	55	1.34
Lick Hill	AA Highway to dead end	1	0.10	\$ 29,040.00	California/Unincorporated	528	55	10.00
Country Lake	AA Highway to dead end	4.00	0.10	\$ 29,040.00	California/Unincorporated	528	55	40.00
US 27	CC Small Engine to south Licking pike	1	0.95	\$ 275,880.00	Unincorporated	5016	55	1.05
Gubser Mill Road	California Cross Road to dead end	1	0.80	\$ 232,320.00	California/Unincorporated	4224	55	1.25
		20	9.75	\$ 2,831,400.00		51480		2.05

Subdistrict YY
 Project Summary #13
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037558

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
A.A.Hwy	Grandview Road to Murnan Road (overpass)	7	6.90	\$ 2,003,760.00	Will/Cld Spmg/Alex/Cal/Ment	36432	55	1.01
Rt.8	New Richmond Road to (south) D.E. of 3"	1	1.40	\$ 406,660.00	Unincorporated	7392	55	0.71
West Main Street (Alex.)	From #878 to Tollgate (Alex-Licking Pike)	0	0.30	\$ 87,120.00	Unincorporated	1584	55	0.00
Shaw-Hess Rd	1/2 mile from city building towards Licking Pike	0.00	0.50	\$ 145,200.00	Alexandria	2640	55	0.00
	From #10280 to Persimmon Gr. Pk.	0	0.45	\$ 130,680.00	Unincorporated	2376	55	0.00
		8	9.55	\$ 2,773,320.00		50424		0.84

Subdistrict ZZ
 Project Summary #14
 Northern Kentucky Water District
 Campbell County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037558

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
A.A.Hwy	Dry Creek to Ivy Ridge	0	1.00	\$ 290,400.00	Cold Spring	5280	55	0.00
A.A.Hwy	Pendleton Cnty line to Smith Road	0	1.80	\$ 522,720.00	Will/Cld Sprng/Alex/Cal/Ment	9504	55	0.00
Creektrace Rd. (KY Rt. 536)	From U.S. 27 to Licking Pike	0	0.80	\$ 232,320.00	Unincorporated	4224	55	0.00
Licking Pike	Banklick to 0.9 miles north (St. John's Church)	0	0.90	\$ 261,360.00	Wildier	4752	55	0.00
Licking Pike	From end of line at Tippahauer to Murman Rd	0	0.50	\$ 145,200.00	Unincorporated	2640	55	0.00
Losey Rd.	#901 to #812	0	0.40	\$ 116,160.00	Unincorporated	2112	55	0.00
Riley Road (old)	From 2nd house to 4 mile (lower end)	0	0.35	\$ 101,640.00	Unincorporated	1848	55	0.00
River Road	Last house to Rt. 8	0	0.50	\$ 145,200.00	Ft. Thomas	2640	55	0.00
Rt.8	?? South to Tower Hill	0	1.00	\$ 290,400.00	Dayton/Ft. Thomas	5280	55	0.00
Rt.8	River Rd. to Blangey Rd.	0	0.30	\$ 87,120.00	Brent	1584	55	0.00
Ten Mile Road	Ritter to 2802 Ten Mile Rd. (Schack farm)	0.00	0.50	\$ 145,200.00	Unincorporated	2640	55	0.00
		0	8.05	\$ 2,337,720.00		42504		0.00

Project Summary #PCWD
 Pendleton County Water District
 Pendleton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21037050

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Aulick Rd.	From End of PCWD service Area to Muinn Rd.	12	0.70	\$ 203,280.00	Unincorporated	3696	55	17.14
Aulick Rd.	From Muinn Rd. to Demossville Rd.	3	0.40	\$ 116,160.00	Unincorporated	2112	55	7.50
Demossville Rd.	From Aulick to dead end	20	1.10	\$ 319,440.00	Unincorporated	5608	55	18.18
Hissem Rd.	From Fairlane to Nagel	8	0.90	\$ 261,360.00	Unincorporated	4752	55	8.89
Hissem Rd.	From Nagel to Aulick	11	0.50	\$ 145,200.00	Unincorporated	2640	55	22.00
Hissem Rd.	From Fairlane to County Line	2	0.40	\$ 116,160.00	Unincorporated	2112	55	5.00
Hissem Rd.	From Ridge View Estates to Hissem Rd.	15	0.70	\$ 203,280.00	Unincorporated	3696	55	21.43
Muinn Rd.	Aulick to dead end	10	0.70	\$ 203,280.00	Unincorporated	3696	55	14.29
Nagel Rd.	From Fischer to Peach Grove Road (KY 154)	3	0.30	\$ 87,120.00	Unincorporated	1584	55	10.00
Newkirk Road		84	5.70	\$ 1,655,280.00	Unincorporated	30096	55	14.74

Subdistrict D Phase V
 Northern Kentucky Water District
 Campbell County Unserved Streets
 FUNDED - Completed 2003
 WRIS Project Number:

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
		18	1.46	\$ 331,015.87	Alexandria	7709	42.94	12.33
		6	0.20	\$ 40,455.36	Alexandria	1056	38.31	30.00
		24	1.66	\$ 371,471.23		8765		

Licking Pike (from Walker Dr. to Pc from Walker Dr. to Poplar Thicket or #4006
 Steffen Road (From Licking Pike to from Licking Pike to 1050 feet

Subdistrict F
 Northern Kentucky Water District
 Campbell County Unserved Streets
 0-2 Year Project Funded
 WRIS Project Number: WX21037552

	STREET	DISTANCE MILES	TOTAL AVAIL. CUST	BID COST
Pk. A	Grandview Rd. (incl. Amy Lou Dr.)	1.70	43	\$485,426
	Heck Rd.	0.70	12	
Pk. B	West Main Street	0.5	10	\$880,204
	Steffen Road	0.4	11	
	Licking Pike (Existing 8 to Ripple Creek)	0.4	7	
	Licking Pike From Trapp Rd to Rifle Range	1.7	31	
	Licking Pike from Rifle Range to Sub-D	0.85	7	\$221,656
Pk. C	Licking Pike 12" Upgrade Cost		15	\$195,305
	Flagg Springs (Route 10)	7.25	136	\$1,782,591
Cost Estimate:			\$1,782,591	
1	Construction		\$54,800	
2	Engineering		\$23,311	
3	Geotechnical		\$10,696	
4	Geotechnical Inspection (0.06%)		\$6,440	
	KIA Administrative Fee (1/2 of 1%)		\$15,000	
6	Legal		\$708,815	
7	Contingencies		\$2,599,653	
Total				\$1,288,000
Source of Funds:			\$25,000	
1	KIA/State Budget Funding		\$55,000	
2	Campbell County Fiscal Court			\$750,000
3	Flagg Springs Market			\$235,365
4	Northern Ky Water Dist. Bond Issue			\$246,298
4a	NKWD Extension Contribution			
4b	NKWD Hydraulic Improvement Contr.			
4c	NKWD Customer Surcharge			
Total				5,131.00

Campbell County Projects
0-2 Year Project Funded
WRIS Project Number: WX21037561

\$200,000

City of Wilder - Three Mile Road/Gibson Lane Water Project

This project will construct a water line on Three Mile Road and Gibson Lane from I-275 to Licking Pike.

Project Profile Water Quality Infrastructure Rehabilitation and Upgrade - Water Works Road

Northern Kentucky Water District
Campbell County Projects
0-2 Year Project Funded
WRIS Project Number: WX21037562

\$200,000

City of Newport - Water Work Road water main replacement project

This project will replace the existing dual 20" critical transmission water lines on Water Works Road in Newport, Ky.

Project Profile Water Quality Infrastructure Rehabilitation and Upgrade - Newport Pavillion

Northern Kentucky Water District
Campbell County Projects
0-2 Year Project Funded
WRIS Project Number: WX21037563

\$200,000

City of Newport -Newport Pavillion water line project

This project will replace the existing water lines to feed the Newport Pavillion development project in Newport, Ky.

Campbell/Kenton

2020 Water Management
Planning Council

2007 Project Profiles Submittal Summaries

Kenton County Area

Project 1 - Kenton County Water Unserved and Underserved Project 2

Northern Kentucky Water District

Kenton County Projects

0-2 Year Project

WRIS Project Number:

\$9,773,000

Underserved and Unserved Projects

This project profile summarizes a critical unserved and underserved \$6,380,000 project that will impact over 60% of the District's nearly 80,000 customer base. This project will also include an additional interconnection between the Bullock Pen Water District and the Northern Kentucky Water District.

The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$3,000,000 of State Budget funding and will provide a match for the remaining \$3,380,000 necessary to complete the project.

The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding.

1) The unserved portion of this project includes 6.6 miles of waterline extension to serve 146 households at a project cost of \$1,966,000. The average number of households served per mile for this project is 21.95 per mile. This project will provide an additional \$50,000.

interconnection between the Bullock Pen Water District and the Northern Kentucky Water District. This component will be partially funded by a \$30 monthly customer surcharge and will be part of the District's Subdistrict system designated as Subdistrict M.

2) The underserved portion of this project includes several components. The first is a 36 inch River Crossing that will provide an additional river crossing across the Licking River for security and redundancy purposes in the event the District loses service from its existing 36 inch Licking River Crossing. This component will impact over 50% of the District's nearly 80,000 customers at an estimated cost of \$2,710,000. The next component is the construction of a back-up power generator to power the District's Taylor Mill Treatment Plant Pump Station for security purposes at an estimated cost of \$1,654,000.

Project: Covington Water Main Replacement Project
 Northern Kentucky Water District
 Kenton County Projects
 0-2 Year Project
 WRIS Project Number:

Water Main Replacement Project

This project profile summarizes a critical underserved \$5,000,000 project that involves the replacement of water mains located in the urban core of the Northern Kentucky Water District's Kenton County Service Area. The location of this project is in Covington and involves the replacement of several water lines with a high incidence of breakage. The District has completed a preliminary engineering report that includes the project cost estimates. The Northern Kentucky Water District is seeking \$2,500,000 of State Budget funding and will provide a match for the remaining \$2,500,000 necessary to complete the project. The District is committing these funds through Bond Anticipation Notes and other local funding sources. Design will commence upon receiving State Budget Funding.

<u>Street</u>	<u>Comment:</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>
Crescent Avenue	Highway Avenue to 9th Street	\$ 1,045,000.00	Covington	3800	275
Western Avenue	Highway Avenue to 12th Street	\$ 1,170,000.00	Covington	5200	225
Philadelphia Street	3rd street to 9th Street	\$ 652,500.00	Covington	2900	225
Robbins Street	Madison Avenue to Prospect Avenue	\$ 340,000.00	Covington	1700	200
10th Street	Madison Avenue to Greenup Street	\$ 200,000.00	Covington	1000	200
Altamont Street	West Street to John Street	\$ 650,000.00	Covington	2600	250
41st Street	Winston Avenue to Decoursey Avenue	\$ 370,000.00	Covington	1850	200
42nd Street	Winston Avenue to Decoursey Avenue	\$ 440,000.00	Covington	2200	200
Greenup Street	9th Street to 11th Street	\$ 175,000.00	Covington	875	200
		\$ 5,042,500.00			

Project: Primary Bullock Pen Water Line Extension Phase 6 and 9 - currently being modified by Bullock Pen

Kenton County Unserved Streets

0-2 year HIGH PRIORITY

WRIS Project Number: WX21117012

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bagby Road	US 25 to Parker Grove	37	2.40	\$ 696,960.00	SKC	12672	55	15.42
Carlisle Road	KY 14 to Parker Grove	45	1.90	\$ 551,760.00	SKC	10032	55	23.68
Courtney Road	Eads Road to Boone County Line	27	0.70	\$ 203,280.00	SKC	3696	55	38.57
Lunsford Road	Off KY 14 (Bullock Pen)	15	0.70	\$ 203,280.00	SKC	3696	55	21.43
Menefee Road	Shady Lane to county line	1	0.30	\$ 87,120.00	SKC	1584	55	3.33
Parker Grove	KY 14 to Shady Lane - Grant County Line	34	2.20	\$ 638,880.00	SKC	11616	55	15.45
Paxton Road	End of Sub C #1723 to Parker Grove	13	1.50	\$ 435,600.00	SKC	7920	55	8.67
Peoples Cemetery	Bagby Rd to dead end (Bullock Pen)	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
Shady Lane	Bagby Rd to county line	0	0.50	\$ 145,200.00	SKC	2640	55	0.00
Stephenson Road	Off KY 14 (Bullock Pen)	16	1.10	\$ 319,440.00	SKC	5808	55	14.55
Key West Road	US 25 to D.E. (Bullock Pen)	1	0.20	\$ 58,080.00	SKC	1056	55	5.00
		192	11.70	\$ 3,397,680.00		61776		16.41

Subdis M
 Project Summary #2
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117300

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Wright Road	Graven to D.E.	4	0.10	\$ 29,040.00	SKC	528	55	40.00
Cherry	Off KY 17, North of Apple	6	0.20	\$ 58,080.00	Independence	1056	55	30.00
Oak Island	Moffett to #14056	3	0.10	\$ 29,040.00	SKC	528	55	30.00
Stafford Heights Lane	Off Harris Pike	6	0.20	\$ 58,080.00	Independence	1056	55	30.00
Marshall Road	KY 177 to #9325	12	0.40	\$ 116,160.00	Covington	2112	55	30.00
Webster Road	Richardson Road to D.E.	18	0.70	\$ 203,280.00	Independence	3696	55	25.71
Kenton Station Road	KY 177 to D.E. (Thornhill)	5	0.20	\$ 58,080.00	SKC	1056	55	25.00
White Villa Estates	Lakeshore, Maple, North Lake Rd	26	1.10	\$ 354,288.00	SKC	5808	61	23.64
Far Hills Drive	From end of 16" to D.E.	1	0.05	\$ 14,520.00	Independence	264	55	20.00
Lakeview Drive	Off Taylor Mill Road, South of Harris	2	0.10	\$ 29,040.00	SKC	528	55	20.00
Goshorn Road	Fiskburg to D.E.	16	0.80	\$ 232,320.00	SKC	4224	55	20.00
Marshall Road	Klette to #9440	2	0.10	\$ 29,040.00	Covington	528	55	20.00
Sawgrass Road	Off Green Road	2	0.10	\$ 29,040.00	SKC	528	55	20.00
Bird Road	D.E. near Wynewood to end of road	6	0.30	\$ 87,120.00	SKC	1584	55	20.00
Dixon Drive	Rich Road to #14038	18	1.00	\$ 290,400.00	SKC	5280	55	18.00
Ernst Bridge Road	From RR bridge to #4425 (Ryland CC)	7	0.40	\$ 116,160.00	SKC	2112	55	17.50
Scenic Ridge Drive	Off Pelly Road	5	0.30	\$ 87,120.00	Independence	1584	55	16.67
Gene Street	Off Walton Nicholson Road	4	0.25	\$ 72,600.00	SKC	1320	55	16.00
Graven Road	End of Sub C to Wright Road	3	0.25	\$ 72,600.00	SKC	1320	55	12.00
		146	6.65	\$ 1,966,008.00		35112		21.95

Subdist. rF
 Project Summary #3
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117302

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Holdsbranch	End of existing pipe to D.E. of street	6	0.40	\$ 116,160.00	Taylor Mill	2112	55	15.00
James Road	South of Moffett	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
Old Fowler Creek Road	Off KY 17	3	0.20	\$ 58,080.00	Covington	1056	55	15.00
Taylor Mill Road	#4860 to Grand	6	0.40	\$ 116,160.00	Taylor Mill	2112	55	15.00
Worthington Drive	Off KY 17, South of Hands Pike	3	0.20	\$ 58,080.00	Covington	1056	55	15.00
Mason Road	hydrant at #460 to Decoursey	3	0.20	\$ 58,080.00	Taylor Mill	1056	55	15.00
Steep Creek	KY 177 to #3704 at bridge	14	1.00	\$ 290,400.00	SKC	5280	55	14.00
Case Road	Steep Creek to KY 177	4	0.30	\$ 87,120.00	SKC	1584	55	13.33
Rich Road	End of Sub C to #3493	4	0.50	\$ 145,200.00	SKC	2640	55	8.00
Rich Road	#3493 to Hempfling	1	0.20	\$ 58,080.00	SKC	1056	55	5.00
Rich Road	Hempfling to Little Cruises	1	0.40	\$ 116,160.00	SKC	2112	55	2.50
Rich Road	Little Cruises to Fiskburg	15	1.00	\$ 290,400.00	SKC	5280	55	15.00
Rich Road	Fiskburg to KY 177 to Rouse	9	0.60	\$ 174,240.00	SKC	3168	55	15.00
Rouse	KY 177 to Rich	3	0.20	\$ 58,080.00	SKC	1056	55	15.00
KY 177	KY 14 to #15168	16	0.60	\$ 174,240.00	SKC	3168	55	26.67
KY 177	#14669 at bridge to Rich Road	17	1.30	\$ 377,520.00	Kenton	6864	55	13.08
Fontanna	KY 177	16	0.60	\$ 174,240.00	SKC	3168	55	26.67
		124	8.30	\$ 2,410,320.00		43824		14.94

Subdis. CO
 Project Summary #4
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117303

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Bethel Grove Road	End of Sub E to D.E.	3	0.22	\$ 63,888.00	Visalia	1162	55	13.64
Steep Creek	Marshall to #3382 at bridge	8	0.60	\$ 174,240.00	SKC	3168	55	13.33
James Road	North of Moffett from Amer Legion to D.E.	4	0.30	\$ 87,120.00	SKC	1584	55	13.33
Oak Island	#14056 to Hempfling	0	0.70	\$ 203,280.00	SKC	3696	55	0.00
Gleason Road	KY 17 to D.E.	4	0.30	\$ 87,120.00	SKC	1584	55	16.67
Hempfling Road	Navaho to Oak Island	10	0.60	\$ 174,240.00	SKC	3168	55	22.50
Hempfling Road	Navaho Road to slide area	18	0.80	\$ 232,320.00	SKC	4224	55	20.00
Conley Road	KY 177 to #3953	6	0.30	\$ 87,120.00	SKC	1584	55	9.00
Conley Road	Kenton Station to #3953	9	1.00	\$ 290,400.00	SKC	5280	55	13.33
Locust Lane	KY 17 to D.E.	2	0.15	\$ 43,560.00	SKC	792	55	12.22
River Road (Route 8)	Chevron to #486 (towards Bromley)	11	0.90	\$ 261,360.00	Villa Hills	4752	55	12.86
Mann Road	Visalia to #11606	9	0.70	\$ 203,280.00	SKC	3696	55	12.50
Pruett	Marshall to Petty	5	0.40	\$ 116,160.00	SKC	2112	55	12.50
Fowler Creek Road	Old Madison to new Madison connector rc	15	1.20	\$ 348,480.00	Independence	6336	55	12.73
		104	8.17	\$ 2,372,568.00		43138		

Subdis. 2
 Project Summary #5
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117304

Comment:

<u>Street</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Harrisburg Road	5	0.40	\$ 116,160.00	SKC	2112	55	12.50
Webster Road	5	0.40	\$ 116,160.00	Independence	2112	55	12.50
Little Cruises Creek Rd	33	2.60	\$ 755,040.00	SKC	13728	55	12.69
Elliot Road	18	1.50	\$ 435,600.00	SKC	7920	55	12.00
Fiskburg Road	6	0.50	\$ 145,200.00	SKC	2640	55	10.00
Fiskburg Road	1	0.10	\$ 29,040.00	SKC	528	55	11.67
Fiskburg Road	7	0.60	\$ 174,240.00	Independence	3168	55	11.67
Cody Road	14	1.20	\$ 348,480.00	SKC	6336	55	11.25
Wright Road	9	0.80	\$ 232,320.00	SKC	4224	55	13.75
Mann Road	11	0.80	\$ 232,320.00	SKC	4224	55	13.75
Trace Run Road	109	8.90	\$ 2,584,560.00		46992		12.25

Klein to D.E.
 South of Independence Station to D.E.
 KY 17 to Rich Road
 KY 17 to D.E.
 Pfanstiehl to Alexander
 Goshorn to Pfanstiehl Road
 Flagstone to #5555
 Banklick to Graven
 Steep Creek to 11606
 Off of Moffett

Subdis. - T
 Project Summary #6
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117650

Comment:

Street

Street	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Webster Road	2	0.20	\$ 58,080.00	Independence	1056	55	10.00
Fuchs Road	1	0.10	\$ 29,040.00	Elsmere	528	55	10.00
Hempfling Road	7	0.70	\$ 203,280.00	SKC	3696	55	10.00
Alexander Road	34	3.10	\$ 900,240.00	SKC	16368	55	10.00
Independence Station Rd	3	0.30	\$ 87,120.00	Independence	7920	55	10.00
KY 177	15	1.50	\$ 435,600.00	Visalia	1584	55	10.00
Moffett Road	3	0.30	\$ 87,120.00	SKC	528	55	10.00
Nelson Road	1	0.10	\$ 29,040.00	Erlanger	2112	55	10.00
Rosanna Lane	4	0.40	\$ 116,160.00	SKC	1056	55	10.00
Spruce View Drive	2	0.20	\$ 58,080.00	SKC	5280	55	10.00
Steep Creek	10	1.00	\$ 290,400.00	SKC	1584	55	10.00
Forest View Lane	3	0.30	\$ 87,120.00	Taylor Mill			
	85	8.20	\$ 2,381,280.00		43296		10.37

Subdis. 11 V
 Project Summary #7
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117307

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Ishmael	End of existing hydrant to #14072	1	0.10	\$ 29,040.00	SKC	528	55	10.00
Wayman Branch	Between old T.M. system and NKWD sys	5	0.50	\$ 145,200.00	Taylor Mill	2640	55	10.00
Justice Lane	Last hydrant to D.E.	3	0.30	\$ 87,120.00	Independence	1584	55	9.23
Hempfling Road	Oak Island to Rich	12	1.30	\$ 377,520.00	SKC	6864	55	8.40
Locust Pike/Lawnmower Rd	Feiser Road to # 9684	21	2.50	\$ 726,000.00	Ryland Heights	13200	55	9.44
Kenton Station Road	Martin to Rector	17	1.80	\$ 522,720.00	SKC	9504	55	8.75
Saint Marys Road	Alexander to KY 177	7	0.80	\$ 232,320.00	SKC	4224	55	8.57
Eads Road	US 25 to I-71/75	6	0.70	\$ 203,280.00	SKC	3696	55	
		71	7.90	\$ 2,294,160.00		41712		8.99

Subdis. AA
 Project Summary #8
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117301

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Pfansstiehl Road	Fiskburg to D.E.	12	1.40	\$ 406,560.00	SKC	7392	55	8.57
Tamarita Lane	Harris to KY 16	1	0.12	\$ 34,848.00	Independence	634	55	8.33
Alexander Road	KY 177 to D.E.	8	1.00	\$ 290,400.00	SKC	5280	55	8.00
Vises's Trail	From KY177 go North 0.77 miles(south en	6	0.77	\$ 223,608.00	SKC	4066	55	7.79
KY 177	St. Mary Rd to Alexander Road	10	1.30	\$ 377,520.00	SKC	6864	55	7.50
Armstrong Road	Off Moffett to D.E.	3	0.40	\$ 116,160.00	SKC	2112	55	7.14
Porter Road	Hydrant at #8924 to hydrant at #9028	2	0.28	\$ 81,312.00	Ryland Heights	1478	55	10.00
Washboard Road	KY 177 to D.E.	4	0.40	\$ 116,160.00	SKC	2112	55	5.00
KY 177	#14443 south of Kenton Station to bridge	3	0.60	\$ 174,240.00	Kenton	3168	55	6.67
Erlanger Road	Turfway to dead end	2	0.30	\$ 87,120.00	Erlanger	1584	55	6.67
Fiskburg Road	Alexander to Rich Road	4	0.60	\$ 174,240.00	SKC	3168	55	6.67
Hergott Drive	Off KY 17, Norther of Callant	4	0.60	\$ 174,240.00	SKC	3168	55	6.67
		59	7.77	\$ 2,256,408.00		41026		7.59

Subdis. . BB
 Project Summary #9
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number:

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
McHugh Lane	Off Independence Station Road	2	0.30	\$ 87,120.00	Independence	1584	55	6.67
River Road (Route 8)	Amsterdam to Chevron	11	1.90	\$ 551,760.00	Villa Hills	10032	55	5.79
Lamb's Ferry Road	Whites Road to Whites Road	10	1.80	\$ 522,720.00	Ryland Heights	9504	55	5.56
Montague Road	Fire Hydrant to #1760	2	0.33	\$ 95,832.00	Covington	1742	55	6.06
Decoursey	I-275 to hydrant at #7900	4	0.70	\$ 203,280.00	Fairview	3696	55	5.71
Kensington Road	Off Green Road	2	0.20	\$ 58,080.00	SKC	1056	55	10.00
Lipscomb	Lieberman to D.E.	2	0.40	\$ 116,160.00	Covington	2112	55	5.00
Narrows Road	Thorn tree to Nelson (served by spiderline)	1	0.20	\$ 58,080.00	Erlanger	1056	55	5.00
Eubanks Road	Erlanger-Crs.Spgs. Road to D.E.	2	0.40	\$ 116,160.00	Crescent Spgs	2112	55	5.00
Navaho Road	Hempling to D.E.	1	0.20	\$ 58,080.00	SKC	1056	55	4.29
Campbell Drive	US 25 to D.E.	3	0.70	\$ 203,280.00	SKC	3696	55	4.29
Decoursey	Marshall to end of Sub-R	3	0.70	\$ 203,280.00	Ryland Heights	3696	55	4.29
		43	7.83	\$ 2,273,832.00		41342		5.49

Subdist. - CC
 Project Summary #10
 Northern Kentucky Water District
 Kenton County Unserved Streets
 WRIS Project Number: WX2111

Comment:

Street

Street	Comment	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Madison Pike	Old Richardson Road to Far Hills	3	0.70	\$ 203,280.00	Independence	3696	55	4.29
Independence Road	#1068 to End of Sub C	0	0.27	\$ 78,408.00	SKC	1426	55	0.00
Fowler Creek Road	Cox to Stephens	2	0.50	\$ 145,200.00	Independence	2640	55	4.00
KY 177	Ryland Lakes C.C. to #11282	5	1.40	\$ 406,560.00	SKC	7392	55	3.57
Wehrman Road	KY 16 to D.E.	1	0.30	\$ 87,120.00	Independence	1584	55	3.33
Stephens Drive	Don Victor to Oliver	0	0.40	\$ 116,160.00	Independence	2112	55	2.50
Locust Pike	#9684 To end of Sub R near Whites	1	0.50	\$ 145,200.00	Ryland Heights	2640	55	0.00
Pin Oak Lane	Erlanger showcase cinema drive to D.E. (1	0.50	\$ 145,200.00	Erlanger	2640	55	2.00
Fowler Creek Road	New Madison connector road to Pelly	1	0.60	\$ 174,240.00	Covington	3168	55	1.67
Moffett Road	Kenton Station to #3630	1	0.60	\$ 174,240.00	SKC	3168	55	1.67
Marshall Road	Coleman to Stewart	1	0.80	\$ 232,320.00	Ryland Heights	4224	55	1.25
Amsterdam Road	12" CC to Sanitation Plant Entrance	0	0.65	\$ 188,760.00	Villa Hills	3432	55	0.00
Decoursey	Grand to I-275	0	0.60	\$ 174,240.00	Covington	3168	55	0.00
		16	7.82	\$ 2,270,928.00		41290		2.05

Subdistr. D
 Project Summary #11
 Northern Kentucky Water District
 Kenton County Unserved Streets
 WRIS Project Number:

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Horsebranch	#760 Horsebranch to Thomas More Parkv	0	1.06	\$ 307,824.00	Crestview Hills	5597	55	0.00
Independence Station Rd	Canberra to R.R. Tracks	0	0.40	\$ 116,160.00	Independence	2112	55	0.00
KY 177	Alexander Road to Pendleton County Line	0	0.30	\$ 87,120.00	SKC	1584	55	0.00
KY 177	#15168 to St. Marys Road	0	0.60	\$ 174,240.00	SKC	3168	55	0.00
Narrows Road	Richardson to Thorntree	0	0.20	\$ 58,080.00	Erlanger	1056	55	0.00
Narrows Road	Nelson to D.E. at Erlanger Fire	0	0.20	\$ 58,080.00	Erlanger	1056	55	0.00
Rice Road #1	Off Mills Road	0	0.25	\$ 72,600.00	Independence	1320	55	0.00
Sleepy Hollow Road	Existing D.E. near Diamond Ct. to Ludlow	0	1.00	\$ 290,400.00	Covington	5280	55	0.00
		0	4.01	\$ 1,164,504.00		21173		0.00

Subdist. -E
 Project Summary #12
 Northern Kentucky Water District
 Kenton County Unserved Streets
 WRIS Project Number:

<u>Street</u>	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Jones Road	American Legion to D.E.	36	1.40	\$ 406,560.00	SKC	7392	55	25.71
Northcut Road	Jones Road to D.E.	8	0.40	\$ 116,160.00	SKC	2112	55	20.00
		44	1.80	\$ 522,720.00		9504		24.44

**Bullock Run Water District Phase 9
 Northern Kentucky Water District
 Kenton County Unserved Streets
 3-20 year project MEDIUM PRIORITY
 WRIS Project Number: WX21117205**

<u>Street</u>	<u>Comment:</u>	<u>Number of Unserved Households</u>	<u>Distance (Miles)</u>	<u>Estimated Project Cost</u>	<u>City</u>	<u>Feet of Main</u>	<u>Est \$ Per Foot</u>	<u>Customers Per Mile</u>
Anderson Road	Gardnersville to D.E.	10	0.90	\$ 261,360.00	SKC	4752	55	11.11
Eads Road	I-7175 to #504	6	1.35	\$ 392,040.00	SKC	7128	55	4.44
Gardnersville Road	End of Sub C to Anderson Road	3	0.60	\$ 174,240.00	SKC	3168	55	5.00
Grassy Creek Road	Gardnersville to D.E.	15	1.20	\$ 348,480.00	SKC	6336	55	12.50
Gripshover	County line to D.E.	1	0.60	\$ 174,240.00	SKC	3168	55	1.67
		35	4.65	\$ 1,350,360.00		24552		7.53

CONSTRUCTION COMPLETED

Project Summary Subdistrict E
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year Funded
 WRIS Project Number: WX21117200

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Bethel Grove Road	Vise's Trail to #12104	20	0.49	\$ 102,841.20	Visalia	2587	39.75	40.82
Brandy Lane	Bethel Grove to Licking Station	5	0.08	\$ 16,790.40	Visalia	422	39.75	62.50
Bromley-Cres. Springs	Amsterdam to north 0.53 miles toward Bro	17	0.59	\$ 123,829.20	Crescent Spgs	3115	39.75	28.81
Fiskburg Road	KY 17 to Goshorn (KY17 to 1.2 miles)	29	1.21	\$ 253,954.80	SKC	6389	39.75	23.97
Ishmall Road	Kenton Area	7	0.20	\$ 41,976.00	Kenton	1056	39.75	35.00
Kenton Station Road	Rector to Conley	10	0.77	\$ 161,607.60	SKC	4066	39.75	12.99
Kenton Station Road	Conley to Moffett	6	0.50	\$ 104,940.00	SKC	2640	39.75	12.00
Kenton Station Road	Moffett to KY 177	5	0.28	\$ 58,766.40	SKC	1478	39.75	17.86
KY 177	KY 536 North to #11282	8	0.36	\$ 75,556.80	Visalia	1901	39.75	22.22
KY 177	KY 536 to Visalia Road	13	0.45	\$ 94,446.00	Visalia	2376	39.75	28.89
KY 177	Visalia Road south to #12246	16	0.44	\$ 92,347.20	Visalia	2323	39.75	36.36
KY 177	Kenton Station south to #14443	34	1.28	\$ 268,646.40	Kenton	6758	39.75	26.56
KY 177	Kenton Station north to #13361	36	1.34	\$ 281,239.20	Kenton	7075	39.75	26.87
Licking Station	Bethel Grove to D.E.	12	0.23	\$ 48,272.40		5016	39.75	52.17
Oliver Road	Stephens to Harris	30	0.95	\$ 199,386.00		1848	39.75	31.58
Oliver Road	McCullum to Stephens	3	0.35	\$ 73,458.00		857	39.75	8.57
St Johns Road	Bromley Crs. Springs to 0.37 miles	5	0.37	\$ 77,655.60		1954	39.75	13.51
Vise's Trail	KY 177 to Visalia Rd. to South .23 miles(n	13	0.40	\$ 83,952.00		2112	39.75	32.50
Whitaker/McDonald	Off of Old KY 17	6	0.17	\$ 35,679.60		898	39.75	35.29
		275	10.46	\$ 2,195,344.80		55229		

CONSTRUCTION COMPLETED

Project Summary Subdistrict R (Fairview/Ryland Heights)
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year Funded
 WRIS Project Number: WX21117202

<u>Street</u>	<u>Comment:</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
KY 177	End of Sub-R (near Kaiser) to Wolf Road	22	0.77	\$ 172,869.31	Fairview	4066	42.52	28.57
KY 177	Wolf to Marshall (bridge)	18	0.92	\$ 206,496.58	Ryland Heights	4858	42.51	19.57
KY 177	910' to short marshall, 500' short marshall	2	0.1	\$ 22,445.28		528	42.51	20.00
Porter Road		2	0.16	\$ 35,912.45		845	42.51	12.50
Tecumseh	Porter to D.E.	8	0.35	\$ 78,558.48		1848	42.51	22.86
		52	2.30	\$ 516,282.10		12144		

Project Summary Klette Road Project
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year Funded
 WRIS Project Number: WX21117250

Comment:

<u>Street</u>	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	<u>City</u>	Feet of Main	Est \$ Per Foot	Customers Per Mile
Klette Road	15	1.16	\$ 341,212.61	Independence	6125	55.71	12.93
Klette Road	7	1.21	\$ 355,920.05	Independence	6389	55.71	5.79
Rice Road #2	16	0.45	\$ 132,366.96	Independence	2376	55.71	35.56
	38	2.82	\$ 829,499.62		14890		

#3335 to Rice Road
 Rice to Marshall
 Off Klette Road

Primary Subdistrict G & I
 Northern Kentucky Water District
 Kenton County Unserved Streets
 0-2 year HIGH PRIORITY - FUNDED
 WRS Project Number: WX21117004 Subdistrict G and WX21117203 Subdistrict I Unserved and Underserved Project 1

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ Per Foot	Customers Per Mile
Banklick Road	Mather to Independence	17	0.90	\$ 289,872.00	Independence	4752	61	18.89
Banklick Road	Bramlage to Walton-Nicholson	15	1.40	\$ 450,912.00	Independence	7392	61	10.71
Banklick Road	Independence to Bramlage	1	0.40	\$ 128,832.00	Independence	2112	61	2.50
Bramlage Road	Banklick to Wilson	23	0.90	\$ 261,360.00	Independence	4752	55	25.56
Bramlage Road	From #1980 BP RD to #1590 BP RD (#19	20	0.80	\$ 232,320.00	Erlanger	4224	55	25.00
Bullock Pen Road	#5414 to #5364	6	0.50	\$ 145,200.00	Independence	2640	55	12.00
Cody Road	Visalia Road (KY 536) to D.E.	8	0.30	\$ 87,120.00	SKC	1584	55	26.67
Estate Lane	Pelly to Cox	19	1.30	\$ 377,520.00	Independence	6864	61	14.62
Fowler Creek Road	Wolf to D.E.	5	0.10	\$ 32,208.00	Covington	528	55	50.00
Independence Road	Banklick to #1068	4	0.23	\$ 66,792.00	SKC	1214	55	17.39
Klein Road	Visalia to D.E.	27	1.00	\$ 290,400.00	SKC	5280	61	27.00
Lieberman Drive	Lipscomb to Dead end	11	0.35	\$ 112,728.00	Covington	1848	55	31.43
Misty Lane	Off KY 17, North of Hands Pike	5	0.10	\$ 29,040.00	Covington	528	55	50.00
Petty Road	Marshall to End of Sub A	26	1.00	\$ 290,400.00	SKC	5280	55	26.00
Pleasure Isle Drive	New KY 17 to D.E.	10	0.19	\$ 55,176.00	Erlanger	1003	55	52.63
Sugar Camp Road	From #2870 to Fowler Creek	4	0.40	\$ 128,832.00	Covington	2112	61	25.00
Upton Drive	Cody to D.E.	5	0.25	\$ 72,600.00	Independence	1320	55	16.00
Webster Road	Off Cody Road - hydrant at #351 to D.E.	7	0.20	\$ 58,080.00	Independence	1056	55	25.00
Wolf	Holly Hock to D.E.		0.40	\$ 128,832.00	Covington	2112	61	17.50
Water fill stations	Ryland and Piner	216	10.72	\$ 3,290,189.00		56602		

Project: File Water Quality Infrastructure Rehabilitation and Upgrade
 Northern Kentucky Water District
 Kenton County Projects
 0-2 Year Project Funded
 WRIS Project Number: WX21117204 and WX21117205

\$5,000,000

Water Main Replacement Consensus Project

This project profile summarizes a critical underserved \$6,000,000 project and 1,000,000 project that involves the replacement of water mains located in the urban core of the Northern Kentucky Water District's Kenton County Service Area. The location of this project is in Covington and involves the replacement of several water lines with a high incidence of breakage. Design will commence upon receiving State Budget Funding.

<u>Street</u>	<u>Comment:</u>
Package A West 3rd Street Johnson Street Main Street Cross Country W.M.	Crescent Avenue to Johnson St. (KY2374) West 2nd Street to West 5th St (KY2374) West 2nd Street to West 3rd Street West 3rd Street to 20" suction side @nd Street Pump station
Package B West 4th Street Bakewell Street Covington Avenue Russell Street East & West 5th Street	Johnson Street to Russell Street 200' north of West 2nd Street to West 9th Street Johnson Street to Russell Street West 4th Street to West 6th Street - switch services Johnson to Russell - switch services
Package C Pike Street Philadelphia Street West 9th Street	Willow Street to West 9th Street West 9th Street to Pike Street Philadelphia Street to Pike Street
Package D Prospect Street East 11th Street East 10th Street Wheeler Street East 9th Street East 8th Street East 7th Street	Robbins to East 11th Street Wheeler Street to 100' west of Madison Ave. Greenup Street to Prospect Street East 11th Street to 12th Street Madison Pike to Prospect Street Madison Pike to Garrard Street Greenup Street to Sanford Street
Package E Southern Avenue Edgecliff Road Benton Road Point Benton Road 39th Street	Huntington Avenue to Glenn Avenue 630' from Monroe to end of street Highland Pike to Phelps Benton Road to end of street Winston Avenue to Huntington Avenue

Case No. 200-_____
Exhibit C

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District G

Campbell County
184-193

Engineer's Letters of Recommendation

Case No. 200-_____
Exhibit C

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District G

Campbell County
184-193

Engineering Reports

Engineer's Letters of Recommendation

Engineers Final Estimate

System Hydraulic Model

Project Map

Project Specifications
(See Attached Specifications)

Since 1945



VIOX & VIOX

Civil Engineers, Surveyors, and Landscape Architects

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 859.727.3293

Fax: 859.727.8452

www.vioxinc.com

March 6, 2007

Northern Kentucky Water District
P.O. Box 18640
2835 Crescent Springs Road
Erlanger, KY 41018

ATTN: Richard Harrison, P.E.

RE: Sub-District G – Phase 4
(Fowler Creek Road, Sugar Camp Road,
Lieberman Road, Wolf Road & Hollyhock Drive)

Dear Mr. Harrison,

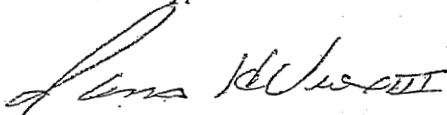
We have reviewed the bids received March 5, 2007, for the Sub-District G – Phase 4 – Project on Fowler Creek Road, Sugar Camp Road, Lieberman Road, Wolf Road & Hollyhock Drive, Kenton County, KY. The breakdown of the bids has been provided to your staff and to the contractors.

The low bidder was Howell Contractors with a bid of \$1,144,948.28, but they have withdrawn their bid. Therefore, the low bidder is Hartman and Smith Construction Company with a bid of \$1,306,178.00. Their bid is \$245,556.00 under our estimate dated 2/13/07 and \$42,145.00 less than the next lowest bid received. Three of the remaining five bids were over our estimate.

Hartman and Smith Construction Company has been a contractor for the NKWD in the past. Therefore, it is our recommendation that the contract should be awarded to them for \$1,306,178.00.

Hopefully, this recommendation is sufficient for your Commission to make a decision.

Yours truly,



James H. Viox III, P.E., L.S.

Since 1945



VIOX & VIOX

Civil Engineers, Surveyors, and Landscape Architects

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 859.727.3293
Fax: 859.727.8452
www.vioxinc.com

March 6, 2007

Northern Kentucky Water District
P.O. Box 18640
2835 Crescent Springs Road
Erlanger, KY 41018

ATTN: Richard Harrison, P.E.

RE: Sub-District G – Phase 1
(Banklick Road, Bramlage Road & Independence Road)

Dear Mr. Harrison,

We have reviewed the bids received March 5, 2007, for the Sub-District G – Phase 1 – Project on Banklick Road, Bramlage Road & Independence Road, Kenton County, KY. The breakdown of the bids has been provided to your staff and to the contractors.

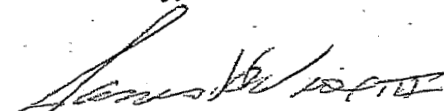
The low bidder was Howell Contractors with a bid of \$1,702,292.00, well under our estimate of \$3,193,495.00 and \$80,876.90 less than the second lowest bid received. All the bidders were under our estimate dated 2/13/07; however, six of the bidders were within nine percent (9 %) of our estimate.

Our estimate anticipated that controlled density backfill would be required on Bramlage Road and Independence Road, but the County ultimately did not require it. Therefore, significant cost savings occurred.

Howell Contractors has been a contractor for the NKWD in the past. Therefore, it is our recommendation that the contract should be awarded to them for \$1,702,292.00.

Hopefully, this recommendation is sufficient for your Commission to make a decision.

Yours truly,



James H. Viox III, P.E., L.S.

Case No. 200-_____
Exhibit C

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District G

Campbell County
184-193

Engineer's Final Estimate

Since 1945

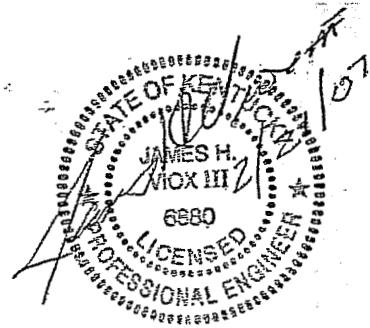


VIOX & VIOX

Civil Engineers, Surveyors, and Landscape Architects

466 Erlanger Road
Erlanger, Kentucky 41018

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ENGINEER'S ESTIMATE SUB-DISTRICT G PHASE 1 BANKLICK ROAD, BRAMLAGE ROAD, & INDEPENDENCE ROAD

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
6.01 24" CLASS 50 DUCTILE IRON PIPE (Detail 103, 103a, 104, 104a, 110)	LF	14520	\$165.00	\$2,395,800.00
6.03 8" C-900 POLYVINYL CHLORIDE (PVC). (Detail 103, 103a, 104, 104a, 110)	LF	5955	\$63.00	\$375,165.00
8.01 INSTALL FIRE HYDRANT ASSEMBLY	EA	20	\$3,000.00	\$60,000.00
8.01HP INSTALL FIRE HYDRANT ASSEMBLY {HIGH PRESSURE}	EA	6	\$3,500.00	\$21,000.00
8.02 INSTALL FUTURE FIRE HYDRANT VALVE	EA	11	\$875.00	\$9,625.00
9.01 8" DUCTILE IRON RESILIENT SEATED GATE VALVE	EA	4	\$1,000.00	\$4,000.00
9.01 12" DUCTILE IRON RESILIENT SEATED GATE VALVE	EA	2	\$1,800.00	\$3,600.00
9.02 24" BUTTERFLY VALVE	EA	10	\$9,000.00	\$90,000.00
11.01 CONCRETE ENCASEMENT	LF	60	\$80.00	\$4,800.00
11.04 8" PLUG AND BLOCK	EA	2	\$500.00	\$1,000.00
11.05 AIR RELEASE VALVE {MATERIALS SUPPLIED BY NKWD}	EA	1	\$2,000.00	\$2,000.00
11.06 8"x8"x6" ANCHORING TEES AND BLOCKS	EA	10	\$700.00	\$7,000.00
11.06 24"x24"x6" ANCHORING TEES AND BLOCKS	EA	27	\$2,000.00	\$54,000.00
11.07 24"x24"x8" DUCTILE IRON TEE AND BLOCK	EA	3	\$2,250.00	\$6,750.00
11.07 24"x24"x24" DUCTILE IRON TEE AND BLOCK {CUT INTO EX. MAIN}	EA	2	\$6,500.00	\$13,000.00
11.09 12"-8" REDUCER	EA	1	\$1,000.00	\$1,000.00
11.09 24"-12" REDUCER	EA	2	\$3,500.00	\$7,000.00
11.11 TEST TAP	EA	1	\$250.00	\$250.00
12.04 ASPHALTIC CONCRETE MILLING AND PAVING	SY	1835	\$14.00	\$25,690.00
12.05 ASPHALTIC CONCRETE	SY	718	\$60.00	\$43,080.00
12.06 ASPHALTIC DRIVEWAY	SY	555	\$55.00	\$30,525.00
12.09 CONCRETE DRIVEWAY	SY	297	\$60.00	\$17,820.00
12.12 GRAVEL DRIVEWAY/PARKING AREA	SY	342	\$45.00	\$15,390.00
12.13 BEST MANAGEMENT PRACTICE	LS	1	\$5,000.00	\$5,000.00
TOTAL ESTIMATED COST				\$3,193,495.00

Since 1945

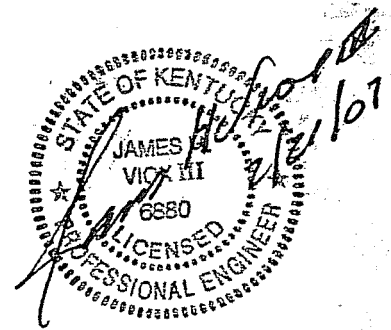


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ENGINEER'S ESTIMATE SUB-DISTRICT G PHASE 3

**MISTY LANE, PLEASURE ISLE, BULLOCK PEN, CODY ROAD, UPTON DRIVE,
CODY ROAD (FLAGSTONE DRIVE TO CSX R/R) & WEBSTER ROAD**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
6.01 6" CLASS 50 DUCTILE IRON PIPE (Detail 103, 103a, 104, 104a, 110)	LF	539	\$45.00	\$24,255.00
6.01 8" CLASS 50 DUCTILE IRON PIPE (Detail 103, 103a, 104, 104a, 110)	LF	11347	\$63.00	\$714,861.00
6.02 6" CLASS 50 DUCTILE IRON PIPE - INTERNAL RESTRAINED JOINT.	LF	36	\$70.00	\$2,520.00
6.02 8" CLASS 50 DUCTILE IRON PIPE - INTERNAL RESTRAINED JOINT.	LF	127	\$88.00	\$11,176.00
6.03 6" C-900 POLYVINYL CHLORIDE (PVC). (Detail 103, 103a, 104, 104a, 110)	LF	596	\$45.00	\$26,820.00
7.02 16"-8" TAPPING SLEEVE & VALVE	EA	1	\$3,000.00	\$3,000.00
8.01 INSTALL FIRE HYDRANT ASSEMBLY	EA	2	\$3,000.00	\$6,000.00
8.01HP INSTALL FIRE HYDRANT ASSEMBLY {HIGH PRESSURE}	EA	15	\$3,500.00	\$52,500.00
8.02 INSTALL FUTURE FIRE HYDRANT VALVE	EA	8	\$875.00	\$7,000.00
8.04 RELOCATE FIRE HYDRANT	EA	2	\$2,000.00	\$4,000.00
9.01 6" DUCTILE IRON RESILIENT SEATED GATE VALVE	EA	5	\$800.00	\$4,000.00
9.01 8" DUCTILE IRON RESILIENT SEATED GATE VALVE	EA	12	\$1,000.00	\$12,000.00
11.01 CONCRETE ENCASUREMENT	LF	100	\$80.00	\$8,000.00
11.04 6" PLUG AND BLOCK	EA	3	\$250.00	\$750.00
11.04 8" PLUG AND BLOCK	EA	5	\$500.00	\$2,500.00
11.05 AIR RELEASE VALVE {MATERIALS SUPPLIED BY NKWD}	EA	1	\$2,000.00	\$2,000.00
11.06 6"x6x"6" ANCHORING TEES AND BLOCKS	EA	4	\$650.00	\$2,600.00
11.06 8"x8x"6" ANCHORING TEES AND BLOCKS	EA	24	\$700.00	\$16,800.00
11.07 8"x8"x8" DUCTILE IRON TEE AND BLOCK	EA	1	\$600.00	\$600.00
11.09 8"-6" REDUCER	EA	1	\$175.00	\$175.00
11.11 TEST TAP	EA	3	\$250.00	\$750.00
12.04 ASPHALTIC CONCRETE MILLING AND PAVING	SY	8338	\$14.00	\$116,732.00
12.05 ASPHALTIC CONCRETE	SY	2825	\$60.00	\$169,500.00
12.06 ASPHALTIC DRIVEWAY	SY	227	\$55.00	\$12,485.00
12.09 CONCRETE DRIVEWAY	SY	310	\$60.00	\$18,600.00
12.12 GRAVEL DRIVEWAY/PARKING AREA	SY	248	\$45.00	\$11,160.00
12.13 BEST MANAGEMENT PRACTICE	LS	1	\$5,000.00	\$5,000.00
12.14 ASPHALT CONCRETE OVERLAY 2-1/2" OVERLAY	SY	2424	\$5.10	\$12,362.40
12.15 CLEARING	LUMP	1	\$4,000.00	\$4,000.00
DENSE GRADE AGGREGATE {6" DEPTH}	LUMP	1	\$6,000.00	\$6,000.00
TOTAL ESTIMATED COST				\$1,258,146.40

**ENGINEER'S ESTIMATE
SUB-DISTRICT G
PHASE 4
FOWLER CREEK ROAD, SUGAR CAMP ROAD,
LIEBERMAN ROAD, WOLF ROAD & HOLLYHOCK DRIVE**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL COST
11.09 8"-6" REDUCER	EA	1	\$175.00	\$175.00
11.09 12"-6" REDUCER	EA	4	\$1,000.00	\$4,000.00
11.09 16"-12" REDUCER	EA	1	\$2,000.00	\$2,000.00
11.11 TEST TAP	EA	4	\$250.00	\$1,000.00
12.04 ASPHALTIC CONCRETE MILLING AND PAVING	SY	13658	\$14.00	\$191,212.00
12.05 ASPHALTIC CONCRETE	SY	4581	\$60.00	\$274,860.00
12.06 ASPHALTIC DRIVEWAY	SY	440	\$55.00	\$24,200.00
12.09 CONCRETE DRIVEWAY	SY	83	\$60.00	\$4,980.00
12.11 CONCRETE SIDEWALK	SY	35	\$80.00	\$2,800.00
12.12 GRAVEL DRIVEWAY/PARKING AREA	SY	392	\$45.00	\$17,640.00
12.13 BEST MANAGEMENT PRACTICE	LS	1	\$5,000.00	\$5,000.00
TOTAL ESTIMATED COST				\$1,551,734.00

Case No. 200-_____
Exhibit C

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District G

Campbell County
184-193

System Hydraulic Model

FIRE FLOW CERTIFICATION

Sub-District G - Phase 1 Unincorporated Kenton County Kenton County, KY

I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.



Sub-District G - Phase 1
 Unincorporated Kenton County, Kentucky
 Output from H2ONET model - copied to Excel



Banklick Road, Bramlage Road, Independence Road

Maximum Hour Run, 65 Potential Customers = 81 GPM				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5379	10.1	810	1,075.21	114.97
5375	10.1	872	1,074.89	87.95
5371	10.1	807	1,074.90	116.13
5377	10.1	819	1,074.65	110.83
5365	10.1	920	1,070.81	65.37
5361	10.1	812	1,074.40	113.75
5383	10.1	850	1,073.93	97.07
5381	10.1	920	1,073.52	66.55

Banklick Road Flushing

Flushing velocity 2.5 fps for 24" pipe on Banklick Road (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5381	0	920	1,044.66	54.04
5383	0	850	1,047.40	85.57
5361	0	812	1,050.42	103.36
5377	0	819	1,051.61	100.84
5371	0	807	1,052.71	106.52
5379	0	810	1,054.07	105.81
5385	3,525.00	922	1,043.32	52.59

Pipe Information for flushing velocity at 2.5 fps for 24" pipe on Banklick Road					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
9036	3,610.32	24	3,525.00	2.5	120
9046	1,305.63	24	3,525.00	2.5	120
9044	1,055.37	24	3,525.00	2.5	120
9038	2,904.16	24	3,525.00	2.5	120
9056	2,620.37	24	3,525.00	2.5	120
9034	1,138.20	24	3,525.00	2.5	120
9066	1,285.99	24	3,525.00	2.5	120

-valves closed to Walton Nicholson Road and Bramlage Road

Bramlage Road Flushing

Flushing velocity 2.5 fps for 8" pipe on Bramlage Road (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5361	392.00	812	1,040.25	98.95
5365	0	920	1,047.97	55.47

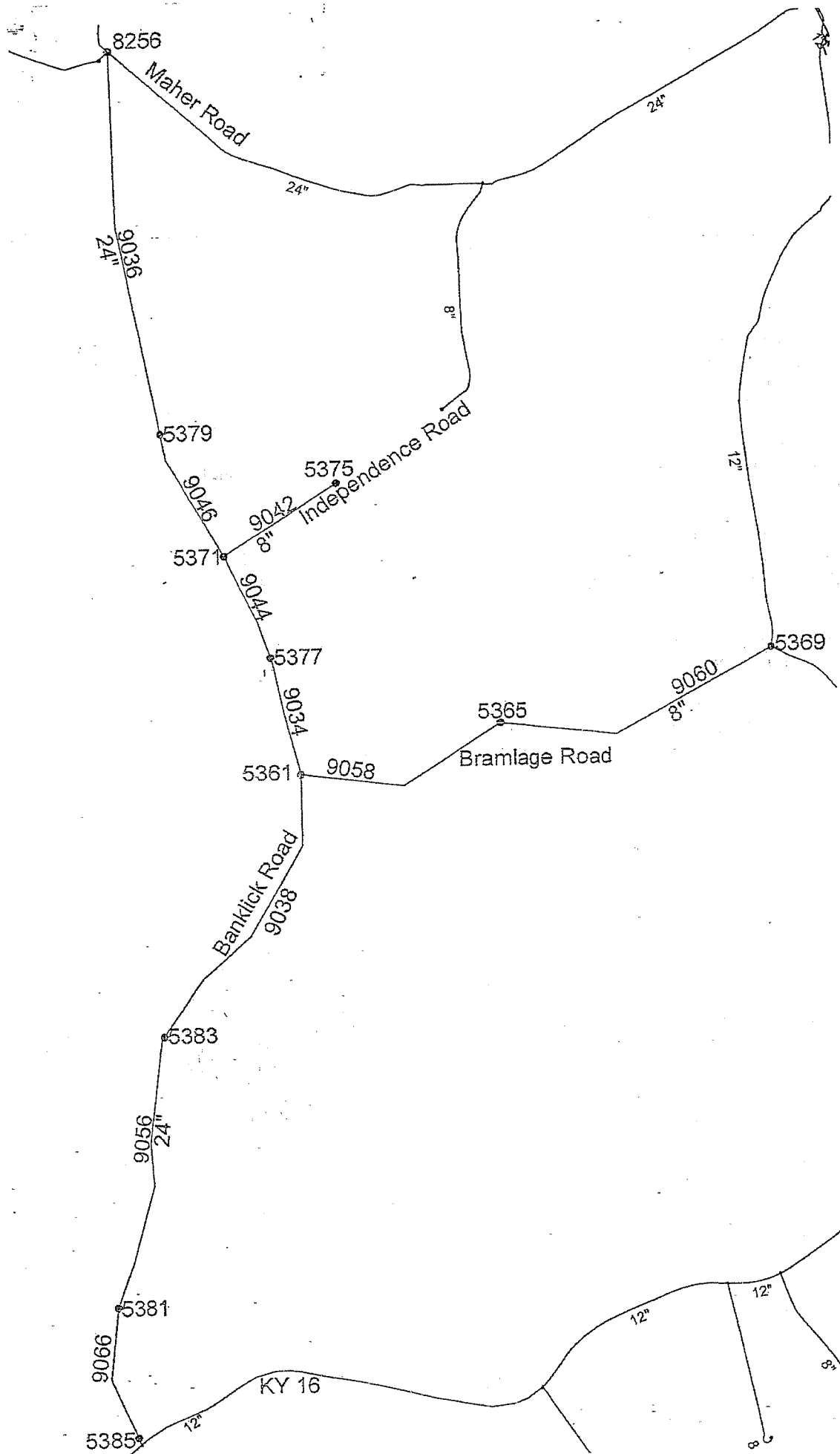
Pipe Information for flushing velocity at 2.5 fps for 8" pipe on Bramlage Road					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
9058	2,042.24	8	-392	2.5	120
9060	2,757.50	8	-392	2.5	120

-valve closed to Banklick Road

Independence Road Flushing

Flushing velocity 2.5 fps for 8" pipe on Independence Road (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5375	392.00	872	1,080.53	90.4
5371	10.1	807	1,085.25	120.62

Pipe Information for flushing velocity at 2.5 fps for 8" pipe on Independence Road					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
9042	1,250.00	8	392	2.5	120



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

**Sub-District G - Phase 2
Klein Road, Estate Lane & Petty Road
Unincorporated Kenton County
Kenton County, KY**

I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100.

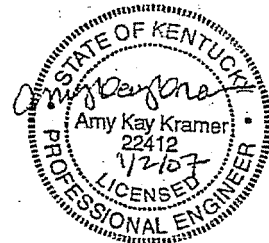
The maximum flow rate that can reliably be supplied to the main and meet 20 psi in the system under maximum hour conditions is 875 gpm on Klein Road, 1525 gpm on Estate Lane, and 1100 gpm on Petty Road. At least 30 psi can be maintained under the peak domestic demand for the 73 potential customers affected. The peak domestic demand using the D.R. Taylor formula for 38 potential new customers on Klein Road is 62 gpm. The peak domestic demand using the D.R. Taylor formula for 10 potential new customers on Estate Lane is 32 gpm. The peak domestic demand using the D.R. Taylor formula for 25 potential new customers on Petty Road is 50 gpm.

This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 8" water mains.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water level in the Independence Tank was one-half full.



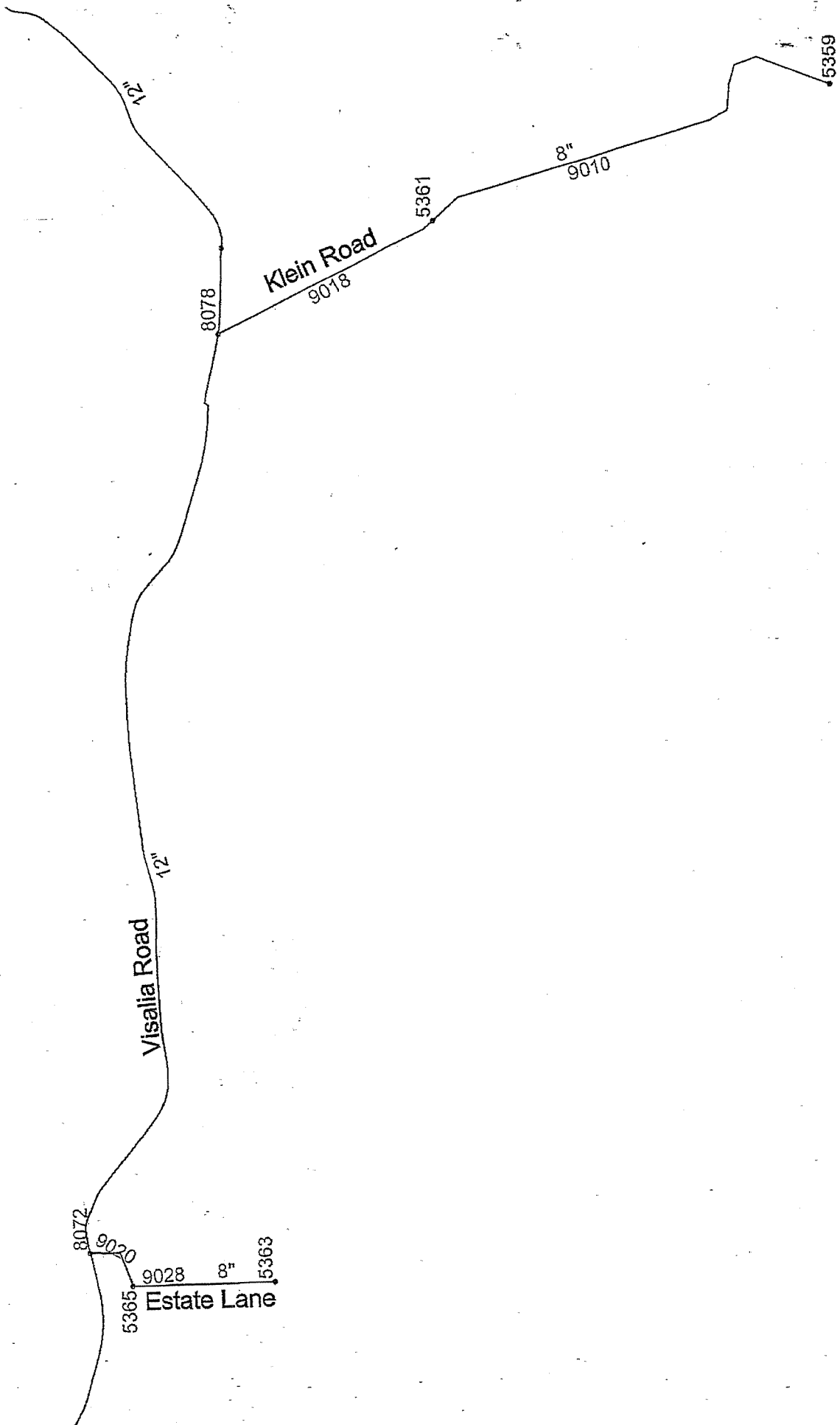
Maximum Available Flow Under Maximum Hour

Maximum Hour Run, Maximum Available Flow on Klein Road				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
8078	0.23	880	1,001.91	52.85
5361	31	880	971.39	39.62
5359	875.00	868	916.87	21.19

Maximum Hour Run, Maximum Available Flow on Estate Lane				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5363	1,525.00	848	895.18	20.45
5365	16	877	942.23	28.28
8072	0.23	874	964.61	39.28

Maximum Hour Run, Maximum Available Flow on Petty Road				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5369	1,100.00	877	925.11	20.86
3641	0.65	824	934.26	47.8
5367	0.00	827	960.42	57.84

<u>Pipe ID</u>	<u>From Node</u>	<u>To Node</u>
9018	8078	5361
9010	5361	5359
9028	5365	5363
9020	8072	5365
9032	5369	5367
9034	3641	5369



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

**Sub-District G - Phase 3
Misty Lane, Pleasure Isle, Bullock Pen
Cody Road, Upton Drive, Webster Road
Unincorporated Kenton County
Kenton County, KY**

I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100.

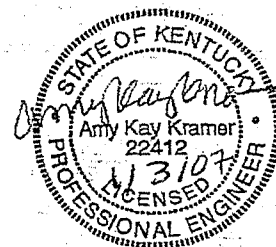
The maximum flow rate that can reliably be supplied to the main and meet 20 psi in the system under maximum hour conditions is 1150 gpm on Misty Lane, 1450 gpm on Pleasure Isle, 1100 gpm on Bullock Pen, 825 gpm on Cody Road and Upton Drive, and 1375 gpm on Webster Road. At least 30 psi can be maintained under the peak domestic demand for the 53 potential customers affected. The peak domestic demand using the D.R. Taylor formula for the 7 potential new customers on Misty Lane is 27 gpm. The peak domestic demand using the D.R. Taylor formula for the 13 potential new customers on Pleasure Isle is 36 gpm. The peak domestic demand using the D.R. Taylor formula for the 20 potential new customers on Bullock Pen is 45 gpm. The peak domestic demand using the D.R. Taylor formula for the 10 potential new customers on Cody Road and Upton Drive is 32 gpm. The peak domestic demand using the D.R. Taylor formula for the 3 potential new customers on Webster Road is 17 gpm.

This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSOFT. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 6" and 8" water mains.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water level in the Independence Tank was one-half full.



Cody Road and Upton Drive

Flushing velocity 2.5 fps for 8" pipe on Cody and Upton (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5375	392	856	1,005.82	65.0
5377	10.66	825	1,016.40	83.0
5373	10.66	755	1,019.17	114.5

Pipe Information for flushing velocity at 2.5 fps for 8" pipe on Cody and Upton					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
9040	690	6	392	4.45	120
9038	700	8	402.7	2.57	120
9036	544	8	413.3	2.64	120

Webster Road

Flushing velocity 2.5 fps for 8" pipe on Webster Road (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5381	8.5	796	1,027.08	100.2
5379	392	755	1,025.01	117.1

Pipe Information for flushing velocity at 2.5 fps for 8" pipe on Webster Road					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
9044	550	8	392	2.5	120

Maximum Available Flow Under Maximum Hour

Misty Lane

Maximum Hour Run, Maximum Available Flow on Banklick Road				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5363	13.5	535	665.97	56.8
5359	1,150	565	614.32	21.4

Pleasure Isle

Maximum Hour Run, Maximum Available Flow on Banklick Road				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5367	1,450	538	588.83	22.0
5365	18	535	639.37	45.3

Bullock Pen

Maximum Hour Run, Maximum Available Flow on Banklick Road				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5371	1,100	550	598.35	21.0
5383	22.5	515	655.79	61.0

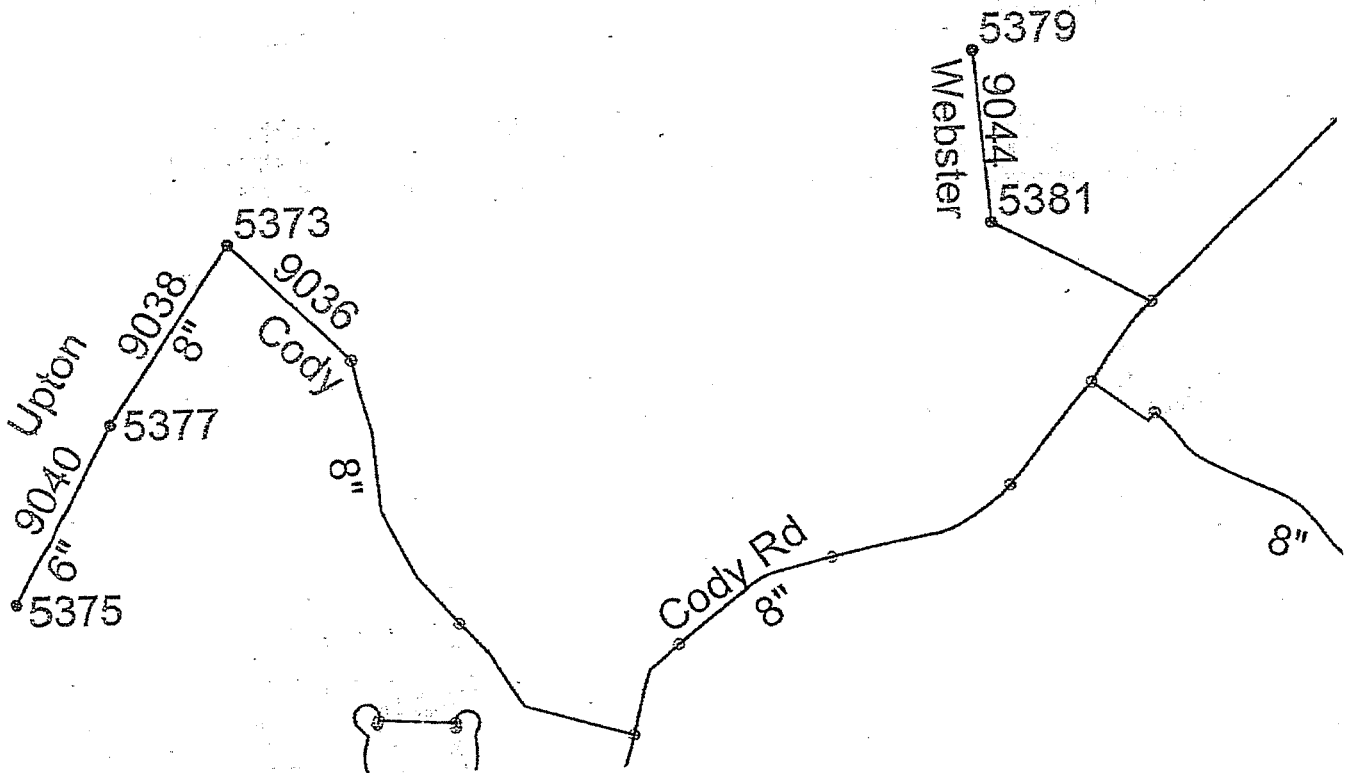
Cody Road and Upton Drive

Maximum Hour Run, Maximum Available Flow on Bramlage Road				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5375	825	856	905.37	21.4
5377	10.66	825	947.28	53.0
5373	10.66	755	958.01	88.0

Webster Road

Maximum Hour Run, Maximum Available Flow on Independence Road				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5381	8.5	796	891.11	41.2
5379	1,375	755	869.93	49.8
8346	0.7	864	913.28	21.4

Pipe ID	From Node	To Node
9044	5381	5379
9040	5377	5375
9038	5373	5377
9036	9764	5373
9030	5365	5367
9020	5363	5359
9034	5369	5383
9046	5383	5371



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

Sub-District G - Phase 4
Fowler Creek, Sugar Camp Road, Lieberman Road
Wolf Road, Holly Hock Road
Unincorporated Kenton County
Kenton County, KY

I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100.

The maximum flow rate that can reliably be supplied to the main and meet 20 psi in the system under maximum hour conditions is 4300 gpm on Fowler Creek, 3000 gpm on Sugar Camp Road, 625 gpm on Lieberman Road, 1100 gpm on Wolf Road, and 1100 gpm on Holly Hock Road. At least 30 psi can be maintained under the peak domestic demand for the 47 potential customers affected. The peak domestic demand using the D.R. Taylor formula for the 20 potential new customers on Fowler Creek is 45 gpm. The peak domestic demand using the D.R. Taylor formula for the 2 potential new customers on Sugar Camp Road is 14.2 gpm. The peak domestic demand using the D.R. Taylor formula for the 12 potential new customers on Lieberman Road is 34.6 gpm. The peak domestic demand using the D.R. Taylor formula for the 8 potential new customers on Wolf Road is 28.3 gpm. The peak domestic demand using the D.R. Taylor formula for the 5 potential new customers on Holly Hock Road is 22.4 gpm.

This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 6", 8", and 12" water mains.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water level in the Taylor Mill Standpipe was one-half full.



Flushing Velocities Under Maximum Hour

Fowler Creek

Flushing velocity 2.5 fps for 12" pipe on Fowler Creek (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5367	15	747	1,074.8	142.1
5365	0	738	1,071.2	144.5
5369	15	754	1,068.6	136.4
5359	0	764	1,067.5	131.6
5371	15	774	1,066.5	126.8
SUBDSTRCT_BV1	881	830	1,062.2	100.7

Pipe Information for flushing velocity at 2.5 fps for 12" pipe on Fowler Creek					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
SD_BV1	1,813	12	926.0	2.6	120
9038	1,442	12	911.0	2.6	120
9034	1,059	12	911.0	2.6	120
9010	1,822	12	881.0	2.5	120
9042	433	12	896.0	2.5	120
9040	427	12	896.0	2.5	120

*valves closed on Oliver, Cox, Parker Ridge, Sycamore Creek

Sugar Camp Road

Flushing velocity 2.5 fps for 8" pipe on Sugar Camp (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5385	14.2	840	1,033.1	83.7
5353	0	866	1,035.8	73.6
5361	392	710	1,029.9	138.7

Pipe Information for flushing velocity at 2.5 fps for 8" pipe on Sugar Camp					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
9068	676	8	406.2	2.6	120
9030	846	8	392	2.5	120

Lieberman Road

Flushing velocity 2.5 fps for 8" pipe on Lieberman Road (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5383	392	846	995.9	65.0
29354	8.5	750	1,002.7	109.5

Pipe Information for flushing velocity at 2.5 fps for 8" pipe on Lieberman Road					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
9066	1,800	8	392	2.5	120

Wolf Road

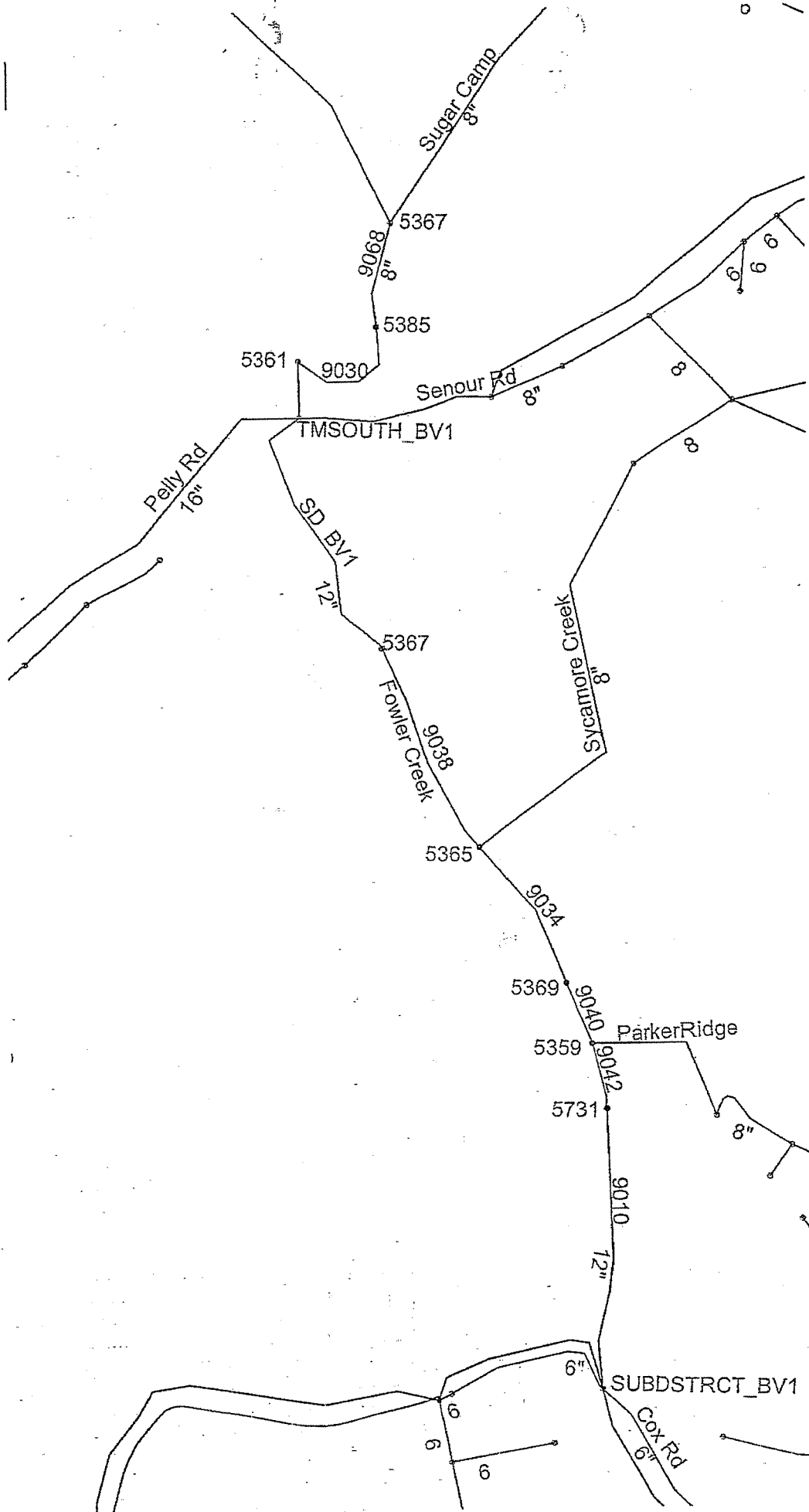
Flushing velocity 2.5 fps for 8" pipe on Wolf Road (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5369	14.2	690	953.8	114.4
5363	392	555	948.4	170.5
5365	0	815	958.4	62.2

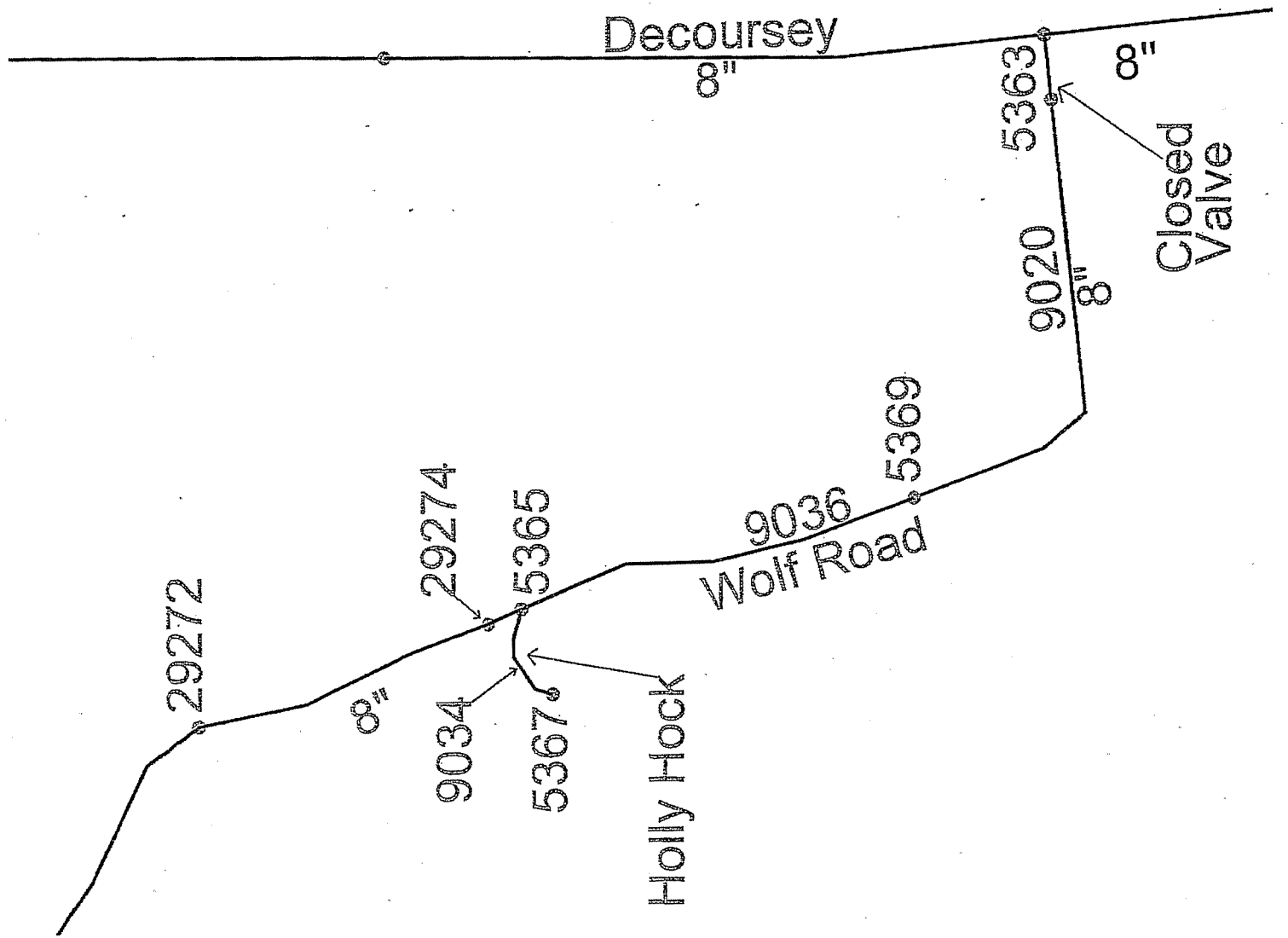
Pipe Information for flushing velocity at 2.5 fps for 8" pipe on Wolf Road					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
9036	1,152	8	406.2	2.6	120
9020	1,435	8	392	2.5	120

Holly Hock Road

Flushing velocity 2.5 fps for 6" pipe on Holly Hock Road (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
5367	220	795	969.8	75.8
5365	0	815	971.2	67.7

Pipe Information for flushing velocity at 2.5 fps for 6" pipe on Holly Hock Road					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
9034	250	6	220	2.5	120





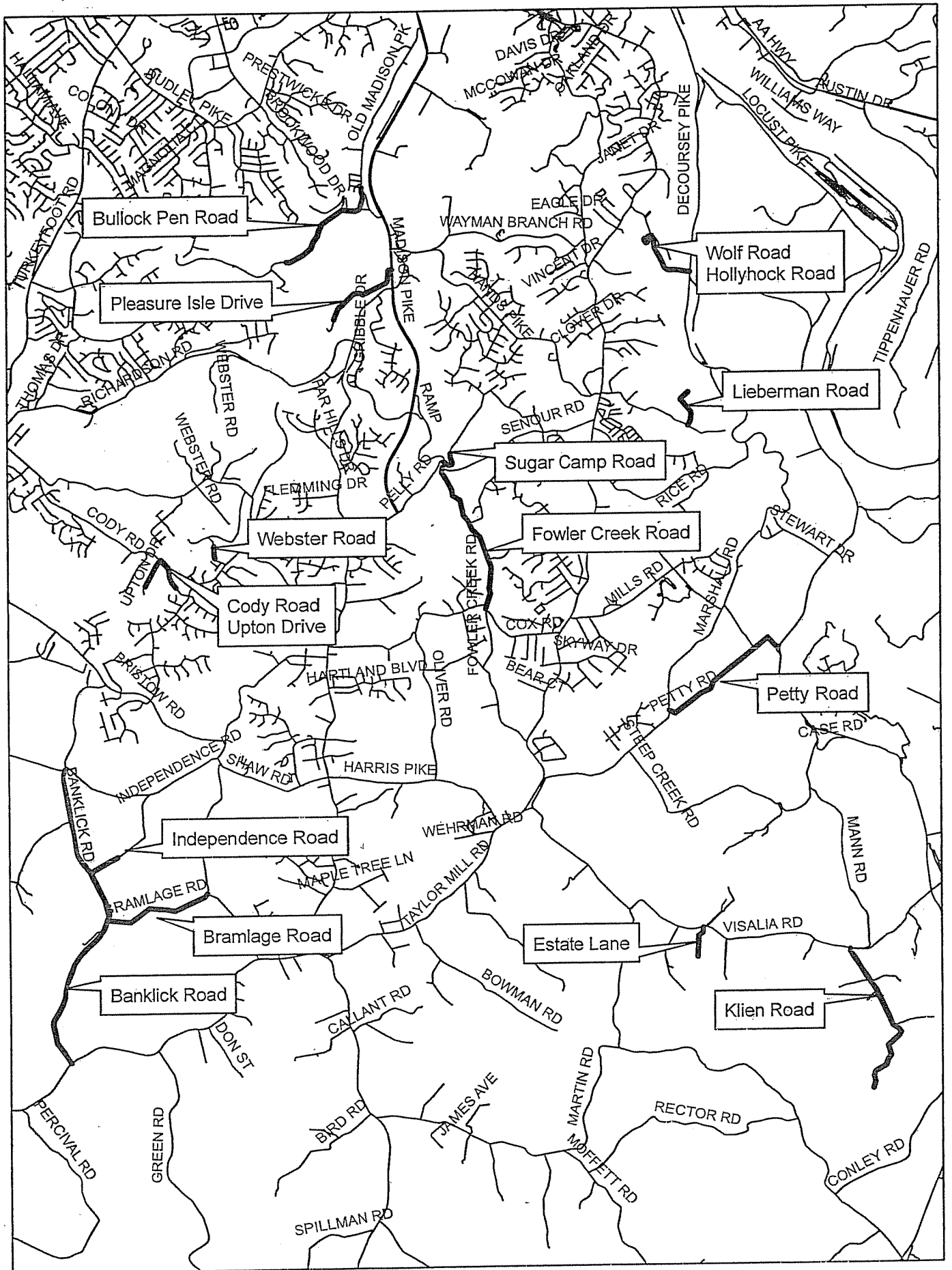
Case No. 200-_____
Exhibit C

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District G

Campbell County
184-193

Project Map



Sub District G

Case No. 200-_____
Exhibit **A**

NORTHERN KENTUCKY
WATER DISTRICT

Project – Klette Road, Rice Road, Marshall Road

Kenton County
184-0142

System Hydraulic Model

(Northern Kentucky Water District is currently in the process
of running a hydraulic analysis of this project)

FIRE FLOW CERTIFICATION

Klette, Rice and Marshall Water Main Extension Kenton County, KY

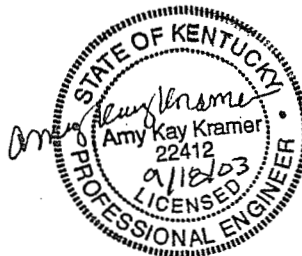
I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the main extension that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

Klette, Rice and Marshall Water Main Extension Kenton County, KY

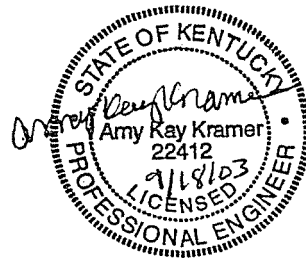
I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100 on the 8 inch main on Rice Road. The 12 inch main on Klette Road can only meet 1.27fps while maintaining 20psi in the system. However, plans for a future connection at State Hwy 16 and Klette Road and a hydraulic improvement water main on Senour Road will strengthen the distribution system in this area. The maximum flow rate that can reliably be supplied to the street and meet 20 psi in the system is 450 gpm. At least 30 psi can be maintained under the peak domestic demand for the 57 customers served. The peak domestic demand using the D.R. Taylor formula for 57 customers is 75.5gpm.

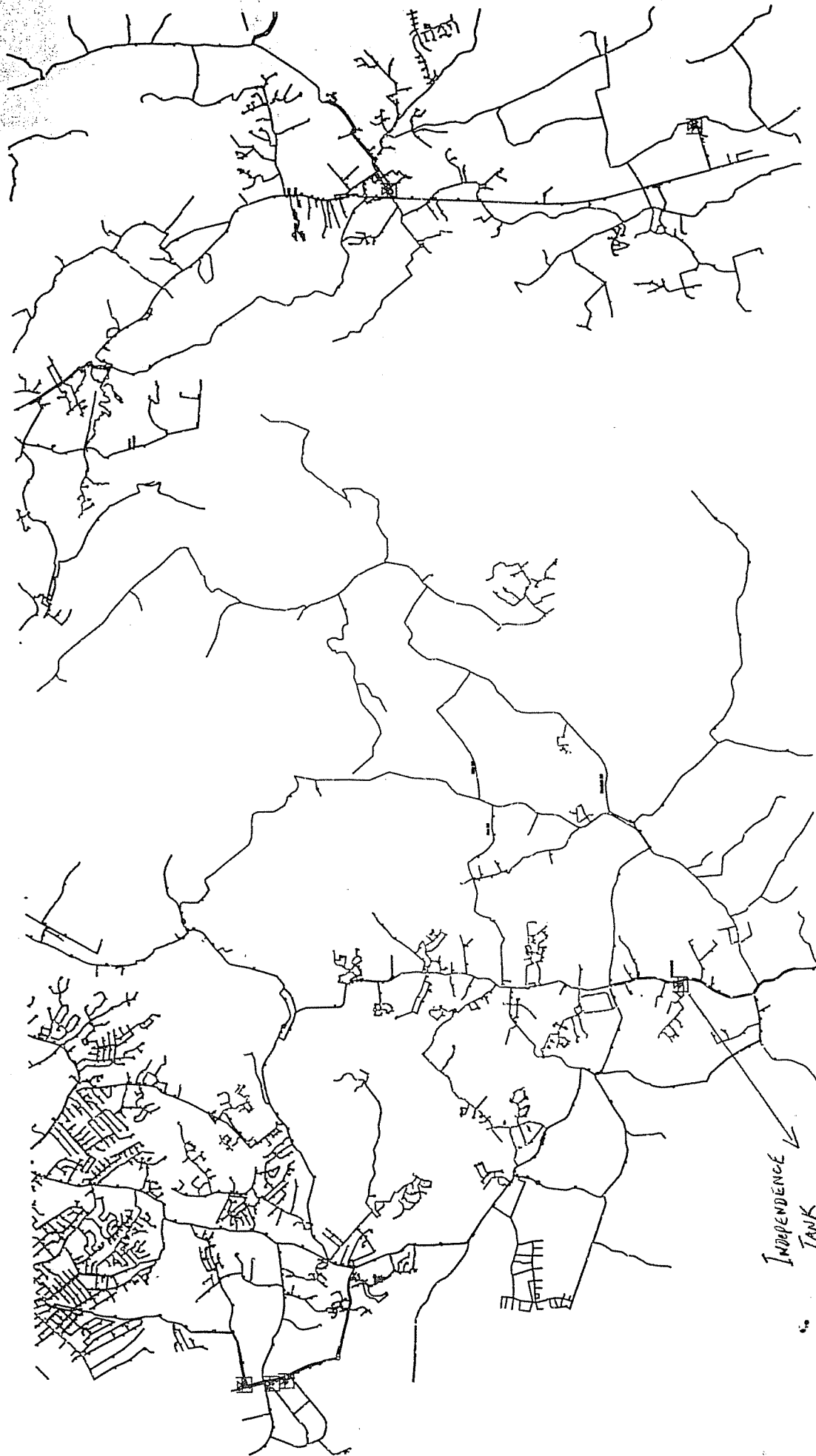
This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONET, the program available from MWHSOft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 12-inch and 8-inch diameter water main.

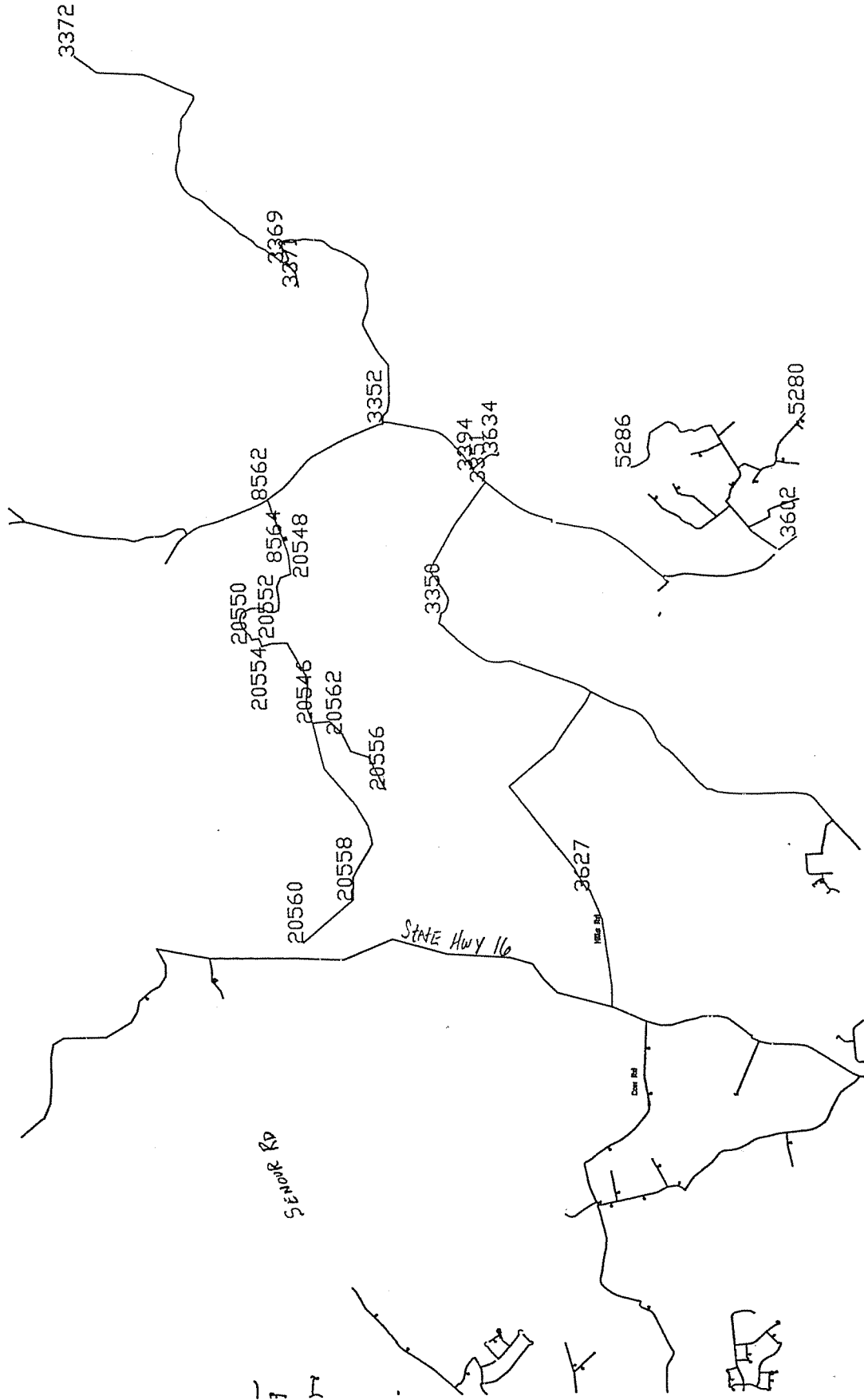
The assumed Hazen-Williams roughness coefficient for all new pipe was 130 and 140, which is suitable for Ductile Iron and PVC. The Independence Tank was half full.



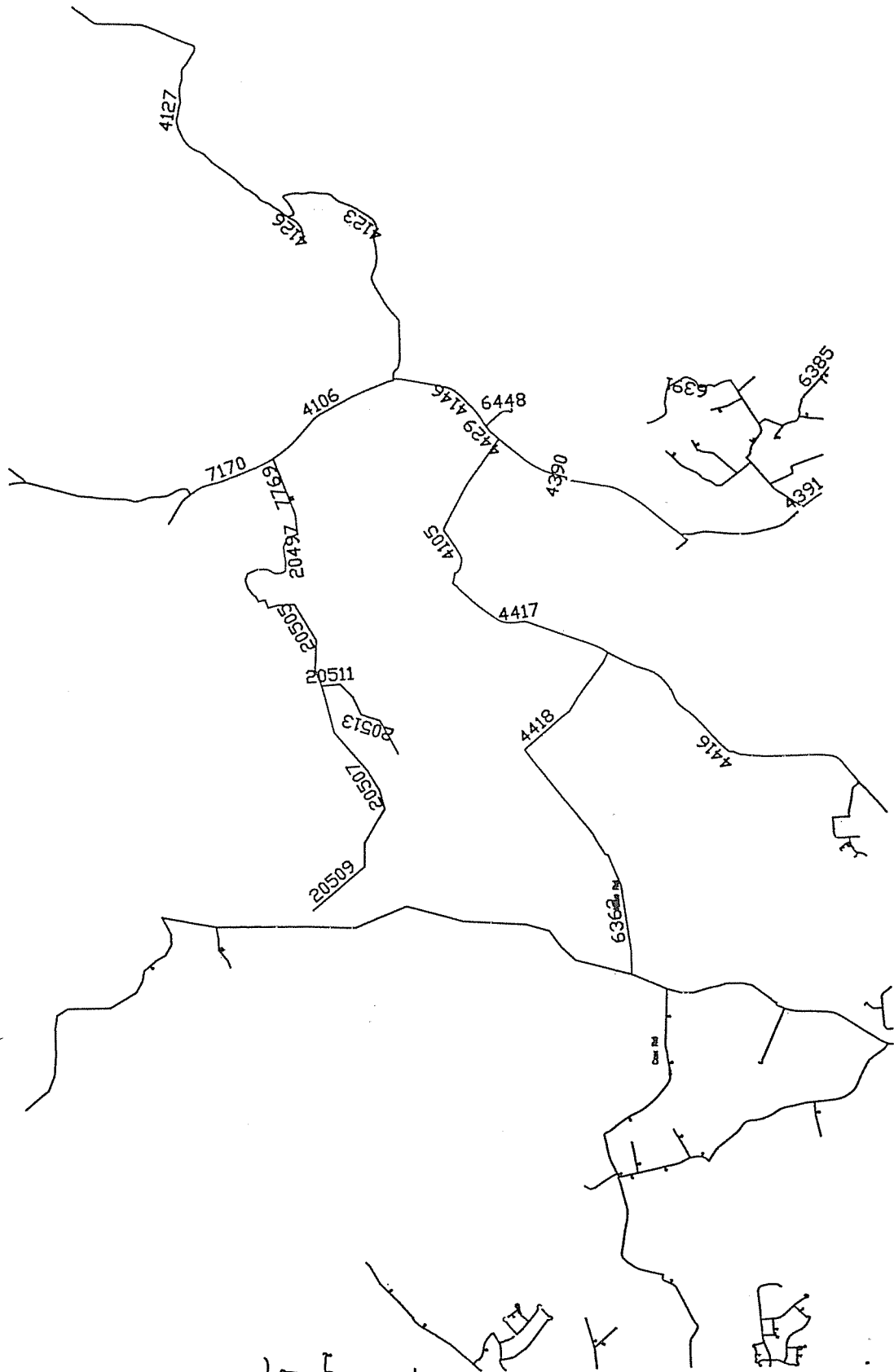


INDEPENDENCE
TANK

JUNCTION IDS



1 1/2" IDS



H2ONET Report-KletteRdWatermain-MaxHr

		ID	Demand (gpm)	Elevation (ft)
1	☐	3352	4.21	874.00
2	☐	8562	4.21	862.00
3	☐	3351	4.21	864.00
4	☐	3602	0.70	598.00
5	☐	20556	18.55	855.00
6	☐	3394	4.21	854.00
7	☐	3627	6.81	862.00
8	☐	20558	17.22	845.00
9	☐	3634	4.21	848.00
10	☐	20560	10.60	840.00
11	☐	8564	1.51	794.00
12	☐	5280	0.47	534.00
13	☐	20562	6.63	790.00
14	☐	20546	10.60	750.00
15	☐	3350	4.21	750.00
16	☐	20548	3.97	735.00
17	☐	5286	0.47	473.00
18	☐	20554	2.65	685.00
19	☐	20550	2.65	685.00
20	☐	20552	2.65	675.00
21	☐	3369	3.90	546.00
22	☐	3372	4.19	542.00
23	☐	3371	3.90	532.00

H2ONET Report-KletteRdWatermain-MaxHr

	ID	Grade (ft)	Pressure (psi)
1	3352	1,038.60	71.35
2	8562	1,036.70	75.73
3	3351	1,040.68	76.59
4	3602	778.09	78.07
5	20556	1,036.52	78.69
6	3394	1,040.38	80.79
7	3627	1,051.23	82.03
8	20558	1,036.54	83.03
9	3634	1,040.37	83.39
10	20560	1,036.54	85.20
11	8564	1,036.66	105.20
12	5280	778.07	105.81
13	20562	1,036.54	106.87
14	20546	1,036.55	124.22
15	3350	1,044.34	127.60
16	20548	1,036.65	130.77
17	5286	778.07	132.25
18	20554	1,036.59	152.42
19	20550	1,036.60	152.42
20	20552	1,036.60	156.75
21	3369	1,038.56	213.52
22	3372	1,038.55	215.25
23	3371	1,038.56	219.59

H2ONET Report-KletteRoadWaterMain-AvgDay-2.5fpsFlushing

	ID	Demand (gpm)	Elevation (ft)
1	→ 20556	→ 392.00	855.00
2	8562	1.62	862.00
3	3352	1.62	874.00
4	20558	17.22	845.00
5	3367	2.07	848.00
6	20560	10.70	840.00
7	3351	1.62	864.00
8	3394	1.62	854.00
9	3634	1.62	848.00
10	3601	0.27	844.00
11	3353	1.62	804.00
12	20562	6.63	790.00
13	8564	0.58	794.00
14	3641	0.27	824.00
15	3368	3.10	786.00
16	3354	0.23	772.00
17	20546	10.60	750.00
18	20548	3.97	735.00
19	5280	0.18	534.00
20	3350	1.62	750.00
21	20554	2.65	685.00
22	20550	2.65	685.00
23	3626	1.62	770.00
24	296	0.18	715.00
25	295	0.18	715.00
26	20552	2.65	675.00
27	5286	0.18	473.00
28	3369	1.50	546.00
29	3372	1.61	542.00
30	3371	1.50	532.00

H2ONET Report-KletteRoadWaterMain-AvgDay-2.5fpsFlushing

	ID	Grade (ft)	Pressure (psi)
1	20556	933.71	34.12
2	8562	945.35	36.13
3	3352	964.96	39.43
4	20558	940.98	41.61
5	3367	945.26	42.16
6	20560	940.97	43.77
7	3351	982.55	51.39
8	3394	980.13	54.68
9	3634	980.13	57.28
10	3601	982.53	60.05
11	3353	945.32	61.26
12	20562	937.97	64.14
13	8564	944.48	65.23
14	3641	982.53	68.72
15	3368	945.26	69.04
16	3354	945.32	75.13
17	20546	940.99	82.79
18	20548	944.12	90.65
19	5280	778.09	105.81
20	3350	1,005.51	110.76
21	20554	942.42	111.59
22	20550	942.60	111.67
23	3626	1,032.31	113.71
24	296	982.53	115.97
25	295	982.53	115.97
26	20552	942.55	115.98
27	5286	778.09	132.25
28	3369	964.96	181.62
29	3372	964.95	183.35
30	3371	964.96	187.69

H2ONET Report-KletteRdWaterMain-AvgDay-2.5fpsFlushing

	ID	From Node	To Node	Length (ft)	Diameter (in)	Flow (gpm)
1	20511	20546	20562	900.00	8.00	398.63
2	20507	20546	20558	4,320.00	12.00	27.92
3	20499	20548	20550	2,650.00	12.00	445.10
4	20501	20550	20552	100.00	12.00	442.45
5	20503	20552	20554	230.00	12.00	439.80
6	20505	20554	20546	2,580.00	12.00	437.15
7	20509	20558	20560	1,450.00	12.00	10.70
8	20513	20562	20556	1,500.00	8.00	392.00
9	4419	296	3628	1,335.70	8.00	6.39
10	2475	296	295	10.00	8.00	-6.57
11	4105	3350	3351	3,427.50	8.00	489.78
12	4429	3351	3394	373.00	8.00	480.87
13	4390	3351	3601	4,556.90	8.00	7.29
14	4123	3352	3369	6,315.30	8.00	4.61
15	4106	3352	8562	3,141.81	8.00	471.40
16	4107	3353	3354	791.90	8.00	0.00
17	4121	3353	3367	3,714.10	8.00	18.28
18	4125	3367	3020	8,605.00	8.00	13.11
19	4122	3367	3368	3,774.90	8.00	3.10
20	4127	3369	3372	7,707.70	8.00	1.61
21	4126	3369	3371	646.40	8.00	1.50
22	4146	3394	3352	2,371.80	8.00	477.63
23	6448	3394	3634	746.80	8.00	1.62
24	4385	3593	3594	902.30	8.00	4.95
25	4419A	3601	295	1,000.00	8.00	6.75
26	4439	3601	3641	424.20	8.00	0.00
27	4418	3626	3627	5,732.10	8.00	-253.55
28	4417	3626	3350	3,977.70	8.00	491.40
29	6385	3647	5280	291.40	6.00	0.00
30	6391	5284	5286	2,704.70	8.00	0.00
31	4416	8120	3626	6,406.61	8.00	239.47
32	7170	8562	3353	1,922.57	8.00	20.13
33	7769	8562	8564	1,291.60	12.00	449.65
34	20497	8564	20548	625.00	12.00	449.07

H2ONET Report-KletteRdWaterMain-AvgDay-2.5fpsFlushing

	ID	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)	Roughness
1	20511	2.54	3.02	3.36	130.00
2	20507	0.08	0.01	0.00	130.00
3	20499	1.26	1.52	0.57	130.00
4	20501	1.26	0.06	0.57	130.00
5	20503	1.25	0.13	0.56	130.00
6	20505	1.24	1.43	0.55	130.00
7	20509	0.03	0.00	0.00	140.00
8	20513	2.50	4.26	2.84	140.00
9	4419	0.04	0.00	0.00	110.00
10	2475	0.04	0.00	0.00	110.00
11	4105	3.13	22.96	6.70	110.00
12	4429	3.07	2.42	6.48	110.00
13	4390	0.05	0.01	0.00	110.00
14	4123	0.03	0.01	0.00	110.00
15	4106	3.01	19.61	6.24	110.00
16	4107	0.00	0.00	0.00	110.00
17	4121	0.12	0.06	0.02	110.00
18	4125	0.08	0.07	0.01	110.00
19	4122	0.02	0.00	0.00	110.00
20	4127	0.01	0.00	0.00	110.00
21	4126	0.01	0.00	0.00	110.00
22	4146	3.05	15.17	6.39	110.00
23	6448	0.01	0.00	0.00	110.00
24	4385	0.03	0.00	0.00	110.00
25	4419A	0.04	0.00	0.00	110.00
26	4439	0.00	0.00	0.00	110.00
27	4418	1.62	11.36	1.98	110.00
28	4417	3.14	26.81	6.74	110.00
29	6385	0.00	0.00	0.00	110.00
30	6391	0.00	0.00	0.00	110.00
31	4416	1.53	11.42	1.78	110.00
32	7170	0.13	0.04	0.02	110.00
33	7769	1.28	0.87	0.68	120.00
34	20497	1.27	0.36	0.58	130.00

H2ONET Report-KletteRoadWaterMain-AvgDay-MaxFlow@20psi

	ID	Demand (gpm)	Elevation (ft)
1	20556	450.00	855.00
2	8562	1.62	862.00
3	20558	17.22	845.00
4	3352	1.62	874.00
5	3367	2.07	848.00
6	20560	10.70	840.00
7	3351	1.62	864.00
8	3394	1.62	854.00
9	3634	1.62	848.00
10	3353	1.62	804.00
11	20562	6.63	790.00
12	3601	0.27	844.00
13	8564	0.58	794.00
14	3368	3.10	786.00
15	3641	0.27	824.00
16	3354	0.23	772.00
17	20546	10.60	750.00
18	20548	3.97	735.00
19	20554	2.65	685.00
20	20550	2.65	685.00
21	20552	2.65	675.00
22	3350	1.62	750.00
23	5280	0.18	534.00
24	296	0.18	715.00
25	295	0.18	715.00
26	3626	1.62	770.00
27	5286	0.18	473.00
28	3369	1.50	546.00
29	3372	1.61	542.00
30	3371	1.50	532.00

H2ONET Report-KletteRoadWaterMain-AvgDay-MaxFlow@20psi

	ID	Grade (ft)	Pressure (psi)
1	20556	903.93	21.21
2	8562	918.80	24.62
3	20558	913.30	29.61
4	3352	943.10	29.95
5	3367	918.70	30.65
6	20560	913.30	31.78
7	3351	964.83	43.71
8	3394	961.85	46.75
9	3634	961.85	49.35
10	3353	918.76	49.75
11	20562	909.43	51.77
12	3601	964.82	52.37
13	8564	917.70	53.63
14	3368	918.70	57.53
15	3641	964.82	61.04
16	3354	918.76	63.62
17	20546	913.32	70.80
18	20548	917.25	79.00
19	20554	915.11	99.75
20	20550	915.35	99.86
21	20552	915.28	104.16
22	3350	993.07	105.37
23	5280	778.09	105.81
24	296	964.81	108.29
25	295	964.81	108.29
26	3626	1,026.03	110.99
27	5286	778.09	132.25
28	3369	943.09	172.14
29	3372	943.09	173.87
30	3371	943.09	178.21

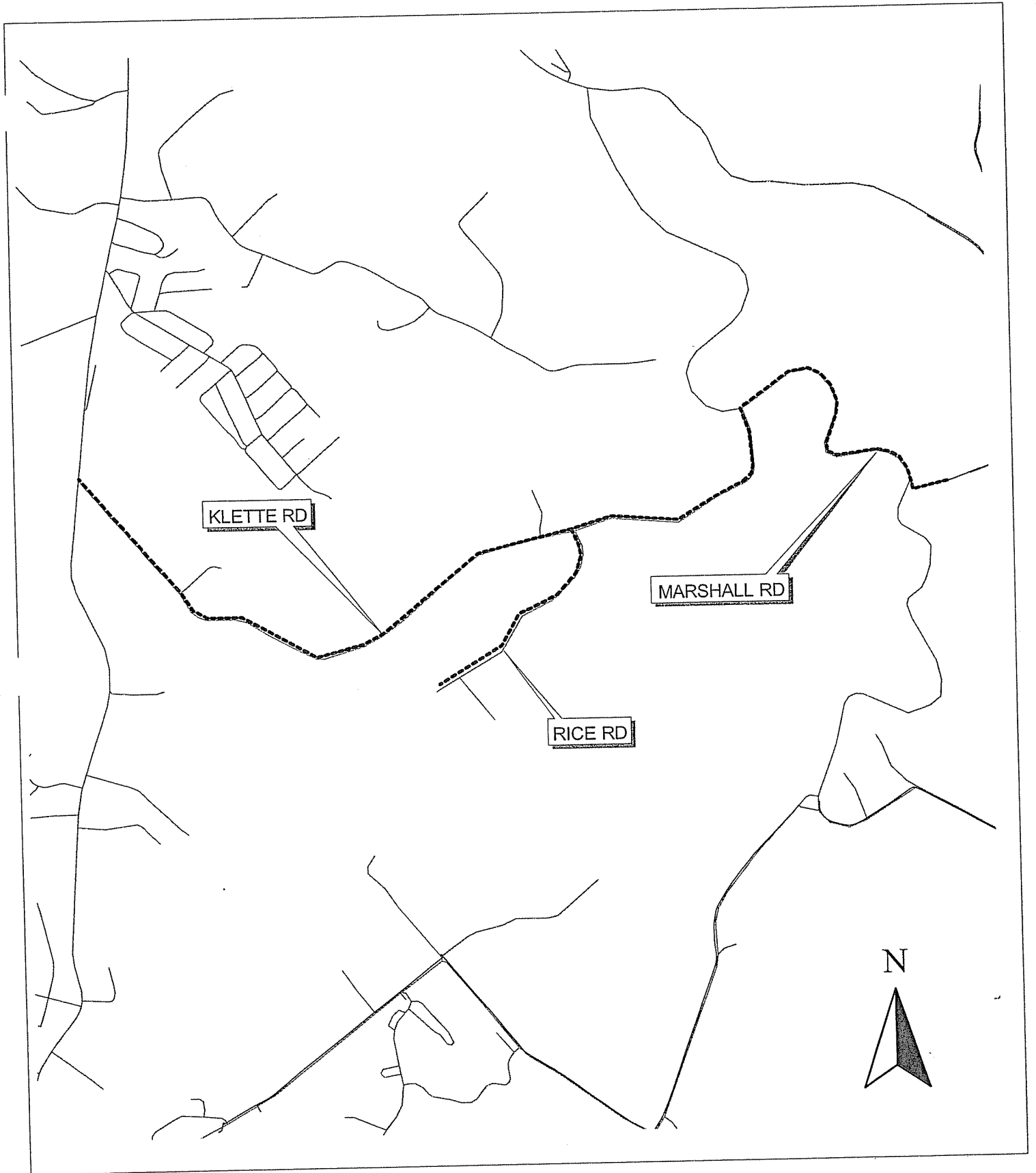
Case No. 200-
Exhibit A

NORTHERN KENTUCKY
WATER DISTRICT

Project – Klette Road, Rice Road, Marshall Road

Kenton County
184-0142

Project Map



 **Current Proposed Project**
Klette Road, Rice Road, Marshall Road
Water Main Exetension Project

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District RF

Kenton County
184-0122

Engineering Reports

Engineer's Preliminary Estimate

Final Estimate and Review of Bids

System Hydraulic Model

Project Map

Revenue Requirements

Project Specifications
(See Attached Specifications)

Case No. 200-_____
Exhibit **C**

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District RF

Kenton County
184-0122

Engineer's Preliminary Estimate

Kentucky Route 177 (Decoursey Pike)
 Kaiser Heating to Wolf Road
 8" Watermain Extension
 Fairview/Ryland Heights

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	4033	l.f.	\$ 27.00	\$ 108,891.00
3/4-inch Air Release Valve	4	each	\$ 250.00	\$ 1,000.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	4	each	\$ 660.00	\$ 2,640.00
8-inch x 8-inch x 8-inch Ductile Iron Anchoring Tee & Blocks	1	each	\$ 250.00	\$ 250.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	8	each	\$ 225.00	\$ 1,800.00
8-inch Cast Iron Plug and Block	1	each	\$ 160.00	\$ 160.00
Connect to Existing 8-inch Main	1	each	\$ 1,100.00	\$ 1,100.00
High Pressure Fire Hydrant Assembly	8	each	\$ 2,150.00	\$ 17,200.00
Water Service	21	each	\$ 500.00	\$ 10,500.00
Concrete Encasement for Creek Crossings	65	c.y.	\$ 100.00	\$ 6,500.00
Gravel Driveway Restoration	37	s.y.	\$ 13.00	\$ 476.67
Concrete Driveway Restoration	33	s.y.	\$ 43.00	\$ 1,404.67
State Road (Asphalt) Restoration	16	s.y.	\$ 45.00	\$ 700.00
TOTALS				\$ 152,622.33
COST PER L.F.				\$ 37.84
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				

9/7/00

Kentucky Route 177 (Decoursey Pike)
 Wolf Road to Marshall Road
 8" Watermain Extension
 Fairview/Ryland Heights

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	4865	l.f.	\$ 27.00	\$ 131,355.00
3/4-inch Air Release Valve	2	each	\$ 250.00	\$ 500.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	9	each	\$ 660.00	\$ 5,940.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	1	each	\$ 750.00	\$ 750.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	5	each	\$ 250.00	\$ 1,250.00
8-inch x 8-inch Ductile Iron Anchoring Tee & Blocks	8	each	\$ 225.00	\$ 1,800.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	2	each	\$ 160.00	\$ 320.00
8-inch Cast Iron Plug and Block	1	each	\$ 1,100.00	\$ 1,100.00
Connect to Existing 8-inch Main	8	each	\$ 2,150.00	\$ 17,200.00
High Pressure Fire Hydrant Assembly	18	each	\$ 500.00	\$ 9,000.00
Water Service	98	c.y.	\$ 100.00	\$ 9,750.00
Concrete Encasement for Creek Crossings	35	s.y.	\$ 13.00	\$ 455.00
Gravel Driveway Restoration	17	s.y.	\$ 33.00	\$ 550.00
Asphalt Driveway Restoration	80	l.f.	\$ 180.00	\$ 14,400.00
Bore and Jack 18-inch Steel Encasement Pipe				
TOTALS				\$ 194,370.00
COST PER L.F.				\$ 39.95
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				

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CHRISTINE ENGINEERING CON

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9/7/00

Marshall Road
8" Watermain Extension
Fairview/Ryland Heights

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	2300	l.f.	\$ 28.00	\$ 64,400.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	2	each	\$ 660.00	\$ 1,320.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	5	each	\$ 225.00	\$ 1,125.00
8-inch Cast Iron Plug and Block	1	each	\$ 160.00	\$ 160.00
High Pressure Fire Hydrant Assembly	5	each	\$ 2,150.00	\$ 10,750.00
Water Service	12	each	\$ 500.00	\$ 6,000.00
Gravel Driveway Restoration	47	s.y.	\$ 13.00	\$ 606.67
Bore and Jack 18-inch Steel Encasement Pipe	50	l.f.	\$ 180.00	\$ 9,000.00
Shoring	1	l.s.	\$ 75,000.00	\$ 75,000.00
Asphalt Street Restoration	367	s.y.	\$ 40.00	\$ 14,668.67
TOTALS				\$ 183,028.33
COST PER L.F.				\$ 79.58
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				

Porter Road
 8" Watermain Extension
 Fairview/Ryland Heights

Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	2315	l.f.	\$ 28.00	\$ 64,820.00
3/4-Inch Air Release Valve	1	each	\$ 250.00	\$ 250.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	1	each	\$ 660.00	\$ 660.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	1	each	\$ 750.00	\$ 750.00
8-inch Ductile Iron Tee & Blocks	4	each	\$ 225.00	\$ 900.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	1	each	\$ 1,100.00	\$ 1,100.00
Connect to Existing 8-inch Main	4	each	\$ 2,150.00	\$ 8,600.00
High Pressure Fire Hydrant Assembly	5	each	\$ 500.00	\$ 2,500.00
Water Service	25	c.y.	\$ 100.00	\$ 2,527.78
Concrete Encasement for Creek Crossings	20	s.y.	\$ 13.00	\$ 260.00
Gravel Driveway Restoration	12	s.y.	\$ 43.00	\$ 516.67
Concrete Driveway Restoration	23	s.y.	\$ 40.00	\$ 933.33
Asphalt Street Restoration				
TOTALS				\$ 83,802.78
COST PER L.F.				\$ 36.20
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				

9/7/00

Tecumseh Road
 8" Watermain Extension
 Fairview/Ryland Heights

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CHRISTIAN ENGINEERING CORP

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Item	Quantity	Unit	Estimated Cost/Unit	Projected Cost
8-inch Class 50 Ductile Iron Pipe and Fittings with Polywrap	1845	l.f.	\$ 40.00	\$ 73,800.00
3/4-inch Air Release Valve	2	each	\$ 250.00	\$ 500.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	2	each	\$ 660.00	\$ 1,320.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box w/ Test Taps & Meter Box	1	each	\$ 750.00	\$ 750.00
8-inch Ductile Iron Resilient Seated Gate Valve & Box	1	each	\$ 250.00	\$ 250.00
8-inch x 8-inch x 8-inch Ductile Iron Anchoring Tee & Blocks	3	each	\$ 225.00	\$ 675.00
8-inch x 8-inch x 6-inch Ductile Iron Anchoring Tee & Blocks	0	each	\$ 160.00	\$ -
8-inch Cast Iron Plug and Block	1	each	\$ 1,100.00	\$ 1,100.00
Connect to Existing 8-inch Main	3	each	\$ 2,150.00	\$ 6,450.00
High Pressure Fire Hydrant Assembly	3	each	\$ 500.00	\$ 1,500.00
Water Service	31	c.y.	\$ 100.00	\$ 3,069.44
Concrete Encasement for Creek Crossings	7	s.y.	\$ 13.00	\$ 86.67
Gravel Driveway Restoration	18	s.y.	\$ 43.00	\$ 788.33
Concrete Driveway Restoration	30	l.f.	\$ 180.00	\$ 5,400.00
Bore and Jack 18-inch Steel Encasement Pipe				
TOTALS				\$ 95,689.44
COST PER L.F.				\$ 51.86
notes:				
1. Fire hydrant spacing @ 500 l.f. per				
2. Gate valve/butterfly valve spacing @ 2000 l.f. per				

Case No. 200-_____
Exhibit **C**

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District RF

Kenton County
184-0122

Engineer's Final Estimate and Review of Bids

VALUE ENGINEERING ESTIMATE SUMMARY
SUB DISTRICT RF

5/23/03

	Quantity	Unit	Estimated Cost/Unit	Projected Cost	Miles
DECOURSEY PIKE	8,790	L.F.	\$ 40.52	\$ 356,191	1.66
SHORT MARSHALL ROAD	552	L.F.	\$ 55.81	\$ 30,807	0.10
TECUMSEH LANE-PORTER ROAD	2,710	L.F.	\$ 55.52	\$ 150,450	0.51
TOTALS	12,052			\$ 537,448	2.28



5-23-03

Item No.	Item	Unit	QUANTITY	UNIT COST	TOTAL
1	8-Inch Class 50 Ductile Iron Pipe And Fittings With Polywrap	L.F.	8790	\$ 27.00	\$ 237,330.00
2	3/4-Inch Air Release Valve	EACH	4	\$ 400.00	\$ 1,600.00
3	8-Inch Resilient Seated Gate Valve And Box	EACH	6	\$ 685.00	\$ 4,110.00
4	8-Inch Resilient Seated Gate Valve And Box with Test Tap	EACH	3	\$ 1,100.00	\$ 3,300.00
5	8-Inch x 8-Inch x 8-Inch Ductile Iron Anchoring Tee And Blocks	EACH	2	\$ 290.00	\$ 580.00
6	8-Inch x 8-Inch x 6-Inch Ductile Iron Anchoring Tee And Blocks	EACH	18	\$ 215.00	\$ 3,870.00
7	8-Inch x 6-Inch Reducer	EACH	1	\$ 150.00	\$ 150.00
8	High Pressure Fire Hydrant Assembly	EACH	16	\$ 2,100.00	\$ 33,600.00
9	Remove and Relocate Existing Fire Hydrant Assembly	EACH	1	\$ 2,300.00	\$ 2,300.00
10	8-Inch Cast Iron Plug and Block At End Of Existing Main	EACH	1	\$ 150.00	\$ 150.00
11	Connect to Existing 8-Inch Ductile Iron Main With Ductile Iron Coupling	EACH	1	\$ 1,000.00	\$ 1,000.00
12	Concrete Box Culvert Crossing in Accordance With Details Provided	L.S.	1	\$ 2,200.00	\$ 2,200.00
13	Concrete Box Culvert Crossing In Accordance With Details Provided	L.S.	1	\$ 2,500.00	\$ 2,500.00
14	Temporary High Pressure Fire Hydrant Assembly	EACH	1	\$ 2,100.00	\$ 2,100.00
15	Water Service Short	EACH	18	\$ 375.00	\$ 6,750.00
16	Water Service Long	EACH	28	\$ 850.00	\$ 23,800.00
17	3/4 Inch Service From Meter to Within 2 Feet of House	L.F.	2340	\$ 7.25	\$ 16,965.00
18	Concrete Sidewalk Restoration	S.Y.	3	\$ 50.00	\$ 133.33
19	Concrete Driveway Restoration	S.Y.	25	\$ 50.00	\$ 1,250.00
20	Asphalt Driveway Restoration	S.Y.	51	\$ 43.00	\$ 2,178.67
21	Gravel Driveway Restoration	S.Y.	54	\$ 17.00	\$ 923.67
22	State Road (Bituminous Asphalt) Restoration	S.Y.	20	\$ 30.00	\$ 600.00
23	Concrete Encasement	L.F.	176	\$ 50.00	\$ 8,800.00
TOTALS					\$ 356,190.67

SHORT MAN...HALL ROAD

3/36/00

Item No.	Item	Unit	QUANTITY	UNIT COST	TOTAL
1	6-Inch Class 50 Ductile Iron Pipe And Fittings With Polywrap	L.F.	552	\$ 21.00	\$11,592.00
2	6-Inch Resilient Seated Gate Valve And Box	EACH	1	\$ 450.00	\$ 450.00
3	6-Inch x 6-Inch x 6-Inch Ductile Iron Anchoring Tee And Blocks	EACH	1	\$ 150.00	\$ 150.00
4	High Pressure Fire Hydrant Assembly	EACH	1	\$ 2,100.00	\$ 2,100.00
5	Water Service Short	EACH	1	\$ 375.00	\$ 375.00
6	Water Service Long	EACH	3	\$ 850.00	\$ 2,550.00
7	¾ Inch Service From Meter to Within 2 Feet of House	L.F.	240	\$ 7.25	\$ 1,740.00
8	County Road (Bituminous Asphalt) Restoration	L.F.	395	\$ 30.00	\$11,850.00
TOTALS					\$30,807.00

TECUMSEH LAND PORTER ROAD

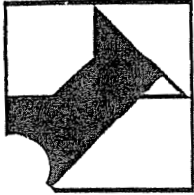
3/26/03

Item No.	Item	Unit	QUANTITY	UNIT PRICE	TOTAL
1	8-Inch Class 50 Ductile Iron Pipe And Fittings With Polywrap	L.F.	2710	\$ 40.00	\$108,400.00
2	3/4-Inch Air Release Valve	EACH	1	\$ 400.00	\$ 400.00
3	8-Inch Resilient Seated Gate Valve And Box	EACH	1	\$ 685.00	\$ 685.00
4	8-Inch Resilient Seated Gate Valve And Box with Test Tap	EACH	1	\$ 1,100.00	\$ 1,100.00
5	Concrete Encasement	L.F.	70	\$ 50.00	\$ 3,500.00
6	8-Inch x 8-Inch x 6-Inch Ductile Iron Anchoring Tee And Blocks	EACH	4	\$ 215.00	\$ 860.00
7	8-inch x 6-inch Reducer	EACH	1	\$ 150.00	\$ 150.00
8	High Pressure Fire Hydrant Assembly	EACH	4	\$ 2,100.00	\$ 8,400.00
9	Temporary High Pressure Fire Hydrant Assembly	EACH	1	\$ 2,100.00	\$ 2,100.00
10	Water Service Short	L.S.	3	\$ 375.00	\$ 1,125.00
11	Water Service Long	EACH	5	\$ 850.00	\$ 4,250.00
12	3/4 Inch Service From Meter to Within 2 Feet of House	L.F.	480	\$ 7.25	\$ 3,480.00
13	County Road (Bituminous Asphalt) Restoration	S.Y.	533	\$ 30.00	\$ 16,000.00
	TOTAL				\$150,450.00
	ALTERNATE				
	County Road (Bituminous Asphalt) Overlay	S.Y.	1950	\$ 5.00	\$ 9,750.00

**NORTHERN KENTUCKY WATER DISTRICT
Subdistrict RF Water Main Extension
Ryland Heights, Kenton County
May 1, 2003
10:00 am**

BID TAB

<u>CONTRACTOR</u>	<u>BID AMOUNT</u>
Coomer Contractors	\$516,284.00
Lykins Contracting	\$639,749.05
Howell Contractors	\$640,719.00
Byrnes, Inc.	\$693,350.00
RFH Construction	\$727,056.00
Engineers Construction Estimate	\$537,448.00
Division of Water Approval - January 28, 2003	
Funding Source – 5 Year Capital Budget, Grant Monies, & Surcharge	



CARDINAL

ENGINEERING
ARCHITECTURE
LAND SURVEYING

May 5, 2003

Mr. John Scheben
Northern Kentucky Water Service District
P.O. Box 17010
Covington, Kentucky 41017

RE: SUB DISTRICT RF WATER MAIN EXTENSION - PHASE V
Project Contract Award Recommendation


Dear John:

After reviewing the low bidders for the of the "Sub District RF Water Main Extension - Phase V," the low bidder is Coomer Contracting at \$516,284.00. After discussing Coomer Contracting's references, he used three projects constructed for the Northern Kentucky Water District and listed your organization as the contact reference. You indicated that Coomer Contracting has performed satisfactory work on past projects.

Since the District is their only reference on the three projects listed and you indicated that Coomer Contracting has performed satisfactory work on past projects, based upon your experience we recommend that Coomer Contracting appears to be qualified to perform the work on the above captioned project and recommend awarding the contract to said firm (provided that all bonding requirements have been addressed).

Should you have any questions, please contact me.

Respectfully Submitted,



Kevin Hanson, P.E.
Project Engineer

Case No. 200-_____
Exhibit **C**

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District RF

Kenton County
184-0122

System Hydraulic Model

FIRE FLOW CERTIFICATION

Ryland Heights Kenton County, KY

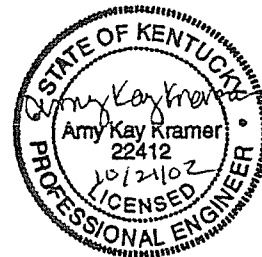
I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using H2ONET, the program available from MWHSOFT. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.



HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

Ryland Heights Kenton County, KY

I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100. The maximum flow rate that can reliably be supplied to the extended main and meet 20 psi in the system is 330 gpm. At least 30 psi can be maintained under the peak domestic demand for the 59 customers added. The peak domestic demand using the D.R. Taylor formula for 59 customers is 76.81 gpm.

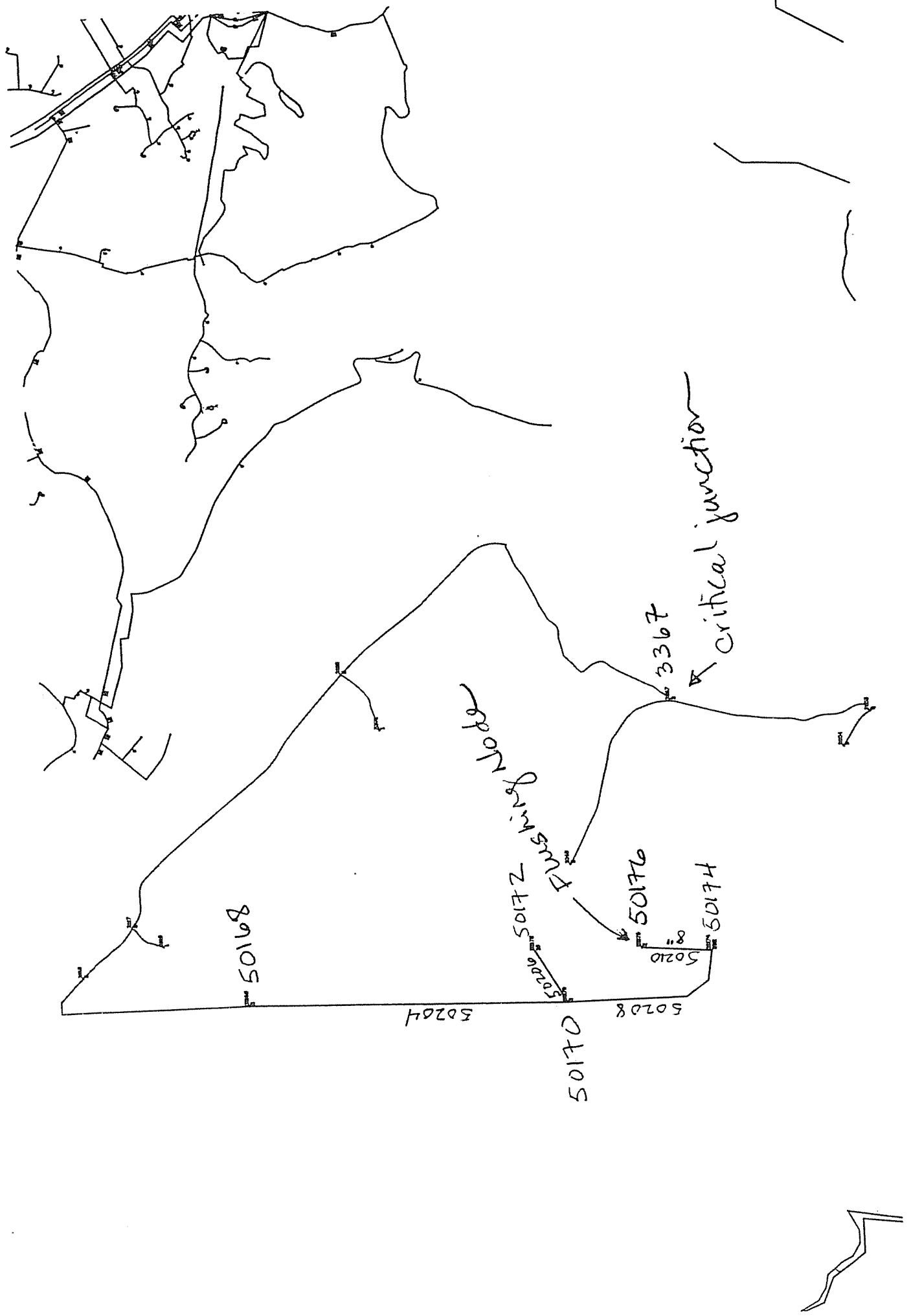
This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using H2ONet, the program available from MWHSoft. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed 8-inch diameter water main.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron.





H2ONET Report Rylands Heights Max Hour

	ID	Demand (gpm)	Elevation (ft)	Grade (ft)	Pressure (psi)
1	3017	10.17	516.00	1,000.06	209.84
2	50168	12.43	521.00	998.32	206.92
3	3020	10.17	531.00	1,002.42	204.36
4	3019	1.79	538.00	1,000.06	200.30
5	3018	10.17	561.00	999.66	190.16
6	50170	0.00	573.00	997.10	183.85
7	3370	1.79	592.00	1,002.42	177.92
8	50174	62.49	590.00	996.75	176.33
9	50176	3.38	604.00	996.75	170.26
10	50172	13.02	635.00	997.08	156.96
11	3353	4.21	746.00	1,007.59	113.40
12	3368	8.06	785.00	1,005.81	95.72
13	3354	0.60	792.00	1,007.59	93.46
14	3367	5.38	840.00	1,005.82	71.88
15	3352	4.21	863.00	1,010.29	63.85

H2ONET Report 2.5 fps flushing

	ID	From Node	To Node	Length (ft)	Diameter (in)	Flow (gpm)
1	4107	3353	3354	791.90	8.00	0.00
2	7769	8562	8564	1,291.60	12.00	0.96
3	3724	3017	3019	685.20	8.00	1.14
4	4124	3020	3370	1,284.30	8.00	1.14
5	4122	3367	3368	3,774.90	8.00	5.12
6	50206	50170	50172	2,600.00	8.00	13.02
7	50210	50174	50176	450.00	8.00	392.15
8	50208	50170	50174	2,480.00	8.00	431.79
9	50204	50168	50170	6,300.00	8.00	444.81
10	50202	3018	50168	5,240.00	8.00	452.70
11	3723	3017	3018	1,299.80	8.00	459.15
12	3725	3020	3017	6,183.40	8.00	466.74
13	4125	3367	3020	8,605.00	8.00	474.33
14	4121	3353	3367	3,714.10	8.00	482.86
15	4106	3352	8562	3,141.81	8.00	489.55

H2ONET Report 2.5 fps flushing

	ID	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft/kft)	Roughnes
1	4107	0.00	0.00	0.00	130.00
2	7769	0.00	0.00	0.00	120.00
3	3724	0.01	0.00	0.00	130.00
4	4124	0.01	0.00	0.00	130.00
5	4122	0.03	0.00	0.00	130.00
6	50206	0.08	0.02	0.01	120.00
7	50210	2.50	1.70	3.78	120.00
8	50208	2.76	11.20	4.52	120.00
9	50204	2.84	30.06	4.77	120.00
10	50202	2.89	25.83	4.93	120.00
11	3723	2.93	6.58	5.06	120.00
12	3725	2.98	32.26	5.22	120.00
13	4125	3.03	39.88	4.63	130.00
14	4121	3.08	17.79	4.79	130.00
15	4106	3.12	15.44	4.91	130.00

H2ONET Report Rylands Heights Max Day 2.5 fps flushing

	ID	Pressure (psi)
1	3020	156.89
2	3017	151.44
3	3019	141.90
4	50168	137.32
5	3370	130.44
6	3018	129.50
7	50170	103.73
8	50174	92.26
9	50176	86.20
10	3353	85.13
11	50172	76.84
12	3354	65.18
13	3368	61.59
14	3352	43.64
15	3367	37.75

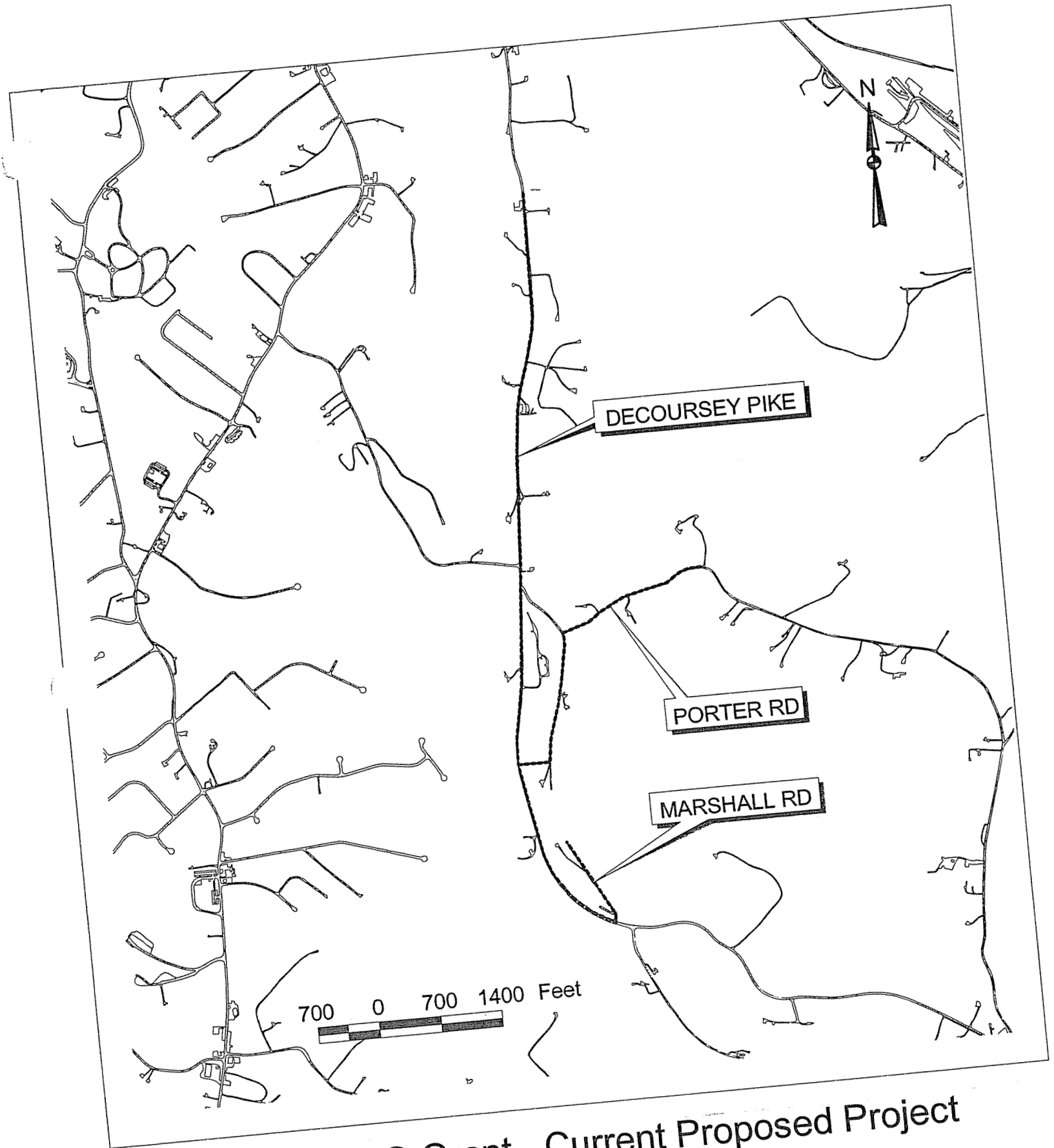
Case No. 200-_____
Exhibit **C**

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District RF

Kenton County
184-0122

Project Map



 CDBG Grant - Current Proposed Project
Sub District RF
Project Funding

Case No. 200-_____
Exhibit **C**

NORTHERN KENTUCKY
WATER DISTRICT

Project – Sub District RF

Kenton County
184-0122

Revenue Requirements

**REVENUE REQUIREMENTS
SUB-DISTRICT RF WATER MAIN PROJECT**

NORTHERN KENTUCKY WATER DISTRICT \$130,875.00 BAN (to become future bond issue reimbursed by the surcharge)

SURCHARGE PROJECTION

- 28 initial users paying the \$26 monthly surcharge
- \$130,875.00 BAN (to become a future 30 year bond issue)
- Future Bond issue will be for 30 years at an estimated 5 percent interest rate

Estimated annual debt service including interest for future bond issue of \$134,067 is \$8,736.

Projected surcharge annual contribution is $28 * 12 * \$26 = \$8,736$

December 17, 1991

The Kenton County Water District No. 1 met on this date at the District Office at 4:00 P.M. Present were Commissioners J. Michael Noll, Timothy Mauntel, Wayne Bach, Jack E. Smart and Clarence Vastine, together with Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn, Ed Smain and Wayne Bridges.

The minutes of the previous meeting of December 10, 1991, were approved by motion of Mr. Vastine, seconded by Mr. Bach.

Will Linder was present and stated that his representatives had been on the phones and in the last three days had signed up about 79 more people for the water in Southeast Kenton County. He stated that there were 725 potential customers and 58 had indicated that they did not want the water. He stated that approximately 75% to 80% are low and moderate income and approximately 291 people have signed up for the water.

Mr. Linder also stated that the State did not give a grant for the Warren Avenue and surrounding area. He stated that another application could be made but the contract has already been awarded to the contractor to construct the water line on Warren Avenue.

Bids have been received for 3 areas to be constructed in the Southeastern portion of the County. Mr. Harrison stated that he would contact some contractors to see how much the wage scale requirement would impact the bids. A representative from Sunesis Construction was present and stated that he was a bidder on the project and he could give us some information concerning the impact on the bid of the Federal and State wage scale requirement.

Mr. Willaman reported that the Taylor Mill Treatment Plant bids were received for the Plant Filter Rehabilitation. The lowest and best bid was from Building Crafts in the amount of \$564,390.00. This contract was awarded to Building Crafts as the lowest and best bidder in this amount contingent upon approval by the Public Service Commission on motion of Mr. Vastine, seconded by Mr. Mauntel.

Mr. Willaman previously presented the O & M Budget for 1992 and this was reviewed by the Commissioners. It was approved on motion of Mr. Bach, seconded by Mr. Mauntel.

Mr. Willaman presented several changes in the Personnel Policy, such as funeral leave, unexcused absence without pay, salaried management and employees, availability pay, pregnancy related disability and maternity leave, together with holidays, long term disability, hospital and medical benefits and grievance procedures and life insurance. These were approved as presented on motion of Mr. Bach, seconded by Mr. Vastine. It was discussed that the Compensations and Benefits Committee will review any future changes in these policies.

Mr. Connett presented a computer networking and in-house billing procedure and states that it would result in considerable savings in billing customers. He will request additional proposals and the Board agreed to proceed with purchasing the equipment by motion of Mr. Mauntel, seconded by Mr. Vastine.

The Board voted to go into Executive Session to discuss personnel matters and lawsuits on motion of Mr. Mauntel, seconded by Mr. Vastine.

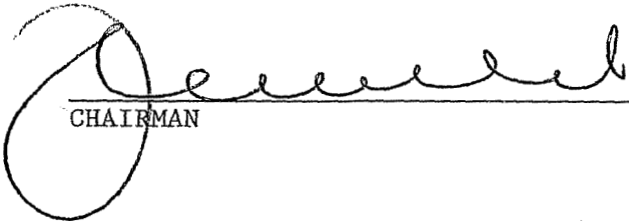
Later the Board voted to come out of Executive Session on motion of Mr. Vastine, seconded by Mr. Bach. Then a motion was made by Mr. Bach, seconded by Mr. Vastine and carried that the District employees receive a 4% increase in pay which will apply to all employees except the General Manager who is under an employment contract and the raises shall be effective January 5, 1992.

A letter was received from the Campbell County Water District requesting that the contract between Kenton and Campbell Districts be amended to permit Campbell to buy 75% of their water from Kenton and 25% from Newport. No decision was made on this matter at this time.

Mr. Bridges suggested that perhaps the General Assembly could be contacted concerning an increase in salaries for Water Commissioners. The present limit is \$3600.00 and this has been the law for several years and he recommended that perhaps a raise to \$6000.00 annually would be reasonable. The Board seemed to agree with this and Mr. Bridges will contact some of our representatives about this matter.

The O & M expenses for the month of November were approved in the amount of \$578,438.64 on motion of Mr. Bach, seconded by Mr. Vastine.

The next meeting will be on January 21, 1992, at 4:00 P.M. There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

May 19 , 1992

The regular meeting of the Kenton County Water District No. 1 was held this date. Present were Commissioners Dennis Kenney, Wayne Bach, J. Michael Noll and Clarence Vastine. Mr. Smart was absent. Also present were Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison and Wayne Bridges.

The minutes of the previous meeting of April 13, 1992, were presented and approved by motion of Mr. Vastine, seconded by Mr. Bach.

Joe Nienaber, City Administrator of Ft. Wright, was present. He stated that the City was against Cellular One's antenna at the proposed site. He said the PSC rejected their site and Cellular One has now appealed. He wanted to explain the City's position to the District. No further action was taken at this time.

A bid was received for furniture at the lab from Fisher Scientific Company in the amount of \$12,217. This was accepted as the lowest and best bid on motion of Mr. Vastine, seconded by Mr. Keeney.

Mr. Willaman presented a petition for water from residents on Whitaker and McDonald Drive. He stated that if federal funds were available this might be a feasible project and the residents had requested that a grant be applied for. It was discussed that possibly a grant could be applied for by September from the Governor's Discretionary Fund. It appears that 5 of the 6 property owners are interested in water.

Mr. Bridges reported that the PSC this week approved the rates for the Subdistrict A. Mr. Harrison reported that one contractor is willing to keep the prices in his original bid but one contractor wants an additional 4%. Motion was made by Mr. Bach, seconded by Mr. Vastine and carried that the District rebid this second portion as soon as possible unless the original bidder will keep his bid.

Mr. Willaman reported that it was not feasible to build the water line on Visalia-Staffordsburg Road as there were insufficient residents to sign up for water.

Mr. Noll reported that his committee met with Bullock Pen Water District representatives recently. They indicated that Bullock Pen can perhaps use a great amount of water in the future but not immediately. It was pointed out that thm's are up and also the cost would be increasing. Bullock Pen will check into a possible grant.

The ^{MILITARY} City of Ft. Thomas requested that the District dedicate a portion of ~~Memorial~~ Parkway near the water treatment plant. Mr. Willaman was authorized to negotiate with the City of Ft. Thomas and the District may eventually be willing to dedicate the right of way with certain conditions. It was suggested that the city prepare a legal description and that an attempt be made to have parking somewhere in this general area as people now use the property of the District and this is dangerous with fire equipment.

A discussion was held concerning electrical problems at the Licking River pumping station. These expenses can be paid from the bond anticipation notes according to Mr. Willaman. He will see the engineers and see if this should be billed separately from the pumping contract.

Mr. Willaman reported that the chlorine building needs to be expanded at the Fort Thomas Treatment Plant. After a discussion was held, motion was made, seconded and carried by Mr. Bach and Mr. Vastine that bids be received for this proposed construction.

Mr. Willaman reported that the access road to the Bromley Pump Station is in a bad state of repairs. He indicated that it would cost approximately \$120,000 to construct a new road and he will check out the situation to see if the District has to maintain the old road if a new one is built in a different location.

Mr. Bridges reported that the Kentucky Court of Appeals has affirmed the Circuit Court. It appears that Campbell County Water District can now purchase all of its water from Kenton and the Campbell Board has indicated it is willing to do so starting July 1, 1992. The Kenton rate is \$.65 per 1000 gallons and Newport's current rate is \$.60. Campbell District suggested that the additional \$.05 be held in escrow until a decision is made by the PSC as to the rate that Kenton should charge Campbell. Mr. Willaman will check with the bond attorney to see if this escrow account would be proper under the bond ordinance. Mr. Willaman will report by letter to the Campbell District of Kenton's position.

A discussion was held concerning the possible shut down of the Taylor Mill Treatment plant but this would not seem to be feasible at this time.

Mr. Harrison requested that a secretary be hired for the engineering department and by motion of Mr. Vastine, seconded by Mr. Bach it was decided to hire a secretary when one is needed.

The next regular scheduled meeting shall be held on June 9, 1992, at 4:00 P.M. at the District Office.

Mr. Willaman reported that the District currently pays 20% of the cost of safety shoes for employees who desire them. He suggested that this be increased to 50% and this was approved on motion of Mr. Keeney, seconded by Mr. Vastine.

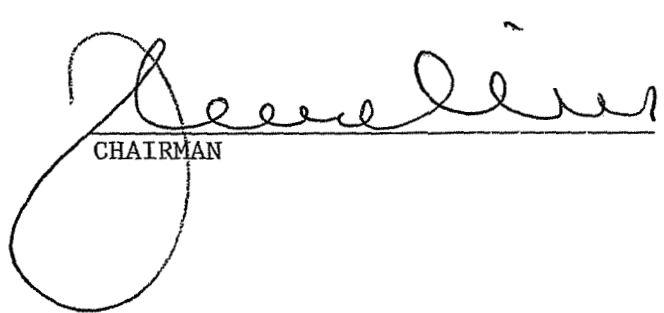
A discussion was held concerning Geographic Information Systems (GIS) and the cost would be approximately \$500,000 to \$600,000. After a discussion motion was made by Mr. Keeney, seconded by Mr. Vastine and carried that the District spend up to \$20,000 for a pilot study on GIS.


Ms. Joslyn reported that Zebra Mussels have been sighted in the area and it is necessary to have an injector to keep zebra mussels out of the intake station. This is an emergency and the Board decided to proceed purchasing the injector system at the cost of \$45,000 as it is an emergency and there is not time to take bids as this is needed immediately.

A discussion was held concerning the purchase of disability insurance for the District's employees. The committee has studied this somewhat and will continue to look into benefits for employees and see if this would be feasible or not at this time.

The bills for the month of April totaling \$580,415.84 were approved on motion of Mr. Bach, seconded by Mr. Vastine.

There being no further business the meeting adjourned.


CHAIRMAN


SECRETARY

July 20, 1992

A meeting of the Kenton County Water District No. 1 was held on this date at the District Office at 3:00 P.M.

Present were Commissioners Dennis Kenney, Wayne Bach, Jack Smart, Clarence Vastine and J. Michael Noll, together with Dennis Willaman and Wayne Bridges.

The minutes of the previous meeting of July 7, 1992, were read and approved on motion of Mr. Vastine, seconded by Mr. Keeney.

Motion was made by Mr. Bach, seconded by Mr. Vastine and carried that the Board go into Executive Session to discuss possible litigation with the Campbell County Water District. The Campbell County Water District Board was also present and ready to go into Executive Session to discuss the lawsuit with Kenton County District.

After an Executive Session, the Board came back to a regular session. Campbell County Judge Executive Ken Paul addressed the Board and stated that he would like to see the status quo for 2 to 6 months until the Kentucky Area Development District can study the issue of merging the water suppliers and districts in Northern Kentucky. He stated that the County attorney would sue the Campbell Water Board if they purchased all of their water from Kenton County. He said the county attorney feels this is not a valid contract between the two Water Districts and that we should stop all of the suits and spending money and study the merger. He said if Campbell County District makes any move to buy from Kenton County, that he would take legal action.

Mr. Noll replied that Judge Paul should get his county attorney not to file any more suits and should get Newport to drop their pending litigation in the Supreme Court. Mr. Vastine pointed out that our customers have been hurt and that the District has spent a lot of money and have signed a valid contract.

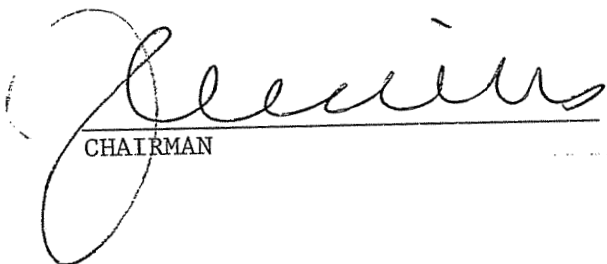
Motion was made by Mr. Keeney and seconded by Mr. Vastine that Kenton notify Campbell District that they purchase all of their water from us under the contract within thirty days or the Kenton District will file suit for damages and breach of contract. The motion carried unanimously.

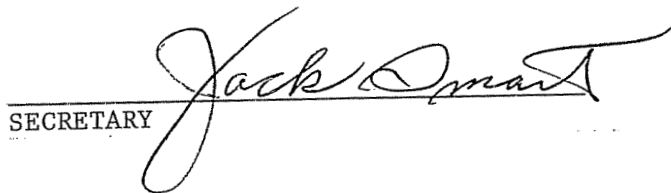
Mr. Willaman presented bids for repainting the Industrial Park tank and recommended that the lowest and best bid is from Currens Company in the amount of \$173,925.00. Same was approved by motion of Mr. Vastine, seconded by Mr. Bach.

Mr. Willaman pointed out that the District may need to extend the water line in Subdistrict A from Old Decoursey Road to Mills Road to serve the new Kenton County Park. The Taylor Mill water system stops on Mills Road at St. Patrick Church. There are several customers who could pay the surcharge and perhaps the County would pay the balance of the cost of this water line.

Mr. Willaman reported that he had been meeting with the Fidelity representatives concerning the proposed water line construction to their new facility.

There being no further business the meeting adjourned.


CHAIRMAN


SECRETARY

August 25, 1992

The regular meeting of the Kenton County Water District No. 1 was held on this date. Present were Commissioners J. Michael Noll, Wayne Bach, Dennis Keeney, Jack Smart and Clarence Vastine. Also present were Dennis Willaman, Mal Connett, Wayne Bridges, Bari Joslyn and Richard Harrison.

The minutes of the previous meeting of July 20, 1992, were presented and approved on motion of Mr. Vastine, seconded by Mr. Smart.

Approximately six families were present from Ridgeview Drive and they were concerned about the proposed tank site for the Fidelity property near Taylor Mill Road. The Commission heard their concerns and answered their questions.

Don and Charlene Fausz, of 210 Pelly Road, were present requesting water for their area. This matter was discussed and their questions were answered.

Representatives from Cellular One were present, Craig Jarvis and Jan Murphy. They requested permission to place an antenna on the tank in Ft. Wright or to have room on the property for an antenna. The matter will be discussed and a decision made at a later date.

A discussion was held concerning the sale of water to Campbell County Water District. It was pointed out that the District has spent approximately \$160,000 in legal and engineering expenses. Attorney Bridges will check with the Kentucky Supreme Court and see when a decision may be reached in the appeal. Mr. Willaman will check with the Northern Kentucky Area Development District for a time table on the merger. Motion was made, seconded and carried unanimously by Mr. Kenney and Mr. Vastine that Attorney Bridges research and prepare suit papers involving the dispute with Campbell Water District.

Mr. Willaman reported on the bids for the Ft. Thomas Treatment Plant Chlorine Building. The staff recommended Radius Construction in the amount of \$94,296.00 as the lowest and best bid. This was approved on motion of Mr. Keeney, seconded by Mr. Vastine.

Mr. Harrison reported that several persons on Mills Road are interested in water service. By using the surcharge in the subdistrict and the County paying around approximately \$20,000, it will be feasible to construct a portion of the water line from Old DeCoursey along Mills Road to the County Park.

A discussion was held concerning water service to Pelly Road. It was decided that Mr. Willaman will contact the Public Service Commission about a possible shut off for several properties using one meter.

Bids were received to repair and paint the Licking River Intake Structure bridge. The staff recommended Kretan Painting Company as the lowest and best bid at \$70,000.00. This was approved on motion of Mr. Keeney, seconded by Mr. Vastine.

Mr. Willaman presented an amendment to the safety toe shoe policy. He suggested adding that it would be a class 75 rating and omit the words steel toed. This was approved on motion of Mr. Vastine, seconded by Mr. Bach.

Mr. Peterman and Mr. Ross have computed the savings from refinancing the \$11 million bond issue in 1988. Mr. Peterman presented a resolution and it was shown that the District would save approximately \$1.12 million in interest by refinancing the bonds at this time before interest rates rise. This was approved on motion of Mr. Kenney, seconded by Mr. Vastine and carried unanimously.

Mr. Willaman reported that it is desirable to relocate the water line on Highland Avenue and the Kentucky Department of Transportation will pay most of the expense. The District will pay to upgrade the line from a 6 inch to a 12 inch main and the estimated cost to the District is \$116,736. On motion of Mr. Vastine, seconded by Mr. Keeney and carried the District will request bids for this planned improvement.

The Salary and Benefits Committee has met and discussed the possibility of obtaining a salary survey and performance appraisal program for the District employees. The Committee recommended that a study be done by the William M. Mercer Company at an approximate cost of \$15,900. This was approved on motion of Mr. Keeney, seconded by Mr. Vastine.

Mr. Willaman reported that there is a slide near Spring and Wilson Streets in West Covington and the water main needs to be relocated. The estimated cost is \$35,000 and Mr. Willaman was authorized to obtain bids for this project.

The GIS Pilot Study will be discussed at a special meeting which will probably be held on September 22, 1992. The next regular meeting is scheduled for September 15, 1992.

Mr. Willaman reported that the site for the new tank at the Fidelity property is being studied and there are three possible locations.

The contract with Taylor Mill was discussed. This may be revised or the District may decide to not renew this when it comes due on October 1, 1992.

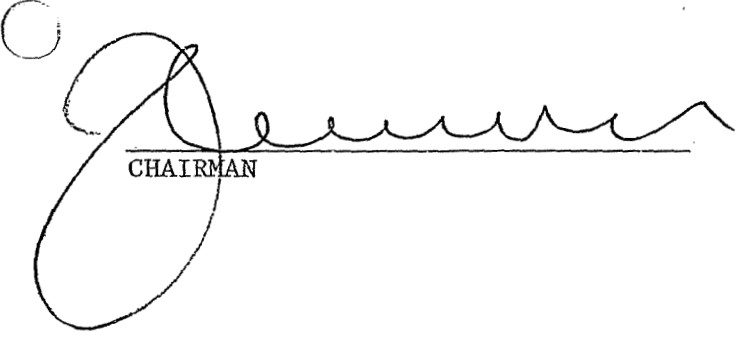
The road to the Bromley tank is in a bad state of repair and it is more feasible to construct a new road due to the steepness and problem with the existing road. The estimated cost for a new road is \$108,000 and approximately \$15,000 to purchase the property for a new road. The property may be purchased or perhaps an easement can be obtained. This proposed road construction was approved on motion of Mr. Smart, seconded by Mr. Keeney.

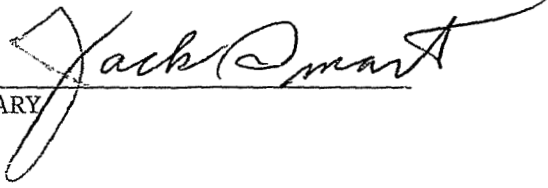
Mr. Willaman reported that the District may save money by contracting the medical insurance through an administrator. Kenton County has done this and several other businesses in the area and have reported a cost savings. This will be studied further.

Mr. Willaman was directed to check into the feasibility of obtaining a grant for extension of the water main along Ky 17. southwardly toward Piner.

The bills for the month of July were approved on motion of Mr. Bach, seconded by Mr. Vastine. The bills totaled \$ 783,742.17.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

October 20, 1992

A regular meeting of Kenton County Water District No. 1 was held on this date. Present were Commissioners J. Michael Noll, Wayne Bach, Dennis Keeney, Michael Hemmer and Steve Hatfield. Also present were Mal Connett, Wayne Bridges, Dennis Willaman, Richard Harrison and Bari Joslyn.

The Board welcomed two new members, Mr. Hemmer and Mr. Hatfield, who replaced Mr. Smart and Mr. Vastine on the Board.

The minutes of the meeting of September 15, 1992, were approved on motion of Mr. Bach, seconded by Mr. Keeney and all voted in favor except Mr. Hemmer and Mr. Hatfield abstained.

The minutes of the previous meeting of September 22, 1992, were approved on motion of Mr. Keeney, seconded by Mr. Bach and all voted in favor except Mr. Hemmer and Mr. Hatfield abstained.

Mr. Willaman reported that he had received a communication from an attorney representing Allied Builders who are upset that they were not awarded two contracts when they believe they were the lowest and best bid. Attorney Bridges had responded to the attorney's correspondence and the Board was made aware of the reasons why the contract was not awarded to Allied Builders.

Mr. Roger Peterman was present and presented the 1992 Series B Bond Resolution in the amount of \$10,955,000.00. He pointed out that this will save the District approximately \$100,000 per year by refinancing the Bond Issue. He stated that the bond sale will be held approximately on November 12, 1992, at 11:00 A.M. The Resolution was approved on motion of Mr. Keeney, seconded by Mr. Bach with the understanding that the Commissioners will be advised by telephone immediately after the bids are received as to the interest rate.

Motion was made by Mr. Bach, seconded by Mr. Keeney and carried unanimously that Mr. Hatfield be elected Secretary of the Board of Commissioners.

Bids for service items were received and management recommended the lowest bid as the lowest and best bid for numbers 1 through 161. This was approved on motion of Mr. Bach, seconded by Mr. Keeney.

Bids for gate valves and fire hydrants were received and management recommended the ductile iron be utilized and recommended U.S. Pipe as the lowest and best bidder for items 1 through 10. This was approved as the lowest and best bid on motion of Mr. Bach, seconded by Mr. Keeney.

A discussion was held concerning the proposed water line extension on Pelly Road. The Wesselman family has agreed to construct the water line past their property at their own expense and will build it according to the plans and specifications of the District. A contract will be negotiated between the Wesselman family and the District.

A discussion was held concerning an amended policy for payment of direct assessments. This was approved on motion of Mr. Bach, seconded by Mr. Hemmer.

A deed and easement to the City of Erlanger for property on Montgomery Drive was presented and approved on motion of Mr. Keeney seconded by Mr. Hemmer and Mr. Willaman was authorized to sign on behalf of the Water District.

Mr. Willaman updated the Board on the tank site for the Fidelity Property on Taylor Mill Road. It will be approximately \$1,300,000.00 net cost and Mr. Willaman will see the City of Covington and Fidelity as to how much of this they will pay.

Bids were received to install water service settings as several meters in the Covington area need to be moved outside for easier reading. Management suggested that all bids be rejected as they were too high and this was accepted by the Board.

Bids were received to relocate a water line on Highland Pike and the lowest bid was from Spartan Construction Company. The Kentucky Department of Transportation will pay part of this cost and the District's part is \$35,442.50. This was accepted as the lowest and best bid on motion of Mr. Bach, seconded by Mr. Keeney.

Mr. Willaman presented a contract for the rental of antenna space with Tower and Antenna Management, Inc. Mr. Bridges suggested that a provision be added to the contract to permit cancellation for good cause by the Water District. This was approved on motion of Mr. Keeney, seconded by Mr. Hatfield and Mr. Willaman was authorized to sign on behalf of the Water District.

A proposal was received from Rankin, Rankin & Co. for preparing the 1992 audit. Some Board members felt that in the future a proposal should be obtained from several accounting firms. The proposal from Rankin, Rankin & Co. was approved for 1992 on motion of Mr. Keeney, seconded by Mr. Hemmer.

Mr. Willaman presented some figures for a proposed expansion along Kentucky 17 from Nicholson area to Spillman Road with a line being constructed on several roads leading off Madison Pike. The matter was discussed at great length as a Subdistrict B and Mr. Bach and Mr. Hatfield were appointed to a committee to study this further with the staff.

Mr. Willaman reported that meetings had been held at the Northern Kentucky Area Development District concerning a merger study of the Water Districts. Attending were Campbell County, Boone County, Kenton County and the City of Florence and Newport. A request will be made for qualifications of prospective firms to do a merger study.

Mr. Willaman presented a proposed contract with the City of Taylor Mill for 20 years. The Board felt that the contract should make some provision that the City would work with the District to meet any new regulations that might be imposed in the future. The contract was approved on motion of Mr. Bach, seconded by Mr. Keeney and Mr. Willaman is authorized

to sign on behalf of the Water District.

Mr. Willaman stated that a new Committee for Compensation and Benefits needed to be appointed and accordingly Mr. Keeney and Mr. Hemmer were appointed to this committee.

Mr. Noll and Mr. Keeney were appointed to the Committee on Public Information.

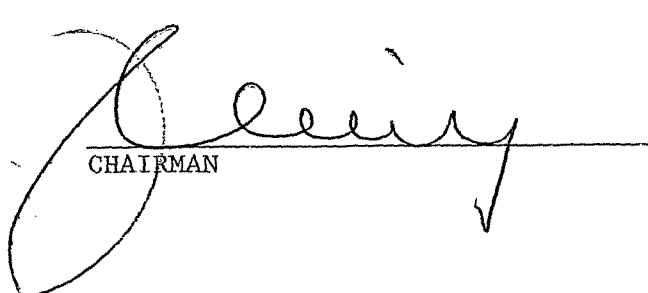
Mr. Willaman presented an amendment to the rules and regulations concerning payment of bills in Subdistrict A and this was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

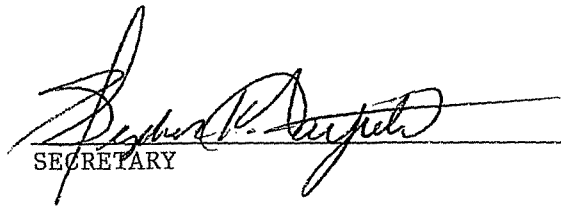
Mr. Willaman reported that a pump needed to be repaired at the Dixie Highway Booster Station and it was an emergency. He has obtained one quotation and will obtain a second. Since this is an emergency, the Board authorized Mr. Willaman to have the pump repaired immediately at a cost not to exceed \$20,452.00 and to obtain a second proposal. This was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

The Board signed commendations for Jack Smart and Benny Vastine for their many years of service to the Board of Commissioners.

The bills for the month of September totalling \$718,262.01 were approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

There being no further business, the meeting adjourned and the next regularly scheduled meeting is November 17, 1992, at 4:00 P.M.


CHAIRMAN


SECRETARY

December 15, 1992

The regular meeting of the Kenton County Water District No. 1 was held this date. Present were Commissioners J. Michael Noll, Steve Hatfield, Michael Hemmer, Wayne Bach and Dennis Kenney, together with Mal Connett, Richard Harrison, Bari Joslyn, Dennis Willaman, Wayne Bridges and County Judge/Executive Clyde Middleton.

The minutes of the previous meeting of November 17, 1992, were presented and approved on motion of Mr. Kenney, seconded by Mr. Bach.

Roger Peterman was present and stated that the bonds had been sold at a considerable savings. He presented a resolution concerning the refunding of the bonds Series B 1992 in the amount of \$11,405,000.00. Same was approved on motion of Mr. Bach, seconded by Mr. Hemmer. This will result in a total savings of \$1,776,100.84 over the life of the bonds.

Mr. Peterman also presented a resolution authorizing issuance of obligations to reimburse the capital expenditures made by the District so that reimbursement of the fund can be made later if the bonds are issued to cover the expenditure. This resolution was approved on motion of Mr. Bach, seconded by Mr. Keeney.

A Mr. Ron Barrett of Bracht was present and requested that a water line be extended northwardly from Bracht on U.S. 25 to serve he and approximately 13 other customers. The Board advised Mr. Barrett that they are making plans to serve southern Kenton County and are moving in that direction but cannot do his area immediately. He requested permission for Bullock Pen Water District to serve him and the Board advised that they had notified Bullock Pen Water District that they could serve certain areas in southern Kenton County if they did it according to the specifications of the Kenton District.

Motion was made by Mr. Keeney, seconded by Mr. Hemmer and carried that the Board go into Executive Session to discuss possible litigation.

After the Executive Session ended motion was made by Mr. Hemmer, seconded by Mr. Keeney and carried that the District send a letter to Campbell County Water District requesting that they proceed with a vote to accept or reject the contract that Kenton currently holds with Campbell District dated September 1988 and reaffirmed in June 1992.

Mr. Willaman reported that the PSC requested information concerning the surcharge in Sub District A. He stated that we have 233 customers and that the surcharge can be reduced from \$24.34 per month to \$22.73. This was approved on motion of Mr. Bach, seconded by Mr. Hatfield.

Mr. Harrison reported that bids were received for concrete restoration and the lowest and best bid was from Falcon Construction for areas in the County and this was approved on motion of Mr. Hemmer, seconded by Mr. Keeney. Bids were also received for concrete restoration in the City of Covington and Falcon Construction was the lowest and best bid and this was approved on motion of Mr. Hemmer, seconded by Mr. Bach.

Mr. Willaman presented a proposed capital budget for 1993 showing items needed by each department and suggesting which quarter during the year each could be purchased.

Mr. Bridges reported that he has been negotiating with Mr. Wesselman's attorney concerning a contract for construction of the water line on Pelly Road.

Mr. Willaman reported that the survey was made of residents in the Sub District B area and there was a very good response. Mr. Hatfield stated that he found a great enthusiasm for people wanting water when he helped survey the area. Mr. Bach suggested that a project be constructed to Spillman Road but that the line not go out Spillman Road at this time as most of the residents on that road do not favor water. Mr. Hatfield stated that most of the residents would not have a great reduction in their fire insurance because they are more than five miles from the fire department headquarters. Mr. Willaman stated that the District needs to apply for a grant from the Department of local government and it was decided to contact Will Linder concerning an application for a grant at this time.

The Board discussed the possibility of Bullock Pen Water District obtaining a grant to construct or help construct a water line from Piner to Spillman Road now that the District plans to proceed southwardly from Nicholson area to Spillman Road. Mr. Willaman will notify Bullock Pen of the District's plans and see if they wish to apply for a grant in this area.

Mr. Willaman reported that Fidelity does not wish to participate in the construction of a new tank as they feel the new water line from Madison Pike area will be sufficient for their needs. Mr. Willaman will contact Taylor Mill to determine if they wish to now build their own tank. Mr. Willaman was instructed to continue pursuing this matter and meet with representatives of Taylor Mill for their input on this project.

Mr. Willaman reviewed the meeting with the Home Builders Association in regard to sand bedding. Sand bedding remains in the specifications with deviations to be approved by the District on a case-by-case basis.

Bari Joslyn discussed the lead rule and the Water District's potential responsibility as it now stands.

Mr. Hemmer inquired as to the reasons and specifications requiring full flow meters for fire protection. He also inquired about installation of large meters to be inside buildings rather than in pits. The District will investigate this matter and report back.

The bills for the month of November totaling \$681,028.47 were approved on motion of Mr. Hatfield, seconded by Mr. Bach.

A motion was made by Mr. Hemmer, seconded by Mr. Bach and carried that the Board go into Executive Session to discuss personnel matters.

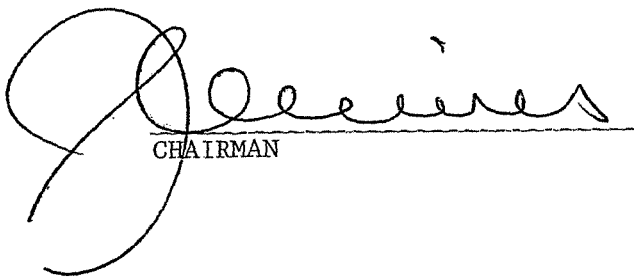
A motion was made by Mr. Hemmer, seconded by Mr. Bach and approved that Executive Session be adjourned.

A motion was made by Mr. Keeney, seconded by Mr. Hatfield and carried that since the District was moving into a "pay for performance" plan that will be fully enforced by January 1, 1994 and the traditional general pay increases would have been approximately 3.5% coinciding with the CPI and since other raises under the old pay administration system for 1993 will be eliminated in 1993, the general pay increase effective January 1, 1993, will be 5% for all full time employees.

Mr. Willaman was offered a two-year contract with all his current benefits to begin January 1, 1993. His salary for 1993 will be \$65,000 and a salary review will take place in November 1993 for the 1994 salary. Mr. Willaman accepted this offer.

The next regularly scheduled meeting will be January 19, 1993 at 4:00 P.M.

There being no further business the meeting adjourned at approximately 8:30 P.M.


CHAIRMAN


SECRETARY

February 16, 1993

A regular meeting of the Kenton County Water District No. 1 was held this date. Present were Dennis Keeney presiding, together with Wayne Bach, Steve Hatfield and Michael Hemmer. Mr. Noll was out of town. Also present were Judge Clyde Middleton, Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison and Wayne Bridges.

The minutes of the previous meeting were approved on motion of Mr. Hatfield, seconded by Mr. Bach.

Judge Middleton advised the Board that the Fiscal Courts and Ad District have met with the prospective engineering companies about the merger study. It was agreed by the committee on the merger study to employ Quest Engineering Company of Lexington and they will have the merger study completed by around June 1, 1993. There have been five different utilities meeting concerning this merger study and the study will cost approximately \$50,000 for the first phase. Mr. Willaman will negotiate on behalf of the Water District as to the percentage Kenton County will pay on the merger study.

A discussion was held concerning future expansion and the order from the Kentucky Public Service Commission and the correspondence from Campbell County indicating it did not wish to purchase water from Kenton until the merger study has been completed. Mr. Bridges was directed to correspond with the Public Service Commission setting out the need for expansion at this time and Campbell County will also be notified of Kenton's position. Judge Middleton suggested that the District not proceed to expand their facilities at this time until the merger study is completed in approximately three months.

Bids were received for service installations and the lowest and best bid was from J. Gemmer & Sons based on the lowest unit costs. Their bid was accepted on motion of Mr. Bach, seconded by Mr. Hemmer.

Bids were also received for the solid state touch read metering devices. The lowest and best bid was from Waterworks Supplies, Inc. in the amount of \$21,104.00 and this was approved on motion of Mr. Hatfield, seconded by Mr. Bach.

Various bids were received for pick up trucks and a back hoe and after a discussion, motion was made by Mr. Hatfield, seconded by Mr. Bach and carried that these bids be tabled for further study.

Mr. Willaman presented the revisions to the Sick Leave Policy and these are No. 91-11-19D and were approved on motion of Mr. Hemmer, seconded by Mr. Bach.

Additions to the Standards of Conduct were presented by Mr. Willaman being No. 92-9-15 and were approved on motion of Mr. Hemmer, seconded by Mr. Hatfield with a change noting that some of the examples are only part of the examples and are not all inclusive.

Mr. Willaman suggested a No Smoking Policy in the District

facilities and after a discussion this was approved on motion of Mr. Hatfield, seconded by Mr. Hemmer and is Policy No. 93-02-16A.

Bari Joslyn suggested a proposal to use one ton cylinders for chlorine at the Dudley Pump Station. Motion was made by Mr. Bach, seconded by Mr. Hatfield and carried that the engineering be begun on this proposal.

A discussion was held concerning the Wesselman contract and Mr. Bridges reported that Wesselman's attorney has agreed to the changes suggested by the Water District. Mr. Willaman was authorized to sign the contract on behalf of the District. This was approved on motion of Mr. Bach, seconded by Mr. Hatfield.

Mr. Willaman stated that with the Sub District B grant application, it is advisable to upgrade the 8 inch line from Shaw Road on Ky. 17 to the end of the present water line south of Nicholson to a 16 inch line. This is approximately 2.1 miles and the estimated cost is approximately \$622,037.00. He recommended that Mr. Viox proceed to do the engineering on this project and it was approved on motion of Mr. Bach, seconded by Mr. Hatfield.


Mr. Willaman presented Resolution 02-16-93 concerning soil testing and use of poly-wrap with water mains. This was approved on motion of Mr. Hemmer, seconded by Mr. Bach.

A discussion was held concerning the need for additional space for the Distribution and Meter Services. Approximately 9 sites have been studied and Mr. Willaman was authorized to begin negotiations for a site near our present facilities.

Motion was made by Mr. Bach, seconded by Mr. Hemmer and carried that the bills for the month of January totaling \$750,628.64 be approved.

There being no further business the meeting adjourned at approximately 7:45 P.M. The next regularly scheduled meeting is March 16, 1993.


CHAIRMAN


SECRETARY

May 17, 1993

A regular meeting of the Kenton County Water District No. 1 was held on this date. Present were Commissioners J. Michael Noll, Wayne Bach, Dennis Keeney, Steve Hatfield and Michael Hemmer. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn and Wayne Bridges.

The minutes of the previous meeting of April 20, 1993, were presented and approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

Mr. Willaman stated that the District should advertise for sale the outdated electronic control equipment. He was authorized to do this on motion of Mr. Hatfield, second by Mr. Bach.

Mr. Willaman presented a Sexual Harassment Policy and this was discussed. It was suggested that he obtain other such policies from Kenton County and perhaps other entities.

The Taylor Mill contract was discussed. It was suggested that the contract contain a provision that Taylor Mill will pay 100% of the cost of this new construction, less any portion that will benefit other users. Mr. Willaman was authorized to sign the contract as changed on motion of Mr. Hatfield, seconded by Mr. Keeney.

A discussion was held concerning Phase II of a project to convert the supervisory control and data acquisition system from a telephone communication to radio communication. This was discussed and Mr. Willaman will obtain additional information concerning the cost and other factors involved in this matter.

It was decided to hold a planning session on June 1, at the District Office at 4:00 P.M. with the Board and Department Heads.

A proposed contract with the Sanitation District was discussed. The Sanitation District suggested a fee of \$1500 per month and an additional \$85 per hour for additional services. Mr. Willaman will negotiate concerning these prices.

A discussion was held concerning improvements at the Ohio River Pump Station. It was suggested that a request for proposals from approximately 3 engineering firms be obtained with the costs for each of three or four phases. Mr. Bridges suggested that the Public Service Commission may need to be consulted for a certificate as this involves approximately \$8,000,000.

Mr. Willaman reported on the merger study and meetings with the Northern Kentucky ADD.

Mr. Bridges reported on the hearing last week before the Kentucky Court of Appeals on the merger case involving the PSC and who would pay for the study. The Court will perhaps rule in the next two or three months.

A discussion was held concerning service to Sub District B in Southern Kenton County. Mr. Harrison reported that the grant application was filed on May 15, but the new main from Shaw Road to the tank at Nicholson was dropped from the project at the suggestion of the grant consultant and the Kentucky Department of Local Government.

A discussion was held concerning the possible handling of sludge from the plants and the possible sale thereof.


Mr. Willaman presented a cafeteria plan for employees under IRS Code 125. A discussion was held and Mr. Willaman will obtain additional information from Kenton County on this matter.

The bond closing was held on May 12, and a good rate was obtained and everything was consummated.

The financial actions for the month of April totalling \$738,051.20 were approved on motion of Mr. Bach, seconded by Mr. Hemmer.

Mr. Noll thanked those who made the Drinking Water Week proceedings a success and suggested that a letter be sent to those who participated offering thanks from the Board.

There being no further business, the meeting adjourned at approximately 7:30 PM. The next regularly scheduled meeting is June 15, 1993, at 4:00 P.M.


CHAIRMAN


SECRETARY

September 28, 1993

The regular meeting of the Kenton County Water District was held this date. Present were Commissioners J. Michael Noll, Michael Hemmer, Steve Hatfield, Wayne Bach and Dennis Keeney. Also present were Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison and Wayne Bridges.

The minutes of the previous meeting of August 17, 1993, were presented and approved on motion of Mr. Bach, seconded by Mr. Hatfield.

Mr. Willaman presented correspondence from the City of Erlanger requesting a contribution toward the construction of a new water line on Riggs Avenue. This would also benefit the District and motion was made by Mr. Keeney, seconded by Mr. Bach and carried that the District pay 1/2 the cost of this water main.

Bids were received for the Taylor Mill Treatment Plant Pump No. 2 replacement and metering. The low bid was from Building Crafts and the staff recommended it. This was approved in the amount of \$244,583.00 on motion of Mr. Keeney, seconded by Mr. Bach.

Pump No. 5, at the Ohio River Pump Station needs to be installed and this is a sole source from Worthington Pump Company and will be approximately \$180,000.00. This was approved on motion of Mr. Bach, seconded by Mr. Hatfield.

Bids were received for the Ohio River Pump Station asphalt paving contract. The lowest and best bid was from Quast, Inc. in the amount of \$17,655.00. This was approved on motion of Mr. Keeney, seconded by Mr. Hatfield, subject to review by the Sub-Committee of Mr. Bach and Mr. Hemmer.

A survey was made of the District employees concerning Section 125 and 25 favored this program, 30 were undecided and 30 were not interested. Mr. Willaman stated that if 30 signed up, this would be sufficient. Mr. Hatfield brought a packet of information concerning this program which everyone will study. It was decided that the Board would meet with representatives from the company presenting this matter.

Mr. Willaman stated that we needed increased flow in the Independence, Nicholson and Walton areas and some residents were without water last summer for short periods of time or had low pressure. He suggested that a booster pump station be installed on Bristow Road at a cost of approximately \$150,000.00 and that a new pump be installed on Dudley Pike at a cost of approximately \$250,000.00. After a discussion, motion was made by Mr. Keeney, seconded by Mr. Bach and approved that the Board proceed with the Bristow Pump Station in order to provide the residents with water next summer. A discussion was also held concerning the growth in Northern Kentucky at this time.

A discussion was also held concerning a water main on Wilson Road to help this pressure problem and Mr. Willaman is authorized to proceed with a design of this water line. This will cost approximately

\$500,000.00. A discussion was also held concerning growth in Southern Kenton County and the need to provide water to Kenton County residents as well as the adjoining counties.

Mr. Willaman reported that on Sub-District B, the State did not approve the grant application. He had a meeting with Attorneys Honaker and Hughes recently and Will Linder. It was decided that the proposed water line could be built by borrowing money from the General Fund until the expected growth came about and the District could use a surcharge to pay off the bonds. This will have to be approved by the Public Service Commission. If it is not approved, we may apply for another grant.

It was discussed that perhaps the District should set aside a certain amount of money each year for growth to serve Southern Kenton County. Perhaps money could be obtained from the Fiscal Court to help in this also.

The problem with water in the Walton area was discussed and a meeting will be arranged with the Mayor to see if Walton could be limited to certain hours of pumping. Mr. Bridges was asked to review the contract with Walton.

Ms. Joslyn reported that water production was up 23% and additional pumping is needed in the Dudley area. On motion of Mr. Keeney, seconded by Mr. Hatfield and carried the District was authorized to proceed with purchasing a new pump for the Dudley Pump Station.

Mr. Willaman reported that Mercer Co. has recommended an increase in merit pay of approximately 4.7%. This would be incorporated in the new budget for 1994. This was approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

A discussion was held concerning possible drug testing for employees. Kenton County is doing this and it will be investigated further.

Mr. Willaman pointed out that the medical provider wishes to waive a second opinion in some cases of elective surgery. This was approved by the Board.

Mr. Willaman stated that the bond debt service ratio is presently 1.25 and the District may need a rate adjustment next year.

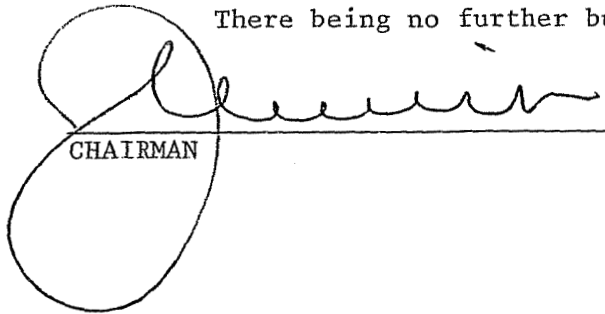
A discussion was held concerning the hiring of a Financial Officer to help Mr. Connett.

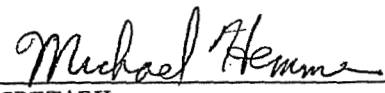
Mr. Willaman reported that he talked with Mr. Barrett at Bracht and will attempt to see how a water line in that area could be financed. Mr. Barrett stated the residents were not interested in an assessment project.

Mr. Willaman has been meeting with 5 owners at the end of the water main on Pelly Road. A discussion was held concerning possible ways to finance this extension.

The bills for the month of August were presented totalling \$867,257.13 and approved on motion of Mr. Bach, seconded by Mr. Hemmer.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

October 19, 1993

The regular meeting of the Kenton County Water District No. 1 was held on this date. Present were Commissioners, J. Michael Noll, Wayne Bach, Dennis Keeney and Michael Hemmer. Mr. Hatfield was absent. Also present were Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison and Wayne Bridges.

The minutes of the previous meeting of September 28, 1993 were read and approved on motion of Mr. Keeney, seconded by Mr. Bach.

Bids were received for distribution materials and service connection items for next year. The Staff recommended that the low bid be accepted on each item, except, that the ductile iron valves be approved as the lowest and best bid for this item. Same was approved on motion of Mr. Bach, seconded by Mr. Keeney.

Mr. Willaman sent a request for proposals to four auditing firms and reported the results. Rankin, Rankin & Co. had hourly rates that were reasonable and comparable to the other firms and their time required to perform the audit would be less because of their experience with the Water District. Rankin's firm was recommended by the Staff to do the next annual audit. This was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

The Family and Medical Leave Act of 1993 Policy was presented together with a Long Term Disability Policy Revision and the Medical and Dental Benefits were revised. The Pregnancy Related Disability and Maternity Policy was omitted. This was all approved as Policy Number 93-10-19 on motion of Mr. Keeney, seconded by Mr. Bach.

A discussion was held concerning the Drug Testing and Employee Assistance Program. This was continued until next month.

The GIS Project was discussed and was recommended for approval by the Committee. It was voted to proceed with the project on motion of Mr. Hemmer, seconded by Mr. Keeney.

Mr. Willaman stated that the tank at 110 Dudley Road is no longer needed and should be demolished. He was authorized to request bids for the demolition and will contact an appraiser to determine the value of the property. It may have more value as a commercial site. This was approved on motion of Mr. Bach, seconded by Mr. Hemmer.

A discussion was held concerning Pump Number 5 at the Ohio River Pump Station and its installation. Bids will be received prior to the next meeting.

The next meeting shall be held on November 9, 1993 and the newspapers will be notified.

Mr. Willaman compared the medical costs with the UMR and with Blue Cross-Blue Shield. There has been a savings of \$54,345.08 through the first 9 months of this year.

Mr. Willaman suggested that an application be filed with the

Farmer's Home Administration for a loan to construct Sub District B. This was approved on motion of Mr. Bach, seconded by Mr. Hemmer.

The Staff recommended that the District use UMR for the Section 125 Program and this was recommended by the Sub Committee. This was approved on motion of Mr. Bach, seconded by Mr. Hemmer.

Mr. Willaman stated that an extension on Sandman Drive needs to be constructed to supply water to the City of Taylor Mill. This would be a transmission line and should be filed with the County Judge/Executive as a deferred assessment. This was approved on motion of Mr. Keeney, seconded by Mr. Bach.

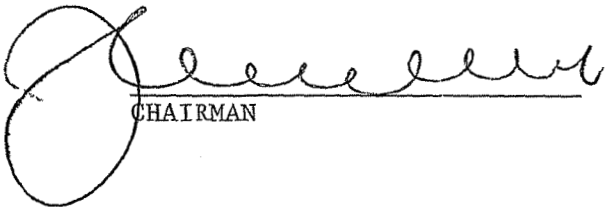
Mr. Willaman stated that a plant operator had resigned and needed to be replaced. This was approved on motion of Mr. Keeney, seconded by Mr. Bach.

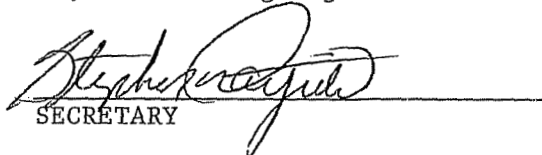
Mr. Willaman was directed to proceed with the engineering work for Sub District B. Mr. Harrison stated that this would be completed by Viox & Viox before Thanksgiving.

Mr. Willaman reported that Bullock Pen has been taking approximately 100,000 gallons of water per day from the City of Walton. Bullock Pen advised Mr. Willaman that they have an insufficient supply of water to serve the customers on U.S. 25 near Bracht.

The expenses for the month of September totaled \$792,255.01 and were approved on motion of Mr. Hemmer, seconded by Mr. Keeney.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

December 20, 1993

A regular meeting of the Kenton County Water District No. 1 was held this date. Present were Commissioners J. Michael Noll, Dennis Keeney, Wayne Bach, Steve Hatfield, Michael Hemmer, together with Dennis Willaman, Mal Connett, Richard Harrison and Wayne Bridges.

The minutes of the previous meeting of November 9, 1993, were approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

Bids were received for the Dudley Pump Station. The lowest and best bid was from Trend Construction in the amount of \$209,000.00. Same was approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Bids were received to demolish the Dudley Tank. The Staff recommended Sunesis Construction Company as the lowest and best bidder in the amount of \$28,600.00. Same was approved on motion of Mr. Bach, seconded by Mr. Keeney.

Bids were received for the Booster Pump Station on Bristow Road. Only one bid was received and it was considerably higher than the engineer's estimate. The Staff recommended that the bid be rejected and that new bids be received. This was approved on motion of Mr. Hatfield, seconded by Mr. Bach.

Mr. Harrison reported that the District is negotiating with the Sanitation District to purchase property on Bristow Road for the new Booster Pump Station.

When the new bids are received for the Booster Pump Station, Mr. Hemmer was authorized to approve the bid and award the contract provided it is in the approximate area of \$100,000.00 or less. If it exceeds this amount by several thousand dollars, two other Commissioners will be consulted. This was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

Mr. Willaman reported on the Ft. Thomas Treatment Plant Powdered Activated Carbon Building. Bids were received. The low bid was from Chemco in the amount of \$150,582.00. The Staff recommended this is the lowest and best bid. It was approved on motion of Mr. Hemmer, seconded by Mr. Bach.

Mr. Willaman reported that the proposed line along Wilson Road would be a deferred assessment project as this is a transmission main to Ky. 16. from Shaw Road. One owner, a Marion Schadler, has property close to Wilson Road but does not abut thereon and has property on Independence Road at the intersection. It was decided that Attorney Bridges should negotiate with Mr. Schadler about a reasonable amount for his assessment as his property is a unique case. The Board approved the manner of assessment and the proposed assessment list and Attorney Bridges was directed to proceed to file for a hearing with the County Judge Executive on motion of Mr. Bach, seconded by Mr. Hemmer.

An Easement Agreement with Cellular One was presented by Mr.

Willaman designating the exact legal description where the facility would be located. This was approved on motion of Mr. Keeney, seconded by Mr. Hatfield and the Chairman was authorized to sign on behalf of the District.

A discussion was held concerning the hiring of replacement personnel and the possible rearrangement of existing personnel. Mr. Willaman and his managers will meet and review the requirements of personnel for the District and see if existing personnel can be better utilized for handling the work of the District.

The 1994 Budget was discussed. It was decided that 1994 will be a bleak year and the District will need a rate increase for approximately 10% or so. The Operating Budget and the Capital Budget were approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

On motion of Mr. Hemmer, seconded by Mr. Hatfield and approved, the District shall apply for a rate increase before the Public Service Commission in approximately March 1994.

Mr. Harrison reported that the Concrete Restoration Contract should be extended for one year with Falcon Construction as they have done a good job. This was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

The Sub-District B financing was discussed. The application was recently sent to the Farmer's Home Administration and the District found its Charter, which goes back to 1926, and was organized by the Kenton Fiscal Court.

A motion was made by Mr. Keeney, seconded by Mr. Hemmer and carried that the Board go into Executive Session to discuss the General Manager's salary for 1994.

After the Executive Session, motion was made by Mr. Keeney, seconded by Mr. Bach and carried, that the General Manager receive an increase of 5% for 1994 and existing contract remain in place. This was approved by the Board.

The expenses for the month of November total \$688,619.07 and same were approved on motion of Mr. Hatfield, seconded by Mr. Bach.

The next regular scheduled meeting is January 18, 1994, at 4:00 P.M.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

February 21, 1994

A regular meeting of Kenton County Water District No. 1 was held on this date at the District Office at 4:00 P.M.

Present were Commissioners J. Michael Noll, Michael Hemmer, Steve Hatfield and Dennis Keeney. Also present were Dennis Willaman, Bari Joslyn, Richard Harrison and Wayne Bridges.

There was no meeting of the Board during January due to the inclement weather.

The minutes of the last meeting, December 20, 1993, were presented and approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Mr. Willaman wrote to the Bullock Pen Water District asking if they could serve approximately 13 customers on U.S. 25, North of Bracht. Mr. Willaman received a letter from Bullock Pen Water District that they cannot serve these customers at this time due to insufficient water.

A discussion was held concerning water service to Walton and also the status of Sub District B.

A discussion was also held concerning supplying water to Campbell County Water District. This will be discussed further at another meeting.

Mr. Keeney and Mr. Noll recently attended a meeting with the Public Service Commission and reported on the matters that were discussed at this meeting.

A motion was made by Mr. Keeney, seconded by Mr. Hatfield and carried that the Board recognize the efforts of the employees during the bad weather and directing Mr. Willaman to thank the employees for their great work and cooperation for the benefit of our customers during the bad weather.

Mr. Hatfield reported that a Judy Gilliam contacted him concerning damage to her car from a plate placed over an excavation by the Water District or its contractors. Mr. Willaman will look into this matter.

A lease was presented to lease the property on Mary Laidley Drive for the sum of \$1800.00 per month for 3 years and an option for 2 additional years at \$1900.00 per month. This will be used for the meter shop.

The lease was approved on motion by Mr. Hemmer, second by Mr. Keeney.

A discussion was held concerning the possible purchase of property for a warehouse in Erlanger. Motion by Mr. Keeney, seconded by Mr. Hemmer and carried, negotiations to purchase the property consisting of approximately 10 acres for the amount of the appraisal was approved.

Mr. Willaman stated that the Water District needs to purchase the property on Bristow Road from the Sanitation District. On motion of Mr. Keeney, seconded by Mr. Hatfield and carried. Mr. Willaman was authorized to sign a deed and purchase the property for \$10,000.00 and the Sanitation District will retain an easement through the property.

Mr. Willaman stated that the District wishes to trade a parcel of the property on Bristow Road acquired from the Sanitation District to a Mr. Brown in exchange for an adjoining piece owned by Brown. This was approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

Bids were received for the Pumping Station on Bristow Road. Mr. Hatfield moved and Mr. Keeney seconded a motion to accept the low bid from SYNCRO FLO in the amount of \$87,355.00 for Option 2.

Mr. Harrison stated that it was necessary to condemn certain parcels of property for easements in the event they could not be obtained through negotiations. He will offer the appraisal and if an agreement cannot be reached, condemnation proceedings shall be instituted on approximately 1 parcel on Wilson Road, 4 parcels on Sandman Drive and 1 near the Bromley Tank Site. This was approved on motion of Mr. Hemmer, seconded by Mr. Hatfield.

Bids were received on the Wilson Road Project and the lowest and best bid was from Howell Contractors in the amount of \$377,574.00 for the 12 inch water main. This was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

Mr. Willaman stated that changes are recommended to the Health Benefit Plan and these were accepted on motion of Mr. Hemmer, seconded by Mr. Hatfield.

An amendment to the Drug Free Work Place Policy No. 93-11-9 was approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

Bids were received for fencing at the Ohio River Pump Station. The lowest and best bid was \$10,188.00 from Mills Fence Company and this was approved on motion of Mr. Keeney, seconded by Hatfield.

Bids were received to purchase 3 new vehicles and trade in 2 vehicles. The lowest and best bids were from Hilltop Ford and this was approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

A discussion was held concerning the projects to be approved by the Public Service Commission. Mr. Willaman stated that the rate increase may be a little more than first anticipated. The Board directed him to make an attempt to lower the increase as much as possible. Mr. Willaman stated that the Rate Team will be meeting on March 1, at 10:00 A.M. at the District Office.

Mr. Willaman recommended that time for payment of water bills be reduced and that this new proposal be submitted to the Public Service Commission for approval. This was approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Mr. Harrison recommended that the new Service Installation Contract be extended one year with J. Gemmer & Sons. They have done a good job and will extend this for another year at the same price. This was approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

The financial statements for 1993 were received from the auditors and discussed. Same were approved on motion of Mr. Hatfield, seconded by Mr. Keeney. The financial statements will be reviewed by the auditor at the meeting on March 8, 1994.

The Operation and Maintenance Expenses paid in 1993 were necessary in order to operate and maintain the Public Water System as required by the Bond Ordinance. These expenditures were approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

The G.I.S. Contract was presented by Mr. Willaman and reviewed. The District shall approve the contract on motion of Mr. Hatfield, seconded by Mr. Hemmer.

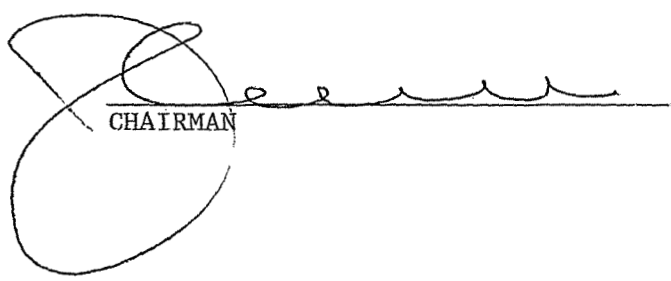
A contract for antennas on the Water Tank was reviewed. Our consultant recommended that the 3 users on the Ida Spence Tank pay \$120.66 per month and that the Sanitation District and TANK be requested to enter into an agreement to pay the same as other users. This was approved on motion of Mr. Hatfield, seconded by Mr. Keeney. Mr. Willaman will negotiate with TANK for possible advertising on the buses in exchange for the antenna.

The Ohio River Intake Design Report was reviewed. This will be discussed with the engineers at the meeting on March 8.

Mr. Honaker suggested that the Board approve the application to be filed with the Public Service Commission for authority to issue approximately \$7,400,000.00 in revenue bonds and to seek a rate increase to provide 1.2 coverage of annual debt service as required by the bond resolution and further to hire the necessary legal assistance, fiscal agent, bond counsel and consultants for the rate case. This was approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

The bills for the previous months were approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

There being no further business, the meeting adjourned at approximately 8:00 P.M.



CHAIRMAN



SECRETARY

March 14, 1994

A meeting of the Kenton County Water District was held this date at the District Office at 4:00 P.M. Present were Commissioners J. Michael Noll, Dennis Keeney, Steve Hatfield, Michael Hemmer and Pat Sommerkamp. Also present were Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison and Wayne Bridges.

Mr. Noll, Chairman, welcomed Pat Sommerkamp as a new member to the Board.

The minutes of the previous meeting of February 21, 1994, were approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

One bid was received for the G.I.S. AM/FM hardware in the amount of \$77,345.60 from The Future Now. Motion was made by Mr. Hatfield, seconded by Mr. Hemmer and carried that the bid be accepted subject to a review by the Committee as this is the lowest and best bid.

Bids were received for construction of the water line from the Fidelity property to the City of Taylor Mill. The Staff recommended the alternate bid for a 16 inch line and the lowest and best bid was from Hartig Company in the amount of \$146,134.84. Motion was made by Mr. Hatfield, seconded by Mr. Hemmer and carried that the bid be awarded to the lowest and best bidder.

Bids were received for the Bristow Road Pump Station installation. The lowest and best bid was from Century Construction Co. in the amount of \$43,484.00 and this was approved on motion of Mr. Keeney, seconded by Mrs. Sommerkamp.

The Board reviewed the design of the Ohio River Pump Station and the engineering firm of Black and Veatch was chosen and their estimated cost of the design would be \$420,000.00. This was approved on motion of Mr. Keeney, seconded by Mr. Hemmer. Mr. Hemmer and Mr. Hatfield will attend some of the meetings with the engineer during the design of the pump and intake station.

Mr. Willaman presented a list of projects that the District needs to construct in the near future and these will be part of the application for the rate increase to be filed this month. This list was approved on motion of Mr. Hatfield, seconded by Mr. Hemmer and duly carried.

Mr. Willaman suggested that the Rules and Regulations for payment of bills be amended. He suggested that the District omit the reminder notice and that customers be given 36 days to pay the bill and then a 10 day shut off notice be sent. This was approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

Mr. Noll was appointed to replace Mr. Bach on the Committee to oversee the Sub District B and possibly Sub District C.

Mr. Willaman announced that the representative from the Farmer's Home Administration wishes to meet with the District Officials on March 29, at 1:00 P.M.. Some documents are to be signed for the loan and the Chairman was authorized to sign these documents on motion of Mr. Hemmer, seconded by Mr. Keeney.

The Board decided to send a certificate of recognition to Wayne Bach for his faithful service on the Board of Commissioners for the past 4 years.

A discussion was held concerning public relations and Mev Wilson may attend some meetings and work closely with the Board and Staff.

Mr. Willaman stated that he will attend a Fiscal Court Meeting concerning improvements to Grand Avenue in the Taylor Mill area. The District's 24 inch main may be relocated and the question has arisen as to who will pay to move the water line. Mr. Willaman will discuss this with the Fiscal Court.

Mr. Willaman reported that he is sending a letter to the Campbell County Water District requesting that it purchase all of its water from the Kenton District pursuant to the contract and giving them a deadline to respond.

A discussion was held concerning the lease and negotiations for the property on Mary Laidley Drive. Mr. Bridges stated that the attorney for the owner of the property has the lease and hopefully will sign it in the near future.

Mr. Willaman discussed the proposal to make an offer to purchase the property in the Erlanger area for a new warehouse consisting of approximately 10 3/4 acres.

Motion was made by Mr. Hatfield, seconded by Mr. Hemmer and carried that the District pay the bills for the month of February totalling \$818,896.86.

The next regularly scheduled meeting will be April 18, 1994, at 4:00 P.M..

There being no further business the meeting adjourned.


CHAIRMAN


SECRETARY

April 18, 1994

A regular meeting of the Kenton County Water District No. 1 was held this date. Present were Commissioners J. Michael Noll, Steve Hatfield, Michael Hemmer, Dennis Keeney and Pat Sommerkamp. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn, Wayne Bridges and Mev Wilson.

The minutes of the previous meetings of March 8, 1994 and March 14, 1994, were approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

The Staff reported that the GIS Contract was lowered to \$71,395:00 which is below the Engineer's estimate.

A Mr. & Mrs. Cahill were present concerning water damage to their property and about 6 or 7 other homes on McAlpin and James Avenues in Erlanger. A discussion was held concerning the damages and the fact that our insurance company has denied any responsibility. It was decided that the Board will contact our insurance company or an independent adjusting company to investigate and report back to the Board as to the extent of the damages.

Bids were received for a particle counter and the lowest and best bid was \$14,410:00 and the bid was accepted on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

Mr. Willaman reported on the SCADA Conversion to radio and one bid was received in the amount of \$204,494:00 which was under the Engineer's estimate. The Board requested that the Staff determine why others did not bid and also check into who did the Sanitation District's system. The contract was awarded on motion of Mr. Keeney, seconded by Ms. Sommerkamp.

A proposed contract to make an offer to purchase the Long property in the Erlanger area was presented. It was suggested that the contract be contingent on all utilities being available at the property line at a reasonable cost and that a satisfactory GEO Technical investigation be made and that the plat be approved. Mr. Willaman was authorized to sign the contract. This was approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

A discussion was held concerning the possible sale of the Dudley Tank site now that the tank has been removed. The property will be appraised. There is some agreement with a Mr. Foltz some time ago that he may have the first refusal and this will be checked out further.

A discussion was held concerning the financing of Sub District B. A Resolution was presented from the Farmer's Home Administration in the amount of \$1,621,000:00. The Chairman and Secretary were authorized to sign this Resolution on motion of Ms. Sommerkamp, seconded by Mr. Hatfield and carried 5 to 0.

The CDBG Grant Application for Sub District B was discussed and

where Federal money is available, there will be help for low and moderate income for their tap in fees. To initiate this project, there will be free service for tap ins to such residents with or without a grant, it was decided by the Board but within this project only. There will also be 120 feet free to initial residents only if they are low income. This was approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

The City of Park Hills requested help from the District in replacing a water line on St. Joseph Lane for better fire flow. This was discussed and the Board agreed to discuss the matter further with the City and may participate when the bids have been received. This was approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Mr. Willaman suggested that the District up-size a water line to 16 inches in the Deer Chase Subdivision along Narrows Road. The Water District would pay the difference in the cost of the larger main. The Engineer would be Mr. Erpenbeck who represents the developer. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

Mr. Willaman reported that the Safe Drinking Water Bill was pending in Congress. Letters will be sent to Senators Ford and McConnell. This was approved on motion of Mr. Hemmer, seconded by Ms. Sommerkamp.

Mr. Noll reported on a meeting with Judge Middleton and some Officials from Campbell County Water District and Judge Paul recently. A discussion was held concerning a meeting with Newport Officials at some time in the near future to discuss the possible acquisition of the Newport Waterworks. Campbell County has indicated that it will be purchasing one-half its water from Kenton County from May to October.

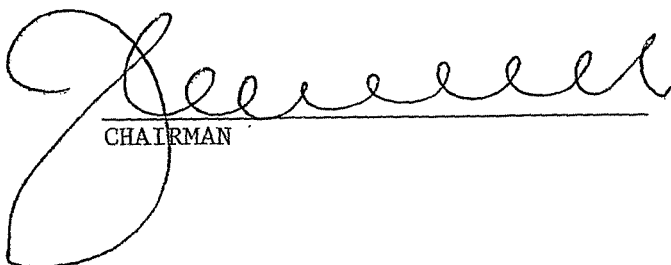
A discussion was held concerning a Public Relations Committee. Motion was made by Ms. Sommerkamp, seconded by Mr. Keeney that this Committee be approved. The appointees will be Mr. Noll and Ms. Sommerkamp.

A discussion was held concerning the Ohio River Pump Station and the Committee suggested that architect, Larry Humpert, help with the conceptual drawing of the new building and its design.

The next regularly scheduled meeting shall be held on May 17, 1994, at 4:00 P.M.

The expenses for the month of March total \$818,896.86 and were approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

There being no further business, the meeting adjourned:


CHAIRMAN


SECRETARY

May 17, 1994

A regular meeting of the Kenton County Water District No. 1 was held this date. Present were Commissioners J. Michael Noll, Steve Hatfield, Michael Hemmer, Dennis Keeney and Pat Sommerkamp. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn and Wayne Bridges.

The minutes of the previous meeting of April 18, 1994, were approved on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

A Mrs. Cahill was present concerning water damage to her home. The District requested the insurance adjuster to inspect the damage to the various homes damaged by this water main break. Mrs. Cahill stated the adjuster was only there five minutes and did see one other home owner briefly. Mr. Connett was directed to contact the insurance adjuster and see if he had inspected all the damage and was ready to make a recommendation to the Board. The possibility of obtaining insurance from another company in the future was also discussed. Some owners apparently have collected money from their homeowner's insurance company. Mr. Hatfield suggested that if any payments are made that the mortgagee of the house be included on the check for any damage to the home.

A Mr. & Mrs. Baker wrote to the Board concerning a large bill and apparently a leak somewhere or a malfunctioning meter. The Board directed that management pay the claim.

Bids were received for construction for the access road to the Bromley Tank. The lowest and best bid was from Paul Michels in the amount of \$115,928.50. This was awarded on motion of Mr. Keeney, seconded by Mr. Hatfield.

Bids were received for a fork lift and the lowest and best bid was from Hy Tek in the amount of \$17,890.00. This was approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

Mr. Willaman stated that the proposed main on Highland Pike from Werner Drive to Reeves Road will not be constructed at this time. No action was taken.

Mr. Harrison reported that a GIS Employee will be needed in the near future. A discussion was held concerning the hiring of a person as an independent contractor. No further action was taken at this time.

Mr. Willaman reported that Cindy Campbell will be leaving and it will be necessary to hire a Human Resource Administrator.

The Dudley Tank Property was appraised for \$75,000.00. The water minutes from 1989 indicate that a neighbor, Mr. Foltz, was to have an opportunity to purchase the property. The Board decided to obtain a second appraisal on motion of Mr. Hatfield, seconded by Mr. Hemmer.

Mr. Willaman reported that he has had discussions with the Newport City Manager concerning the acquisition of the water works system in Newport. Requests for proposals are being prepared for an evaluating company and also for an engineering company. The cost of this will be split between the District and the City. The Sub Committee will review the request for proposals and the Board will tour the Newport plant facilities in the near future.

Mr. Willaman reported that the owners of the Long property rejected the District's offer of approximately \$42,500.00 per acre. They are asking \$67,500.00 per acre. It was discussed that perhaps a new appraisal should be obtained and also additional sites should be looked at. Perhaps the Tri-County Economic Development Committee could have suggestions concerning a possible site for this new warehouse.

Ms. Sommerkamp reported on the meeting of the Public Relations Sub Committee. The Board felt that a citizens advisory group may be helpful and some members of the District may travel to Lexington and see how they have set up such groups.

The engineers have reported a higher cost for the Ohio River Pump Station due to a soil problem. The Sub Committee will review this.

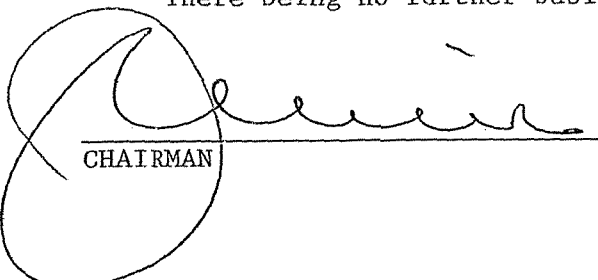
The bills for the month of April totalling \$812,697.41 were approved on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

Mr. Willaman reported that the Rate Case Hearing will be before the Kentucky Public Service Commission in Frankfort on September 13 and a prehearing conference will be held on September 8, 1994.

Mr. Harrison reported that the CDBG Application is being evaluated and there will be a site visit on May 26 for Sub District B. Mr. Willaman reported that the schedule is to begin construction by November 1, 1994 and complete same by May 1, 1995.

The next regularly scheduled meeting shall be June 6, 1994, at 4:00 P.M.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

July 19, 1994

A regular meeting of the Kenton County Water District No. 1 was held on this date at 4:00 P.M. at the District Office. Present were Commissioners J. Michael Noll, Steve Hatfield, Michael Hemmer, Dennis Keeney and Pat Sommerkamp. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn, Mev Wilson and Wayne Bridges.

The minutes of the previous meeting of June 6, 1994, were presented and approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney.

Various correspondence was reviewed. TANK has requested a waiver on the fee for the antenna on the water tower. A discussion was held as to whether TANK could provide advertising for the Water District on the buses. No decision was made at this time.

Mr. Willaman stated that TAMI has prepared a contract with Page Net on the tower at Kenton Lands Road. This was approved on motion of Mr. Hemmer, seconded by Mr. Hatfield.

The District received correspondence from the Sanitation District requesting interest on some funds that were a little late in being paid over to the District recently for collection of Sanitation bills with the Water bills. A discussion was held concerning a contract with the Sanitation District concerning the escrow and payment of funds. This will be reviewed by Mr. Willaman with the Sanitation Officials.

A discussion was held concerning the type of river intake structure to be built. Ms. Joslyn and Bob Gabbard traveled to several sites recently and recommended that one be on the shore instead of a bridge out into the river.

Ms. Joslyn stated that the District needs to construct a new facility at the Licking River Pump Station for a Potassium Permanganate Feed System. The estimated cost of this structure and equipment is \$250,000.00. The same was approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney.

Mr. Harrison reported that there has been a slip on Mooch Road, near the 36 inch water main from Ft. Thomas. This needs to be repaired and the lowest bid was from Langenheim and Thomson Company in the amount of \$21,885.00. This was approved as the best and lowest bid on motion of Mr. Keeney, seconded by Mr. Hemmer.

Mr. Willaman suggested that the District drop Delta Dental and add Dental Insurance to the current medical plan as this will save some money. The Committee will review this and report back to the Board.

Mr. Harrison reported that the District must have a Cross-connection Control Policy. After a discussion, Mr. Harrison was directed to draft a proposed letter to several of the high risk customers concerning cross-connection control.

Mr. Harrison reported that an application should be filed for

a grant or loan for Sub-District C. Some of the roads that may be included in this next project are Ky. 17 from Spillman Road to the Pendleton County line, possibly Green Road and U.S. 25 from Bracht to Walton and also Staffordsburg Road, Spillman Road and Hempfling Road. The Committee will meet concerning this project and file an application with the Farmers Home Administration and this shall be held on July 25, 1994.

Mr. Willaman reported that the District has received \$168,000.00 in Community Development Block Grant for Sub-District B.

Mr. Willaman reported that the Consolidation Feasibility Study Report from the ADD District has been received concerning the possible consolidation of 11 utilities.

A discussion was held concerning the acquisition of the Newport Water Works. The Valuation Report was received today and will be reviewed by the Board members. A tour of the Newport facilities will be held in the near future.

Mr. Willaman reported that a new appraisal has been obtained for a possible warehouse site at the cost of \$54,845.00 per acre. The owner is asking \$67,500.00 per acre and the first appraisal was \$42,500.00 per acre. The Committee will study this further.

A new appraisal was obtained on the Dudley Tank Site and it was same as the first, \$75,000.00. Mr. Willaman will negotiate with Jerry Foltz who was promised first option to purchase this property several years ago.

The City of Park Hills took bids for the St. Joseph Lane construction and the lowest and best bid was from Lonkard Construction in the amount of \$37,400.00. The District has agreed to pay one-half this amount and this was approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

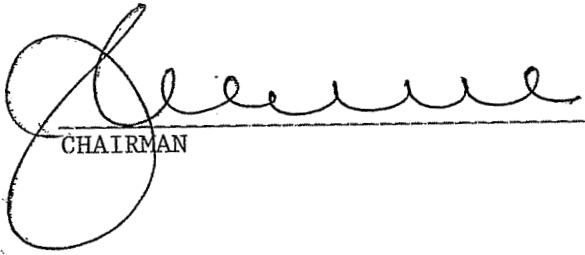
Mr. Harrison reported that Ryland Heights has obtained a Community Development Block Grant for \$891,000.00 to construct a water line in the Ryland Heights area. The Ryland Lakes County Club is to provide a portion of the money and would like to have the Water District obtain a loan for their share of the water line. It was requested that the representative of Ryland Lakes Country Club come to the next meeting to discuss this matter.

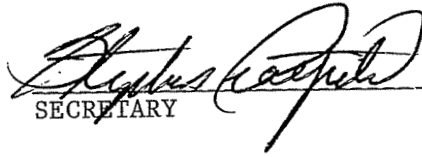
The next meeting will be held July 28th at the Ft. Thomas Treatment Plant and the August meeting will be held on August 16, 1994, at the Water District Office.

Mr. Connett presented the bills for the month of June totalling \$760,108.01 and same were approved on motion of Mr. Hemmer, seconded by Ms. Sommerkamp.

Mr. Bridges reported that he has heard from the District's Insurance adjuster concerning the damage to the 7 owners back on March 13 in the Erlanger area on James Avenue and McAlpin Avenue. The adjuster has made certain recommendations concerning a settlement with the property owners and Mr. Bridges will attempt to negotiate reasonable settlements.

There being no further business, the meeting adjourned:


CHAIRMAN


SECRETARY

August 16, 1994

A regular meeting of Kenton County Water District No. 1 was held on this date at 4:00 P.M. Present were Commissioners J. Michael Noll, Steve Hatfield, Dennis Keeney and Pat Sommerkamp. Mr. Hemmer was absent. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn, Mev Wilson and Wayne Bridges.

The minutes of the previous meetings of July 19 and July 28, 1994, were presented and approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Mr. Tom Ratzki, of Black & Veatch, was present and discussed the Ohio River Pump Station design. There will be a shore intake built and the concept will be prepared by Larry Humpert. Engineers will keep the Board advised as this matters progresses.

Mr. Ken Palisin, planner with the Northern Kentucky Area Development District, was present to discuss the Ryland Heights project. He stated that the CDBG Grant Funds have been approved and requested that the District issue bonds to help with the project in the amount of \$1,781,500.00. There will be a surcharge to the residents of Ryland Heights and a larger surcharge by the residents of Ryland Lakes. The financing was approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

A discussion was held concerning the possible acquisition of the Newport Water Works. Newport may have to increase its rates in the future and will spend money for improvements. Mr. Jim Sparrow, of Rankin, Rankin & Co., was present and discussed the matter with the Board from a financial point of view. The Committee reported on its findings to date. A special meeting will be held on August 30, 1994, at 4:00 P.M. to discuss the Newport acquisition and the design of the Ohio River Pump Station.

A project known as Sub District C was discussed. The Board approved the filing of an application with the Farmers Home Administration for a loan to construct this project. This was approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Mr. Willaman reported that Mr. Foltz was not interested in purchasing the property at 110 Dudley Pike for the appraised price. Someone else is interested in the property. It was decided to advertise for bids to sell this property.

Mr. Willaman presented Fiscal Court Resolution No. 94-32 and a Cooperation Agreement with the Fiscal Court for the CDBG Grant Funds. These were approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Mr. Hatfield suggested that the Board thank Wayne Bach for all of his hard work on Sub District B.

Sub District B was discussed and motion was made by Mr. Hatfield, seconded by Mr. Keeney and carried that the District file with the PSC for a certificate to construct Sub District B and for approval to charge the required surcharge and for all other authority needed from the PSC

associated with the Sub District B project:

Motion was made by Mr. Hatfield, seconded by Ms. Sommerkamp and carried that we apply to the PSC for a certificate to construct the new Ohio River Pump Station at an estimated construction cost of approximately \$11,000,000.00 and for approval to finance the construction by issuing Revenue Bonds estimated in the range of \$14,405,000.00 and approval of an additional rate increase for approximately 12.1% for \$1,778,000.00 or whatever it takes to sufficiently cover the additional charges associated with the Ohio River Pump Station.

Mr. Harrison reported on the progress on the Cross Connection Program. He and Merv Wilson will draft correspondence to the users in the near future.

Mr. Willaman stated that the Board could increase its rates effective October 1 as the PSC may not rule on this until early 1995. This will be discussed further.

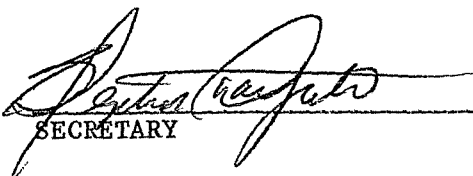
Mr. Harrison reported that Sub District B has 153 sign-ups and the goal was to reach 165. However, the Board accepted this amount and changes in the financing of the project. It was decided that new sign-ups will pay the full amount of the tap-in fee and the project will proceed. This was approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

Mr. Willaman presented the bills for the month of July, totalling \$941,536.80. Same was approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

The next regular scheduled meeting will be September 20, 1994, at 4:00 P.M.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

October 18, 1994

A regular meeting of the Kenton County Water District No. 1 was held this date at the District Office. Present were Commissioners J. Michael Noll, Pat Sommerkamp, Dennis Keeney, Steve Hatfield and Michael Hemmer. Also present were Dennis Willaman, Richard Harrison, Bari Joslyn, Mav Wilson and Wayne Bridges.

The minutes of the previous meetings of September 20, 1994, and September 28, 1994, were presented and approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Tom Ratzki of Black & Veatch was present and gave a report on the design of the Ohio River Pump Station. It was discussed and agreed that the plans would be scaled down from 80 to 60 million gallons per day on motion of Mr. Hemmer, seconded by Mr. Hatfield.

Motion was made by Mr. Hemmer, seconded by Mr. Hatfield and carried that the Board go into Executive Session to discuss a possible lawsuit with Campbell County. After the Executive Session, motion was made by Mr. Hemmer, seconded by Mr. Hatfield and carried that the Board go back to regular session.

Mr. Harrison presented the program for eliminating the cross-connections and was directed to move forward with this program as outlined on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

Mr. Willaman reported that a developer wants to build a subdivision in southern Kenton County off U.S. 25 and water would be served from the Bullock Pen Water District. It was decided on motion of Mr. Hatfield, seconded by Mr. Hemmer and carried that developer construct the water mains to the standards of Kenton County Water District and that the developer also get approval from the Fiscal Court to construct this line.

The bids for distribution materials were received and the Staff recommended the lowest and best bids which were approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

Mr. Harrison presented an amended contract concerning the Ryland Water Main Extension Project. The amended contract was approved provided Ryland Country Club pays the District for engineering services if they decide to pull out of the project. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

County Judge Executive, Clyde Middleton attended this portion of the meeting and the Campbell County lawsuit was discussed with the Judge and also the possible acquisition of the Newport Water System. The Judge pointed out that Kenton County has bent over backwards to accommodate Campbell County. A letter was received from Newport rejecting the Kenton County Water District's offer to purchase the system of Newport. A letter was also received from Campbell County Water District that it will soon be ceasing to purchase water from Kenton and will go back on the Newport Plant for 100% of its water in the near future.

The next meeting was scheduled for November 2, at 3:00 P.M. and another meeting on November 22, at 4:00 P.M.

Mr. Harrison reported that the construction bids for Sub District B will be received on October 28.

Mr. Noll stated that he will be out of town for a few days and Ms. Sommerkamp will be spokesperson for the Board during his absence and will confer with Mr. Hemmer and Mr. Hatfield about pending matters.

Mr. Bridges reported that he had met with Attorney Klette concerning the Hoefinghoff suit. The Board directed Mr. Bridges to contact Mr. Foltz to see if he is interested in purchasing the property and inquire as to what he would be willing to pay. The matter hopefully can be resolved in the near future whereby all the property will be sold and the Hoefinghoff suit would be resolved.

Mr. Willaman presented the bills for the month of September totalling \$907,331.15. Same were approved on motion of Mr. Hatfield, seconded by Ms. Sommerkamp.

There being no further business, the meeting adjourned at approximately 8:00 P.M.


CHAIRMAN

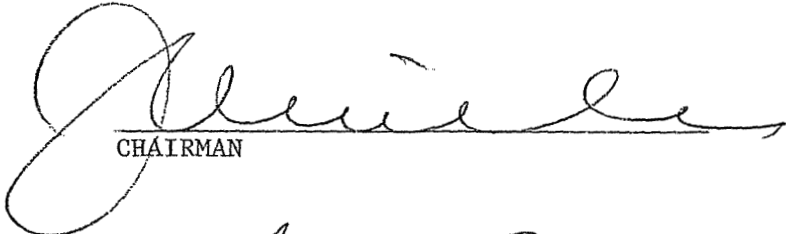

SECRETARY

November 2, 1994

The Kenton County Water District No. 1 met on this date at the District Office at 3:00 P.M. Present were Commissioners, J. Michael Noll, Steve Hatfield, Dennis Keeney, Michael Hemmer and Patricia Sommerkamp, together with Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison, Mev Wilson and Wayne Bridges.

Mr. Willaman presented the bids for Sub District B construction. The lowest and best bid for Phase I was from Spartan Construction Company in the amount of \$667,405.00. The Staff recommended this as the lowest and best bid and it was approved by the Board unanimously on motion of Mr. Hatfield, seconded by Mr. Keeney.

The bids for Phase II were received and the Staff recommended the lowest and best bid to Shirley Coomer in the amount of \$574,286.46. This was approved unanimously by the Board on motion of Mr. Keeney, seconded by Ms. Sommerkamp.



CHAIRMAN

ATTEST:



SECRETARY

~~KENTON COUNTY WATER DISTRICT NO. 1~~
Bid Tabulation Sheet for
8" and 16" Water Main Ext. - Subdistrict B - Phase 1
Bid Opening: October 28, 1994

CONTRACTOR	TOTAL BASE BID
Spartan Construction	\$667,405.00
Larry Smith Contractor	\$674,407.00
Smith Contractors	\$677,184.00
Howell Contractors	\$685,867.00
Kinder Construction	\$694,909.27
Schweitzer Construction	\$832,488.00
Smith & Brown	\$835,423.00
MSC, Inc.	\$840,683.00
Keeney, Inc.	\$894,406.00

KENTON COUNTY WATER DISTRICT NO. 1
Bid Tabulation Sheet for
8" Water Main Ext. - Subdistrict B - Phase 2
Bid Opening: October 28, 1994

CONTRACTOR	TOTAL BASE BID
Shirley Coomer	\$ 574,286.46
Smith Contractors	\$ 876,384.00
Kinder Construction	\$ 957,342.96
Spartan Construction	\$1,020,036.00
Keeney, Inc.	\$1,117,600.00
Smith & Brown	\$1,320,966.00
Schweitzer Construction	\$1,706,316.00

November 2, 1994

The Kenton County Water District No. 1 met on this date at the District Office at 3:00 P.M. Present were Commissioners, J. Michael Noll, Steve Hatfield, Dennis Keeney, Michael Hemmer and Patricia Sommerkamp, together with Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison, Mev Wilson and Wayne Bridges.

Mr. Willaman presented the bids for Sub District B construction. The lowest and best bid for Phase I was from Spartan Construction Company in the amount of \$667,405.00. The Staff recommended this as the lowest and best bid and it was approved by the Board unanimously on motion of Mr. Hatfield, seconded by Mr. Keeney.

The bids for Phase II were received and the Staff recommended the lowest and best bid to Shirley Coomer in the amount of \$574,286.46. This was approved unanimously by the Board on motion of Mr. Keeney, seconded by Ms. Sommerkamp.

Mr. Willaman reported that it is necessary for the District to sign an easement to Union Light, Heat & Power Co. for facilities at the Ft. Thomas Treatment Plant. This was approved on motion of Mr. Hemmer, seconded by Mr. Hatfield and the Commissioners were authorized to sign the easement.

Mr. Willaman reported that two employees have been terminated and he plans to hire replacement employees. After discussion, this was approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney to replace the two employees.

Mr. Willaman reported that it was necessary to hire an auditor for the 1994 audit. He recommended that Rankin, Rankin & Co. be employed as they have done a good job and are working on the ongoing rate cases. This was approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

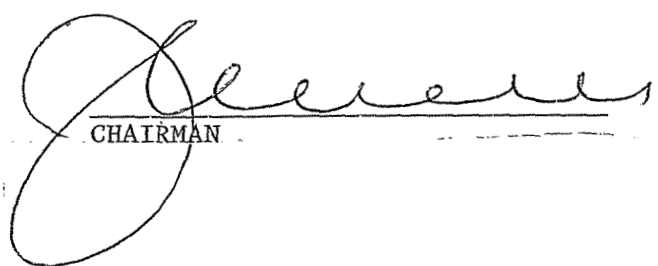
On motion of Mr. Keeney, seconded by Mr. Hemmer and carried the District will employ Will Lindner for contract services in connection with the CDBG Grant for Sub District B.

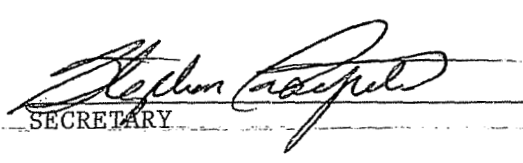
The Board discussed their mission statement and goals for the District. Some of the items discussed were the pending lawsuit against Campbell County and the need to construct a new water treatment plant in the next few years. This may be located in Boone or Gallatin County and Judge Middleton will meet with Judge Lucas about this. Mr. Noll will discuss it with Judge Middleton.

Some of the goals were revised and they were reduced to a smaller number with key words utilized. Mr. Harrison reported that Black & Veatch is presently studying the future needs of Boone County and perhaps the District needs to have a study performed for the District's future needs also.

Motion was made by Mr. Hemmer, seconded by Mr. Hatfield and carried that management consult with a consulting company concerning the estimated cost of a water treatment plant, both with and without Campbell County as a customer.

There being no further business, the meeting adjourned and the December meetings will be held on December 7, at 3:00 P.M. and December 20, at 4:00 P.M.


CHAIRMAN


SECRETARY

November 22, 1994

A regular meeting of the Kenton County Water District was held on this date at 4:00 P.M. at the District Office. Present were Commissioners J. Michael Noll, Dennis Keeney, Pat Sommerkamp, Steve Hatfield and Michael Hemmer. Also present were Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison, Mev Wilson and Wayne Bridges.

The minutes of the previous meetings of November 2, 1994 and October 18, 1994, were presented and approved on motion of Mr. Hemmer, seconded by Mr. Hatfield.

Mr. Willaman discussed the possibility of obtaining a CDBG Grant to serve 10 homes on Amsterdam Road in Villa Hills. He is continuing to work on this with the Northern Kentucky Area Development District.

Tom Ratzki, of Black and Veatch, was present and discussed the Ohio River Pump Station design. He also discussed the possible new treatment plant that may be needed in the future by the District. He will study Boone County and Campbell County. He was directed to proceed on motion of Mr. Hemmer, seconded by Ms. Sommerkamp with the yellow portion of the chart which will be approximately \$18,000 in engineering costs and with the green portion of the chart which is about \$54,000.

Mr. Willaman reported that the #4 Pump at the Ohio River Pump Station needed to be repaired and was done so as an emergency measure. This was approved on motion of Mr. Hemmer, seconded by Mr. Hatfield.

Mr. Willaman reported that he had received a communication from Mayor Guidugli of Newport suggesting a meeting to discuss a compromise of the lawsuit against Newport. Mr. Noll will contact the Mayor and advise that he is willing to discuss the acquisition of the Newport system. He is willing to listen and relay to the Board any offer they may have.

Mr. Willaman received a communication from the Campbell County Water District advising that they would turn off the water from Kenton County on October 31, and would proceed to buy from Newport until next May. Mr. Willaman was authorized to send a letter to Campbell County Water District advising that this is unsatisfactory with Kenton County and they are expected to honor their contract and purchase all of their water from Kenton County.

Mr. Noll reported that he had received a call from a representative of the Northern Kentucky Chamber of Commerce offering to meet and discuss the lawsuit with Campbell County. Mr. Noll will contact the Chamber representative and discuss the matter and invite him to any meeting with the Campbell District.

Mr. Hemmer reported that the Committee is studying the possible acquisition of the Long property for a warehouse site. They plan to offer \$57,000 per acre and divide the cost of moving the dirt and with the Longs providing the utility service to the site.

Mr. Bridges reported that he had discussed the possible sale of the property at 110 Dudley Pike to Jerry Foltz. The Board felt that the property should be sold as one parcel to Mr. Foltz and he then sell the small portion to Hoefinghoff. Mr. Bridges stated that this should be done simultaneously. Perhaps a contract should be obtained from all parties involved.

Mr. Willaman stated that the Board should discuss an investment policy for the District. ~~No action was taken at this time.~~ The Board also discussed an ethics policy and reviewed a proposal and will study it further.

The Mercer Company recommended a proposal for payroll changes and this was discussed by the Board but no action was taken at this time.

Mr. Willaman presented a proposed 1995 budget for the O & M expenses and for capital projects. No action was taken at this time.

Mr. Willaman reported that the Wilson Road and Sandman Drive projects have been completed and stated that an assessment hearing needs to be scheduled with the Judge Executive for the final assessments. Both projects came in with bids higher than the original estimates, but the Board determined that the owners should pay only the amount of the original proposed assessment. This was approved on motion of Mr. Keeney, seconded by Mr. Hemmer. Mr. Bridges will present this to the Judge Executive for a hearing.

Mr. Willaman stated that an easement had been obtained from the Knuckles family near the Fidelity property for the water main. The Knuckles have agreed to pay an assessment for their project even though their property does not front on the water main. An agreement will be entered into between the District and the Knuckles concerning the easement and payment of their assessment. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

Mr. Willaman stated that the Kentucky Highway Department will be redesigning the intersection of Ky. 17 and Shaw Road in Independence. The Water District needs to construct a 16 inch main in this area to replace the 8 inch main at present. The cost to redo this intersection with a new water line is approximately \$24,000. This was approved on motion of Mr. Hemmer, seconded by Mr. Hatfield.

Mr. Hatfield asked if extra funds from Sub District B could be used to serve residents along U.S 25 near Bracht. Mr. Harrison will see the Bullock Pen Water District and the contractor concerning this and it must be approved by the Farmers Home Administration.

Motion was made by Mr. Keeney, seconded by Mr. Hemmer that the Board go into Executive Session to discuss the General Manager's contract. After the Executive Session, motion was made by Mr. Hatfield, seconded by Ms. Sommerkamp that Mr. Willaman be offered a 2 year contract with a 10% raise the first year, and his salary for the second year will be determined later.

Mr. Bridges reported to the Board about correspondence he had received from the attorney for Bill Erpenbeck concerning who shall pay for relocation of the water line through the former Scott property on Highwater Road. The Water District took over this water main from Covington but there is no recorded easement for the water main and Erpenbeck wishes for the Water District to pay for the cost of moving the water line. Mr. Bridges will negotiate with Mr. Erpenbeck's attorney concerning this.


The expenses for the month of October 1994, were approved on motion of Mr. Hatfield, seconded by Mr. Hemmer in the amount of \$744,958.59.

The next meetings will be on December 5, at 3:00 P.M. and December 20, at 4:00 P.M.

There being no further business, the meeting adjourned at approximately 8:50 P.M.



CHAIRMAN



SECRETARY

January 17, 1995

A regular meeting of the Kenton County Water District No. 1 was held on this date. Present were Commissioners, J. Michael Noll, Dennis Keeney, Michael Hemmer, Pat Sommerkamp and Steve Hatfield, together with Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison, Mev Wilson and Wayne Bridges.

The minutes from the previous meeting of December 20, 1994, were read and approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

Mr. Willaman received a request from the Fiscal Court concerning the possibility of serving 6 residents on DeCoursey Pike. Mr. Willaman said the cost was very expensive and would be around \$160,000 and he so reported to the Fiscal Court.

Tom Ratzki, of Black & Veatch, was present and reported on the progress of the plans for the Ohio River Pump Station.

Attorney Roger Peterman was present concerning the interim financing for Sub District B. He presented a resolution to issue \$1,625,000.00 in bonds and this was approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney for a Series A Bond Resolution.

A resolution was approved for the Anticipation Notes in the same amount on motion of Mr. Keeney, seconded by Mr. Hatfield.

Mr. Willaman presented the Operations Budget for 1995 and the Capital Budget which was discussed at length. Mr. Willaman stated that some items may need to be cut from the Capital Budget.

Mr. Bridges reported on the Ethics Policy. The Attorney General has issued a formal opinion that special districts such as the Water District are not covered by the new State Ethic's Law. The only persons who may be covered would be the Board Members who are appointed by the Fiscal Court.

Mr. Willaman reported that he had received a request for water service at 719 Highwater Road. The Water District has a 20 inch concrete main in this area which is a transmission line and it would be very expensive and difficult to tap this main for a residential customer. Mr. Willaman will ask the City of Bromley if the customer could be served off the City's 8 inch water line in this area.

Mr. Willaman suggested that the Board may wish to consider a long range plan to bill monthly instead of quarterly. This would save a lot of time and the Board should commence using touch read meters if they plan to bill monthly. The Board indicated this may be the best procedure for the future.

Mr. Willaman reported that the Ft. Thomas Treatment Plant building had received a landmark award from the AWWA. An open house and celebration will be planned to commemorate this award.

Mr. Willaman reported that plans were moving ahead with the Cellular One Lease of the tank facility and the time has been extended to March 31, 1995.


The bills for the month of December 1994, were approved in the amount of \$813,340.97 on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.


Mr. Willaman reported that a meeting has been scheduled with Long heirs on Friday concerning the possible purchase option on their property.

Mr. Willaman stated that it is necessary to adopt rates for Sub District B. Accordingly a resolution was adopted being Resolution No. 1-1-95 setting the rates for Sub District B. Motion was made by Mr. Hatfield, seconded by Mr. Hemmer that the rates be approved and motion carried unanimously.

The next meetings will be on February 20, March 27 and April 17, 1995.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

February 13, 1995

The Kenton County Water District No. 1 Board of Commissioners met on this date at 4:00 p.m. at the District Office. Present were Commissioners J. Michael Noll, Dennis Keeney, Patricia Sommerkamp, Steve Hatfield and Michael Hemmer. Also present were Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison, Mev Wilson and Wayne Bridges.

The minutes of the previous meeting of January 17, 1995, were read and approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

Bids were received for new service installations. The Staff recommended Dan F. Vogel, Inc. as the lowest and best bid in the amount of \$145,900.00. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney.

Mr. Ratzki, of Black and Veatch, was present and reported on the plans for the Ohio River Pump Station. The bids will be received on March 14, 1995.

The Board discussed the future growth needs of the District. The engineers will have a report to the Board by next month.

Mr. Willaman reported that he has been contacted by representatives from Ludlow and Bromley about the rate increase and their water system.

Mr. Willaman reported that he has been asked to attend the Bromley City Council meeting on March 4, at 9:00 a.m. to discuss serving Kenton County residents on Highwater Road using the Bromley 8" water main in front of their houses.

A resolution was adopted appointing any one Commissioner to approve bills as they are submitted for payment for the construction of Sub District B with Farmers Home Administration Funds. This was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

Mr. Willaman inquired as to whether Rankin, Rankin & Co. was to do the audit for 1995 and this was approved by the Board on motion of Mr. Hatfield, seconded by Mr. Hemmer.

Mr. Willaman reported that bids will be received on February 16, 1995, for the potassium permanganate feed system building, the alteration to the sludge handling operation at the TMTF and purchase of some vehicles. The Board will meet on February 22, 1995, at Noon to review these bids.

Mr. Willaman reported that the Ida Spence Tank painting bids will be received in March. The Board appointed Commissioners Hatfield and Noll to review and approve the bids on motion of Mr. Hemmer, seconded by Mr. Keeney.

Mr. Willaman reported that the TANK Management has requested to be exempted from paying a monthly charge for their radio antennas on the Barrington Water Tower. A discussion was held as to whether Tank should be exempted or whether advertising on the buses could be obtained in exchange for the antenna. Ms. Sommerkamp suggested that since 20% of TANK's income is from revenues and 80% from the government, that perhaps TANK should be charged 20% of the normal charge for the monthly antenna installation. Mr. Noll and Mr. Willaman will negotiate with the TANK Management and report back to the Board.

Mr. Willaman is planning a business after hours session at the Ft. Thomas Treatment Plant with the Chamber of Commerce.

A tele-conference will be held on March 9, 1995, and some Commissioners plan to attend.

The AWWA Conference will be held in Anaheim, California from June 17 to 22 and some of the Board Members may attend.

The Board set April 24, 1995 at 3:00 p.m. as a long-range planning meeting.

Mr. Willaman reported that Sub District R involving Ryland Heights is being discussed with the attorneys and Bond Counsel. The District plans to issue bonds for the project but PSC approval may be required and Mr. Willaman will attempt to resolve any problems with this project.

Mr. Willaman reported that a meeting was held recently with the Long heirs and others about the grading necessary for the possible purchase of the Long property. The Committee will meet again concerning this on February 20.

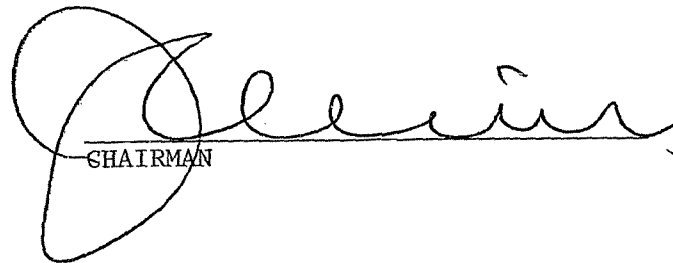
The Operations & Capital Budgets for 1995 were discussed and approved on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

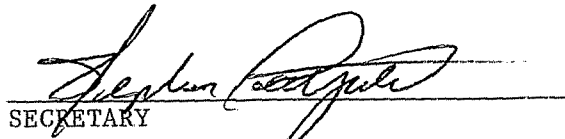
Mr. Willaman reported that he would still like to consider monthly billing sometime in the future, but the Sanitation District indicated it is not interested in monthly billing at this time.

The operation and maintenance expenses were presented for the month of January 1995, totalling \$704,236.16. Same were approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

The next regular meeting will be held on March 27, 1995 at 4:00 p.m.

There being no further business the meeting adjourned.


CHAIRMAN


SECRETARY

March 27, 1995

A regular meeting of Kenton County Water District No. 1 was held this date at 4:00 P.M. at the District Office.

Present were Commissioners J. Michael Noll, Dennis Keeney, Pat Sommerkamp, Steve Hatfield and Michael Hemmer. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn and Wayne Bridges.

The minutes of the previous meetings of February 13, February 22 and March 10, 1995, were read and approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

Larry Gaddis and Ed Koval from Black & Veatch were present. Mr. Koval presented the Demand Projection Memorandum for future water sales. The Commissioners will study this report further.

Mr. Gaddis reported that 10 bids were received for the Ohio River Intake Station. The low bid was from DeBra Co., however they withdrew their bid immediately as they had a major clerical error and this is permitted in the specifications. The next lowest bidder is Fru Con Construction Corporation in the amount of \$13,690,000.00. The bid was discussed at great length and motion was made by Mr. Hemmer, seconded by Mr. Hatfield and carried that the PSC be apprised of the bids and that the engineers negotiate with Fru Con to see if there could be a savings in the construction project.

Jim Sparrow was present and reviewed the 1994 Audit Report with the Board.

Mr. Harrison reported on the projects R & RL at Ryland. He has encountered some problems and is working with the engineer and Mr. Honaker to solve these.

Mr. Harrison reported that approximately 50% of the construction in Sub District B has been completed. There will be some excess funds and the line will be extended on Ky. 17 to Gleason Road.

Mr. Harrison reported that Project C is moving forward with the loan application. This will be a project of approximately \$6,000,000 and there will be about \$2,000,000 in upsizing to be paid by the District. The growth projections in the area were discussed also.

The bids for the painting of the Ida Spence Tank were reviewed and the lowest and best bid was from Sam K in the amount of \$182,000. The contract was awarded in this amount to the contractor with the lowest and best bidder on motion of Mr. Keeney, seconded by Mr. Hemmer.

Bids were received to upsize Deerchase Subdivision near Narrows Road. The lowest and best bidder was Jack Gemmer and Sons, Inc. and the lowest bid for upsizing was \$75,901.50 and this was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

The Board received a correspondence from Long's Land Ltd. and their latest proposal. This was reviewed by the Board and motion was made

by Mr. Hatfield, seconded by Mr. Hemmer and carried that the Board cease negotiations concerning the purchase of the property at this time.

A few of the assessments on Warren Avenue are not paid for the annual amount. This was discussed and Attorney Bridges will notify the lienholders of their delinquency, but no legal action will be taken at this time.

Mr. Willaman stated that there was an emergency and he had to repair Pump 2 at the Licking River Pump Station. This was approved as an emergency on motion of Mr. Keeney, seconded by Ms. Sommerkamp.

Mr. Willaman has been meeting with the City of Bromley concerning the District taking over operation and maintenance of the 8 inch water line on Highwater Road. The District will then be able to serve customers on the other side of the roadway. Mr. Willaman will continue to negotiate on this matter.

Mr. Willaman reported that he has contacted the Chamber of Commerce about a possible business after hours meeting at the Ft. Thomas Treatment Plant and he will continue to look into this.

Mr. Willaman stated that the Board should consider the possible purchase of property on U.S. 27 near the Ft. Thomas Treatment Plant. This was referred to the Property Committee for study.

3 Personnel Policies were presented concerning the Retirement Plan, the Employee Assistance Program and the Family and Medical Leave Program. These policies were approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney.

Mr. Bridges presented a proposed deed to Jerry Foltz and Mr. Willaman was authorized to sign this deed on motion of Mr. Hemmer, seconded by Mr. Keeney.

The O & M expenses were presented by Mr. Connett in the amount of \$705,750.03 and these were approved on motion of Mr. Hemmer, seconded by Ms. Sommerkamp.

The next meetings will be held on April 10, 1995, at 4:00 P.M. and April 24, 1995 at 3:00 P.M.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

June 8, 1995

A regular meeting of the Kenton County Water District was held this date at the District Office at 4:00 P.M. Present were Commissioners J. Michael Noll, Dennis Keeney, Patricia Sommerkamp, Michael Hemmer and Steve Hatfield together with Dennis Willaman, Mal Connett, Bari Joslyn, Bill Wulfeck and Wayne Bridges.

The minutes of the previous meeting of May 15, 1995, were presented and approved on motion of Mr. Hatfield, seconded by Ms. Sommerkamp.

Ms. Joslyn reviewed the Chemical bids and the Staff recommended the low bid in each instance except on Polymer. There, the lowest bid was nonconforming and the next lowest bid was recommended as the lowest and best bid. All of this was approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney.

Tom Ratzski, of Black & Veatch, was present and updated the Commission on the contract for the Ohio River Intake Station. The contract will now be awarded to the low bidder since the PSC has approved the rate increase on the Bond Issue.

Mr. Noll reported that he had had a meeting on June 5, with the County Judges of Kenton County and Campbell County and representatives of the Chamber of Commerce and representatives from the Kenton and Campbell Boards.

Motion was made by Mr. Keeney, seconded by Ms. Sommerkamp and approved that the Board go into Executive Session to discuss this lawsuit with Campbell County. Some time later the Board came out of Executive Session on motion of Mr. Hemmer, seconded by Mr. Hatfield

A proposed agreement with Campbell County Water District to discuss a merger was approved. Mr. Bridges and Mr. Willaman will devise the contract as directed by the Board and Mr. Noll was authorized to then sign it on behalf of the Board.

Mr. Willaman reported that only 195 customers had signed up thus far on District C and 136 of these were on U.S. 25, Ky. 17 and Green Road. The Committee will meet concerning this matter on June 12, at 2:30 P.M.

Mr. Willaman suggested that the Board ask the Fiscal Court to apply for a CDBG Grant for Sub District C. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

Mr. Wulfeck discussed customers of the laboratory and the costs and possible purchase of GC-MS. The Board advised that he could go ahead with this purchase and put it in the 1996 Capital Budget.

Mr. Willaman reported on the Main Replacement Program. He stated that bids will be received on June 16, 1995 for new water mains on Leathers Road in Ft. Mitchell. Ms. Sommerkamp and Mr. Keeney were appointed to review and approve the bids and this was on motion of Mr. Hatfield, seconded by Mr. Hemmer.

Mr. Willaman reported on the proposed contract with Ryland Heights concerning water main construction in that area. This will be further reviewed by the Committee and authorized Mr. Willaman to sign on behalf of the District on motion of Mr. Keeney, seconded by Ms. Sommerkamp.

Mr. Willaman reported on insurance changes that would be effective in Kentucky on July 1, 1995 for medical coverage. This will be reviewed later.

A discussion was held concerning what portions of District C may be completed and some roads may have to be dropped as there are insufficient customers signing up.

Mr. Connett reported that the insurance with KALF needs to be renewed on July 1, 1995. This was approved for property and liability insurance on motion of Mr. Keeney, seconded by Mr. Hatfield.

Mr. Keeney reported that his Committee had met with John Walker and recommended that he be employed by the District on a consulting basis on financial matters from time to time. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

Mr. Willaman reported that a draftsman will retire June 30, 1995, and he will be replaced with a GIS draftsman.

The O & M expenses for the month of May 1995 were approved in the amount of \$817,493.31 on motion of Mr. Hemmer, seconded by Ms. Sommerkamp.

Mr. Noll contacted Norm Veatch this date and indicated that Campbell was in favor of a merger and placing the lawsuit on hold and the contract would be effective until the end of this year. Campbell wants to continue purchasing from Newport until the end of the year.

The next regular scheduled meeting will be held on July 18, 1995, at 4:00 P.M. at the District Office.

There being no further business the meeting adjourned.



CHAIRMAN



SECRETARY

July 18, 1995

A regular meeting of the Kenton County Water District was held this date at the District Office at 4:00 p.m. Present were Commissioners J. Michael Noll, Dennis Keeney, Patricia Sommerkamp, Michael Hemmer and Steve Hatfield together with Dennis Willaman, Mal Connett, Bill Wolfeck, Wayne Bridges, Richard Harrison and Mey Wilson.

The minutes of the previous meeting of June 8, 1995, were presented and approved on motion of Ms. Sommerkamp, and seconded by Mr. Keeney.

Mr. Willaman reported that he had received a letter from Taylor Mill Water Commission concerning a merger possibility with the District. Edwin Meece, Taylor Mill Administrator, was present and discussed a possible merger. Ms. Sommerkamp was appointed to represent the District concerning these merger discussions.

Roger Peterman and Terrell Ross were present and presented the bond resolution for the Ohio River intake station. A Motion was made by Mr. Keeney, seconded by Mr. Hemmer and carried unanimously, and that Resolution 95B be adopted and that the bids which will be received on July 26, 1995 be accepted and approved by Mr. Connett and Mr. Keeney on behalf of the Board, provided the bid is not over 6 1/4 percent. Mr. Ross reported that the closing should be held around August 9, 1995.

Tom Ratzki was present and reported on the Ohio River pump station project. The Contract has been signed but the contractor has not started the project as yet, and he has notified them of a meeting in the near future in hopes to get them started right away.

A discussion was held concerning the baffling of the Ft. Thomas Treatment Plant clearwell. This was recommended by Black and Veatch. This was approved on a motion of Mr. Hatfield, seconded by Mr. Keeney.

Mr. Wolfeck stated that bids for the laboratory equipment will be received in September.

Mr. Harrison reported that the bids for the water line on Leathers Road were received. The lowest and best bid was from Paul Michels & Son, Inc. in the amount of \$49,745.20. This was approved as the lowest and best bid on a motion of Mr. Keeney, seconded by Ms. Sommerkamp.

Mr. Harrison reported that Sub District C has been downsized as not enough residents signed up on some of the roads.

Mr. Harrison reported that Sub District R is on hold at this time as the District has been doing some engineering. There is problem with road slides on Decoursey Pike. Ms. Sommerkamp will

see a representative of the Northern Kentucky Area Development District and possibly the City of Ryland and Fiscal Court should be in on these discussions.

Mr. Willaman reported that a contract was signed with John Walker to do some financial consultations.

Mr. Willaman reported that the new health insurance was effective July 15, 1995 and that the Commissioners may not be covered, but it is not certain at this time.

Mr. Willaman reported that the property and liability insurance was taken out with Bilz Insurance Agency, as they were the lowest quotation.

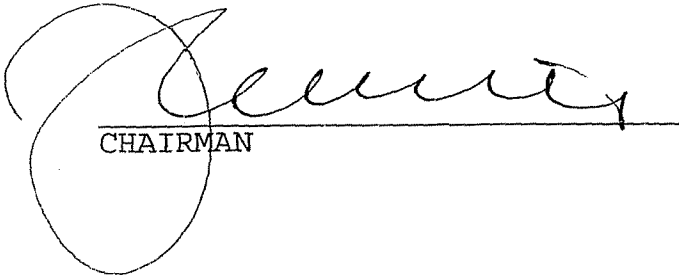
A discussion was held concerning a change in the bill format postcards, but no decision was made at this time.

A letter was received from Judge Middleton concerning a Mr. Whitehouse who had some damage to his sewer line and blames the Water District. It was decided that the matter will be turned over to the District's insurance company for an investigation.

Mr. Willaman reported that a press release has been issued concerning the merger with the Campbell County Water District.

The bills for the month of June totaled \$890,973.71. This was approved on a motion of Mr. Hatfield, seconded by Mr. Keeney.

There being no further business the meeting adjourned.


CHAIRMAN


SECRETARY

August 15, 1995

The Board of Commissioners of Kenton County Water District No. 1 met on this date at the District Office at 4:00 p.m. Present were Commissioners, J. Michael Noll, Dennis Keeney, Michael Hemmer, Patricia Sommerkamp and Steve Hatfield, together with Dennis Willaman, Mal Connett, Bari Joslyn, Richard Harrison, Mev Wilson and Wayne Bridges.

The minutes of the previous meeting of July 18, 1995 were approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney.

Tom Ratzski was present and updated the Board on the status of the construction at the Ohio River Intake Station. The contractor presently has 5 employees on site and things are moving along well.

Mr. Willaman reported that the bonds for the Intake Station were sold at a rate of 5.7767% and the closing will be held on August 23, 1995.

Mr. Willaman presented a resolution on the Bond Issue to change the 1995 Series A to 1995 Series C. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney.

Mr. Noll reported on a meeting of the Merger Committee with the Campbell County Water District. Contracts were received from Taft, Stettinius & Hollister for legal work and from Seasongood & Mayer for financial advice and from Woolpert for oversight of the proposed merger. The Water District will pay 50% of the fees of each of these three contractors and the Campbell Water District will pay the other 50% and it is with the understanding that the contracts will not exceed the estimated amounts in each contract. This was approved on motion of Mr. Hemmer, seconded by Mr. Keeney and Mr. Noll was authorized to sign the contracts with the deletion of future work after the merger in the Seasongood & Mayer proposal.

Mr. Keeney and Mr. Ratzski reported on the possible plant sites for a new proposed treatment plant in Boone County. It was decided to review the proposals thus far with the representatives of Boone County and the 2000 Committee and a realtor will be consulted. The next meeting is scheduled for September 14, 1995 at 11:30 a.m.

Mr. Willaman reported on three projects from the Strategic Planning meeting including the Ft. Thomas Treatment Plant Clearwell, the purchase of laboratory equipment and stated the Main Replacement Program is also proceeding.

Mr. Harrison reported on Sub District R and stated that a meeting had been held with Legislators and others including the Mayor of Ryland. The scope of the project will have to be reduced and the surcharge may have to be increased and the State and County

may help with repairing the landslide areas.

Ms. Sommerkamp reported on the meeting with Taylor Mill concerning a proposed merger. It was discussed as to whether a vote would perhaps have to be held by the City of Taylor Mill and it was not determined when the rates for Taylor Mill customers would be reduced. Their next meeting is September 14, 1995.

Ms. Sommerkamp suggested that the Board consider a full time Public Relations Representative and Mr. Willaman will look into this with other Water Districts.

A water line has been proposed for Empire Drive in the Industrial Park and Hennigan & Co. will pay around \$8,000.00 of the proposed \$19,000.00 cost. The Staff recommended that this line be constructed to improve water to the businesses in that area. The Board approved this on motion of Ms. Sommerkamp, seconded by Mr. Hemmer provided the approximate \$8,000.00 is available to help with this.

Mr. Willaman reported on the claim of Mr. Whitehouse and stated this has been turned over to the insurance company to handle.

Mr. Connett reported that the Public Service Commission had no objections to the format of the proposed new bill for customers.

The bills for the month of July were approved on motion of Mr. Hemmer, seconded by Mr. Hatfield in the amount of \$862,909.50.

Motion was made by Mr. Hatfield and seconded by Ms. Sommerkamp that the Board go into Executive Session to discuss a personnel matter. Motion was later made by Ms. Sommerkamp, seconded by Mr. Keeney to adjourn the Executive Session.

Motion was then made by Mr. Hatfield, seconded by Mr. Keeney that a Chairman of the Board of Commissioners be elected for a 2 year term and that the Chairman could not succeed himself or herself immediately after the 2 year term.

Motion was then made by Mr. Hatfield, seconded by Mr. Keeney that Mr. Noll be re-elected Chairman for a 2 year term.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

September 19, 1995

A regular meeting of the Kenton County Water District No. 1 was held this date at the District Office. Present were Commissioners, J. Michael Noll, Dennis Keeney, Michael Hemmer, Steve Hatfield and Pat Sommerkamp. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn, Larry Gaddis, of Black & Veatch, Bob Gabbard, Christina Schmidt and Gailen Bridges.

Minutes of the previous meeting of August 15, 1995, were approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Mr. Noll reviewed the correspondence, including the letter from Pendleton County Water District, which Mr. Willaman responded to by telephone.

Larry Gaddis, of Black & Veatch, reported on the progress of the Ohio River Pump Station Project.

Mr. Willaman reported on the Third Water Treatment Plant site selection. Moved by Mr. Keeney, seconded by Mr. Hatfield to negotiate a contract with Ken Harper to assist in finding a site for the water treatment plant.

Bob Gabbard reviewed the proposal to advertise for bids for Pump No. 3 at the Taylor Mill Treatment Plant. Mr. Keeney moved, seconded by Mr. Hemmer that it be advertised for bids.

Mr. Willaman reviewed the Antinepotism Policy and the revised Alcohol and Drug Testing Policy. Upon motion of Ms. Sommerkamp, seconded by Mr. Hatfield, both policies were adopted.

Mr. Willaman reviewed and the Board discussed a request for a full-time secretary/clerk for the Ft. Thomas Treatment Plant. Motioned by Mr. Hatfield, seconded by Mr. Keeney to make the position a full-time position.

Mr. Noll reported on the progress of the merger with Kenton County Water District and Taylor Mill Utilities.

Richard Harrison reviewed the Sub District R surcharge estimate.

Mr. Willaman reviewed the projects from the Strategic Planning meeting, and Bari Joslyn reviewed the future use of the Taylor Mill Treatment Plant.

The Mission Statement draft was discussed and upon motion by Mr. Hatfield, seconded by Ms. Sommerkamp, was approved by the Board.

Mr. Connett reviewed the proposal for joint shut-off with Sanitation.

Mr. Willaman reviewed the vehicle and construction equipment replacement schedule and gave his General Manager's Report.

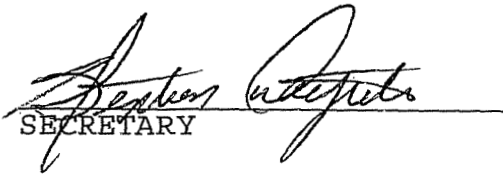
The bills for the month of August totalling \$932,182.34 were presented and approved on motion of Mr. Hemmer, seconded by Mr. Hatfield.

The next regular scheduled meeting will be on October 17, 1995, at 4:00 p.m. at the District Office.

There being no further business, the meeting adjourned on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.



CHAIRMAN



SECRETARY

October 17, 1995

The Kenton County Water District met on this date at the District Office. Present were Commissioners J. Michael Noll, Dennis Keeney, Pat Sommerkamp, Michael Hemmer and Steve Hatfield, together with Dennis Willaman, Mal Connett, Bari Joslyn and Wayne Bridges.

The minutes of the previous meeting were approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney.

Larry Gaddis and Tom Ratzski from Black & Veatch were present and reported on the status of the Ohio River Intake Facility.

The engineers also reported on possible plant sites for a new treatment plant near Belleview in Boone County.

Realtor, Ken Harper, has submitted a proposal to acquire the necessary land for a new treatment plant when the exact location has been determined. On motion of Mr. Hemmer, seconded by Mr. Keeney, and carried, a contract will be entered into with Mr. Harper to obtain the necessary options.

Bids were received for the baffling improvements at the Ft. Thomas clearwell. Black & Veatch recommended Apex Environmental Resources, Inc. as the lowest and best bid in the amount of \$221,470.00. This was approved on motion of Mr. Hemmer, seconded by Ms. Sommerkamp.

Mr. Willaman reported that Pump No. 1 at the Licking River Pump Station had to have emergency repairs in the amount of approximately \$46,000.00. This was approved on motion of Mr. Keeney, seconded by Mr. Hatfield.

Bids were received for purchase of several vehicles. Mr. Willaman will check with the State of Kentucky to see if they can get a better price for the 8 vehicles. The motion was made by Mr. Keeney, seconded by Ms. Sommerkamp that Mr. Willaman proceed to purchase the vehicles for the lowest and best bid subject to a better price from the State of Kentucky.

Several bids were received for service items and the Staff recommended that the low bid be accepted in each case. This was approved on motion of Mr. Hemmer, seconded by Mr. Hatfield.

Mr. Willaman reported a change in the Antinepotism Policy No. 84-3-14. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

The Gas Chromatograph/Mass Spectrometer bids were received and the lowest and best bid conforming to the specifications was from Hewlett-Packard Company in the amount of \$106,477.50. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney and will be paid for from the 1996 budget.

Bids were received for Pump No. 3 at the Taylor Mill Treatment Plant and the lowest and best bid was \$142,100.00 from Century Construction, Inc. This was approved on motion of Mr. Hemmer, seconded by Ms. Sommerkamp.

Mr. Noll reported that the wording on a contract was being negotiated concerning the merger agreement with Campbell County Water District and also some proposed legislation was being drafted.

Mr. Willaman reported that Ryland will be meeting with the residents there to discuss the proposed water line construction in Sub District R.

Mr. Noll reported that a plant tour will be held in the near future with the members of the Kenton Fiscal Court.

Checks totalling \$774,594.07 were approved for last month on motion of Mr. Hemmer, seconded by Mr. Hatfield.

The Cross-connection Policy was discussed and Mr. Willaman was instructed to meet with the Fiscal Court to explain this matter.

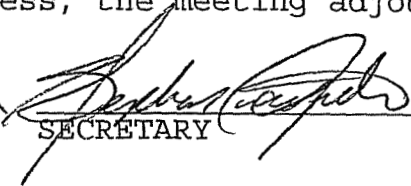
Mr. Willaman reported that the Medical Benefit Transition Plan will be in place by the first of 1996.

The position of a Public Information Coordinator was also discussed.

The next meeting will be on November 21, 1995 at 4:00.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

November 21, 1995

A regular meeting of the Kenton County Water District No. 1 was held on this date at the District Office. Present were Commissioners J. Michael Noll, Dennis Keeney, Patricia Sommerkamp, Michael Hemmer and Steve Hatfield. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn and Wayne Bridges.

The minutes of the previous meeting of October 17, 1995, were read and approved on motion of Mr. Hatfield, seconded by Mr. Keeney.

Various correspondence was discussed.

Tom Ratzki, of Black and Veatch, was present and discussed the status of the Ohio River Pump Station. He also stated that the new Treatment Plant was being reviewed and a meeting has been scheduled with the Kentucky Department of Water.

Mr. Willaman presented the name of a PR firm and the Board directed him to get a proposal as to the estimated cost of this matter.

A discussion was held concerning a new contract with Boone County and this will be pursued and also a meeting will be set up with the 3 Fiscal Courts.

Mary Alexander gave a demonstration of the new GIS.

Mr. Willaman presented the PlaNet GIS Partnership Agreement and Mr. Noll was authorized to sign this on motion of Mr. Hemmer, seconded by Mr. Hatfield.

Bids were received for the new water lines in the Ryland Heights area. The engineer recommended on Phase I that Kinder Construction be awarded the contract in the amount of \$531,757.50; that Coomer Contractors be awarded the contract on Phase II in the amount of \$380,273.75; on Phase III the engineer recommended Howell Contractors in the amount of \$860,593.00. The apparent low bidder was Tri State Diggers but they do not have a lot of experience in water line construction and failed to provide references with their bids, but did provide them later, and there were a lot of concerns about their ability to complete this project with the landslide problems and things of this nature. So, the contract was awarded to Howell Contractors as the lowest and best bid and also to Kinder and Coomer as recommended by the Engineer and Management. This is on motion of Mr. Keeney, seconded by Mr. Hatfield. Mr. Harrison reported that the matter will now be presented to the Kentucky Public Service Commission for approval.

Mr. Noll reported on merger talks with Campbell County Water District. A contract is being prepared and reviewed by the parties and may be signed by the end of this year. Legislation is also being prepared to be introduced in the Kentucky General Assembly in January or so.

Mercer recommended a payroll increase of 3.9% for employees and a pay structure adjustment of 2.9%. This was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

Mr. Willaman reported on the Cross-connection Program and will see the Fiscal Court in the near future and advise them about this matter.

Mr. Willaman reported that he is working on the 1996 Budget and will mail it to the Commissioners in the near future.

Mr. Willaman recommended that the Commission send out a request for proposals to various engineering companies for evaluation for the Taylor Mill Treatment Plant and any needed repairs there.

The O & M Expenses for the month of October were approved in the amount of \$965,301.81 on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

Mr. Willaman reported on the status of the projects authorized from the Strategic Planning Commission's meeting held April 24, 1995.

The baffling of the Fort Thomas Treatment Plant clearwell is now under contract. The GC-MS laboratory testing equipment is on order to be received after January 1, 1996. The Water Quality laboratory microscope needed to test for Cryptosporidium and Giardia will have bids to review in December. The additional laboratory analyst is in the process of being hired to start work on January 1, 1996.

The main replacement program has begun with \$287,000 of projects for 1995 and \$235,000 of projects for 1996.

The next regular scheduled meeting is December 19, 1995 at 4:00 p.m.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

December 19, 1995

A regular meeting of the Kenton County Water District No. 1 was held on this date at the District Office. Present were Commissioners J. Michael Noll, Patricia Sommerkamp, Michael Hemmer and Steve Hatfield. Mr. Keeney was out of town. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn and Wayne Bridges and Judge Clyde Middleton.

The minutes of the previous meeting of November 21, 1995, were read and approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

Judge Middleton discussed the future of the water district with the board. He pointed out that there will be considerable growth in the three counties in the next few years and it is important that the three counties cooperate. He stated that it is also important that the district attempt to merge with the Campbell County Water District. He stated that Newport may not wish to merge at this time but may agree to let Kenton district operate their plant under a contract.

Larry Gaddis of Black & Veatch was present and reported on the status of the new intake station on the Ohio River.

Mr. Willaman reported that pump number four, that's the Ohio River Pump Station, had to be repaired in an emergency at a cost of approximately thirteen thousand, eight hundred dollars. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

The bids for the fluorescence microscope were received and the lowest and best bid was \$25,680.30 from Carl Zeiss, Inc. This was approved on the motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

Bids were received for a 12 inch main on Empire Drive. The lowest and best bid was from Tim Hartig Company in the amount of \$15,846.00. Approximately \$8,000.00 of this will be paid by the Hennegan Company. This was approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

Bids were received for concrete restoration in Covington and the lowest and best bid was in the amount of \$88,845.00 from Broom Paving Company of Ohio. This was approved on motion of Mr. Hatfield, seconded by Ms. Sommerkamp.

Bids were also received for concrete restoration in the county and the lowest and best bid was in the amount of \$61,265.00 from Broom Paving Company of Ohio. This was also approved on motion of Mr. Hemmer, seconded by Ms. Sommerkamp.

A resolution for bonds for subdistrict R was presented and approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

A discussion was held concerning a proposal for residuals management. Management will study the cost of this further.

A discussion was also held concerning the merger with Campbell County Water District and Mr. Noll brought the board up to date on the progress there.

A discussion was held concerning a PI proposal from Shandwich Company. Mr. Willaman has been working with this company and will get a proposal in the near future.

Mr. Bridges presented a proposed contract between Mr. Harper and Mr. Bridges as trustee for the water district and a contract between Mr. Bridges and the water district to obtain options on property in Boone County. The board decided to wait on these contracts at this time.

Mr. Willaman presented an Operations Budget for 1996 and also a Capital Budget for 1996. These were approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

Mr. Bridges reported on an easement being negotiated with the CSX Railroad for a crossing for the Ryland Project. The railroad proposed to cancel the agreement at any time and Mr. Bridges will seek to work this out with the railroad. The agreement was then approved and Mr. Willaman will sign on behalf of the district on motion of Mr. Hemmer, seconded by Mr. Hatfield.

Mr. Willaman presented a revised funeral leave policy and this was approved on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

Mr. Willaman announced that the practice of a \$25.00 gift to each employee for Christmas, as in the past, should be approved once again. This was approved on motion of Mr. Hemmer, seconded by Ms. Sommerkamp.

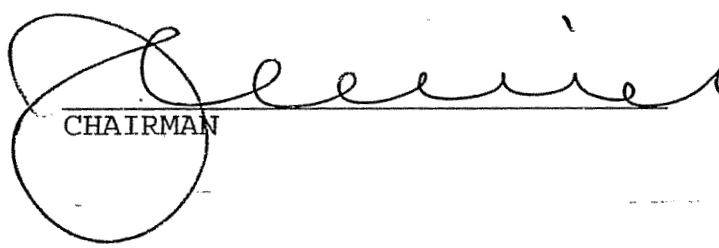
The bills for the month of November, totaling \$995,526.73 were approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

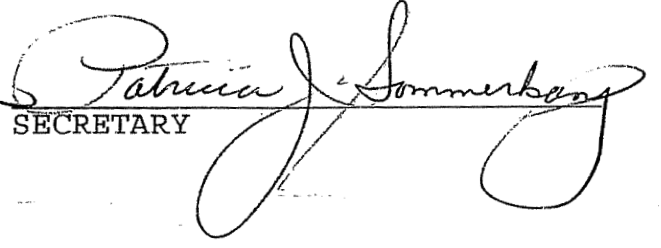
An action was made by Mr. Hemmer, seconded by Ms. Sommerkamp, and approved that the board go into executive session to discuss the salary of the general manager.

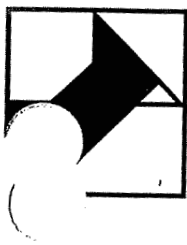
After the board came back into regular session a motion was made by Ms. Sommerkamp, seconded by Mr. Hemmer and carried that Mr. Willaman's salary be increased to \$80,000.00 for 1996.

The next regularly scheduled meeting is set for January 16, 1996 at 4:00 p.m.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY



CARDINAL

ENGINEERING
ARCHITECTURE
LAND SURVEYING

RYLAND HEIGHTS WATER PROJECT
PHASE I, II & III
NOVEMBER 10, 1995
BID TABULATION

<u>PHASE I</u> <u>BIDDER</u>	<u>AMOUNT LISTED ON BID</u>	<u>CONFIRMED AMOUNT</u>
KINDER CONSTRUCTION	\$ 531,757.50	\$ 531,757.50
THOMER EXCAVATING	\$ 607,111.25	\$ 607,111.25
HOWELL CONTRACTORS	\$ 625,579.00	\$ 625,579.00
EDGEWOOD EXCAVATING	\$ 640,513.00	\$ 640,513.00
SMITH CONTRACTORS	\$ 643,717.00	\$ 643,717.00
TRI STATE DIGGERS	\$ 650,817.25	\$ 650,817.25
PAUL RACK EXCAVATING	\$ 654,796.70	\$ 654,796.75*
REYNOLDS, INC.	\$ 661,186.50	\$ 661,186.50
TIME HARTIG	\$ 740,114.00	\$ 740,093.50*

<u>PHASE II</u> <u>BIDDER</u>	<u>AMOUNT LISTED ON BID</u>	<u>CONFIRMED AMOUNT</u>
COOMER CONTRACTORS	\$ 380,273.75	\$ 380,273.75
KINDER CONSTRUCTION	\$ 421,367.00	\$ 424,387.00 *
SMITH CONTRACTORS	\$ 428,945.00	\$ 428,945.00
HOWELL CONTRACTORS	\$ 433,595.00	\$ 433,595.00
TRI STATE DIGGERS	\$ 438,227.50	\$ 438,227.50
THOMER EXCAVATING	\$ 439,034.25	\$ 439,034.25
TIM HARTIG	\$ 441,381.00	\$ 441,831.50*
EDGEWOOD EXCAVATING	\$ 479,781.50	\$ 479,781.50
PAUL RACK EXCAVATING	\$ 486,377.30	\$ 486,377.30
REYNOLDS INC.	\$ 502,672.50	\$ 502,672.50
SUNESIS CONSTRUCTION	\$ 629,707.50	\$ 629,707.50

<u>PHASE III</u> <u>BIDDER</u>	<u>AMOUNT LISTED ON BID</u>	<u>CONFIRMED AMOUNT</u>
TRI STATE DIGGERS	\$ 731,855.00	\$ 857,855.50*
HOWELL CONTRACTORS	\$ 860,593.00	\$ 860,593.00
KINDER CONSTRUCTION	\$ 890,403.00	\$ 891,250.50*
THOMER EXCAVATING	\$ 899,581.50	\$ 899,581.50
SMITH CONTRACTORS	\$ 920,627.40	\$ 920,627.40
SPARTAN CONSTRUCTION	\$ 1,053,185.00	\$ 1,053,185.00
REYNOLDS INC.	\$ 1,069,612.00	\$ 1,069,612.00

NOTE: BIDS MARKED WITH AN ASTERISK (*) HAVE BEEN ADJUSTED TO REFLECT CORRECT BID AMOUNT. ADJUSTMENTS HAVE NOT CHANGED THE RELATIVE ORDER OF BIDDERS.



Prepared by:

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Ryland Heights Engineer

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January 16, 1996

A regular meeting of the Kenton County Water District No. 1 was held on this date at the District Office at 4:00 P.M. Present were Commissioners J. Michael Noll, Patricia Sommerkamp, Michael Hemmer, and Dennis Keeney. Mr. Hatfield was out of town. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn, and Wayne Bridges.

The minutes of the previous meeting of December 19, 1995, were read and approved on motion of Mr. Keeney, seconded by Ms. Sommerkamp.

Larry Gaddis of Black & Veatch was present and gave a status on the Ohio River pump station and intake facility.

Tom Ratzki of Black & Veatch was present and reported on the status of the proposed treatment plant in Boone County.

Mr. Noll reported on the merger discussions with Campbell County. The Campbell District has been informed of the proposed new treatment plant. The new proposed legislation for the merger was also discussed briefly. The possible purchase of water from Newport was also discussed.

Mr. Willaman reported that six engineering firms had responded to their requests for proposals for an engineering study at the Taylor Mill treatment plant. A committee was appointed to review these proposals.

Mr. Willaman reported on a proposed revision to the board's tariff for service installations. This was approved on the motion of Mr. Keeney, seconded by Ms. Sommerkamp.

The tariff for backflow prevention was also revised on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

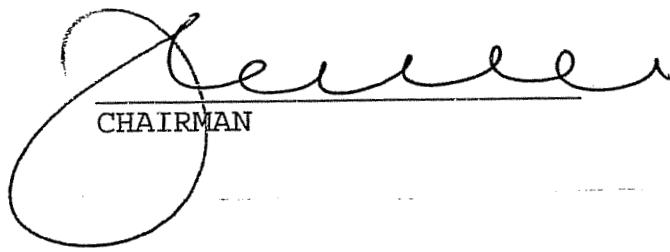
The G.I.S. interlocal agreement with the Kenton Fiscal Court, the PVA, the Area Planning Commission and Sanitation District was reviewed. Mr. Noll is authorized to sign this on behalf of the District on motion of Mr. Hemmer, seconded by Ms. Sommerkamp.

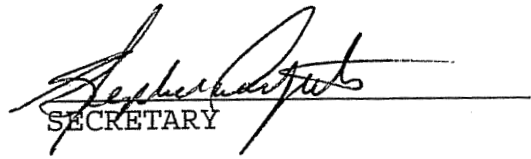
Mr. Harrison reported on the Ryland Heights water project. Mr. Honaker has submitted the application to the Public Service Commission and is waiting on a response at this time.

Expenses for the month of December totaled \$743,841.38 and these were approved on the motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

The next regularly scheduled meeting is set for February 13, 1996, at 4:00 P.M.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

February 13, 1996

A regular meeting of the Kenton County Water District No. 1 was held on this date at the District Office at 4:00 P.M. Present were Commissioners J. Michael Noll, Patricia Sommerkamp, Michael Hemmer, Steve Hatfield and Dennis Keeney. Also present were Dennis Willaman, Mal Connett, Richard Harrison, Bari Joslyn, and Wayne Bridges.

The minutes of the previous meeting of January 16, 1996, were read and approved on motion of Mr. Keeney, seconded by Ms. Sommerkamp.

The minutes of the special meeting of February 8, 1996, were presented and approved on motion of Mr. Hatfield, seconded by Ms. Sommerkamp.

Tom Ratzski of Black & Veatch was present and reported on the status of the Ohio River Pump Station and intake project.

Mr. Ratzski also reported on the progress on the proposed new plant to be located in Boone County.

Mr. Willaman reported that bids would be received soon for the painting of the Kenton Lands Tank and on motion of Mr. Keeney, seconded by Ms. Sommerkamp and carried, a committee was appointed to review the bids and award the contract.

Mr. Willaman inquired as to whether the Board wished to permit cities to have their names placed on the water tanks. The Board discussed this but did not wish to approve it at this time.

The engineers proposals for study of the Taylor Mill treatment plant were reviewed by the committee and staff. It was recommended that the contract be awarded to CH2MHill and this was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

Bids were received for new services and the lowest and best bid was from Becknoll-Coghill in the sum of \$137,600.00. This was approved on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

The District's vehicle use policy was reviewed, being policy #85-1-15A and these revisions were approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney.

Mr. Harrison reported that the water line should be constructed across Harris Pike from Kentucky 17 to Kentucky 16 at this time as it would help water pressure in the Ryland and surrounding areas. Since this is primarily a transmission main it would be constructed on a deferred assessment basis. Mr. Bridges will file the proposed assessments with Judge Middleton who will conduct a hearing thereon. This was approved on motion of Mr.

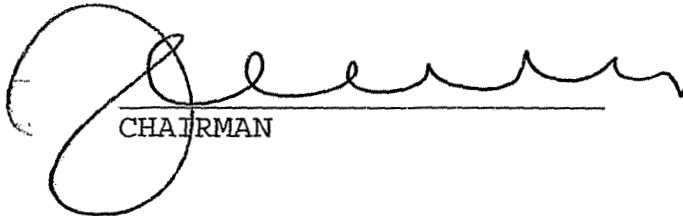
Hemmer, seconded by Mr. Keeney.

Mr. Harrison reported that subdistrict R in the Ryland area has been approved by the Kentucky Public Service Commission. The Board wished to thank the staff and Representative Tom Kerr who worked diligently to complete this project. The contracts have now been awarded for construction to the three contractors.

The bills for the month of January, totaling \$915,836.73 were approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

The next regularly scheduled meeting is set for March 19, 1996, at 4:00 P.M.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

April 18, 1996

A regular meeting of the Kenton County Water District No. 1 was held on this date at the District Office at 4:00 P.M. Present were Commissioners J. Michael Noll, Patricia Sommerkamp, Michael Hemmer, Steve Hatfield and Dennis Keeney. Also present were Dennis Willaman, Richard Harrison, Bill Wulfeck, and Wayne Bridges.

The minutes of the previous meetings of March 20 and April 3, 1996, were read and approved on motion of Mr. Hatfield, seconded by Ms. Sommerkamp.

Mr. Willaman reported that a letter was received from the Kentucky Public Service Commission stating that if the point of sale of water was in Ohio, there would be no regulation of rates by the PSC. He has not heard from the Division of Water as yet. He received a letter from Boone County Water District and the City of Florence, requesting to be a part of the discussions with the City of Cincinnati for purchase of water.

Larry Gaddis was present and discussed the Ohio River intake station. It was agreed that Gary Herfel will set up a meeting with FruCon in the near future and advised them to not incur any additional expense for any acceleration costs.

A tour will be arranged for water district officials and personnel to travel to Lincoln, Nebraska, to view their facilities.

Jim Sparrow of Rankin, Rankin & Co. was present and discussed the 1995 audit. After reviewing it, this was approved on motion of Mr. Keeney, seconded by Ms. Sommerkamp.

Mr. Bridges presented a proposed indemnification agreement for the commissioners and this was approved on motion of Mr. Hatfield, seconded by Mr. Keeney, and signed by all Board members.

Mr. Bridges reported that a meeting will be held at the Independence Courthouse on May 14th at 6:00 p.m. before Judge Middleton concerning the improvements on Harris Pike which is a deferred assessment project.

Bids were received on the Fort Mitchell waterline and the only bid was from Paul Michels & Sons, Inc., in the amount of \$73,995.50. This was the only bid but was below the engineer's estimate and was approved as the lowest and best bid on motion of Mr. Hatfield, seconded by Mr. Hemmer. The vote was four to zero with Mr. Keeney abstaining.

Mr. Willaman presented a cross-connection control policy to be filed with the Public Service Commission. This was reviewed and approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

Bill Wulfeck updated the Board on the PARTNERSHIP FOR WATER PROJECT.

Mr. Harrison updated the board on the status of Subdistrict C and stated that the District could apply for a grant by July 15. Mr. Harrison had a meeting with the Department of Local Government and it looks more promising this year to obtain a grant. He was authorized to file the application on the motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

A meeting will be arranged with the Campbell County Water District commissioners to tour the facilities of the District.

Mr. Noll and Mr. Keeney were appointed to a committee to coordinate the merger with Campbell County Water District.

Mr. Noll announced that the governor had signed the legislation on April 15, 1996, approving the merger of Kenton and Campbell Water Districts.

Mr. Bridges presented a resolution authorizing Mr. Willaman to sign an application with the Public Service Commission for the merger of the Water District with Campbell County Water District. This was approved on motion of Mr. Keeney, seconded by Ms. Sommerkamp.

A resolution was also presented authorizing Mr. Willaman to sign an application to operate the new Northern Kentucky Water Service District after the merger. This was approved on motion of Mr. Hatfield, seconded by Mr. Hemmer. Mr. Bridges will send these resolutions to Mr. Pangburn and to Mr. Honaker.

Mr. Willaman suggested that an auditor was needed to combine the financial statements of Kenton and Campbell Districts. This will be discussed at the next meeting with the Campbell County District commissioners.

Mr. Willaman suggested that the District omit the requirement for a cash deposit with a new application as this does not greatly help in collecting bills. It is a lot of paperwork for the District and it is not cost effective. The Board approved this new policy which will be more user friendly.

The bills totaling \$801,558.99 were presented and approved on motion of Mr. Hatfield, seconded by Ms. Sommerkamp.

The next regularly scheduled meeting will be held at the District office at 4:00 p.m. on May 21, 1996.

There being no further business, the meeting adjourned.



CHAIRMAN



SECRETARY

June 13, 1996

A regular meeting of the Kenton County Water District No. 1 was held on this date at the District Office at 4:00 P.M. Present were Commissioners J. Michael Noll, Patricia Sommerkamp, Michael Hemmer, Steve Hatfield and Dennis Keeney. Also present were Dennis Willaman, Mal Connett, Bill Wulfeck, Richard Harrison and Wayne Bridges.

The minutes of the previous meeting of May 21, 1996, were read and approved on motion of Ms. Sommerkamp, seconded by Mr. Keeney, and duly carried.

Mr. Willaman informed the Board that the PSC will conduct a hearing in Frankfort on June 17th at 10:00 a.m., concerning the merger with Campbell County.

The Board received correspondence from Judge Lucas asking the Board to reconsider its decision not to join with the Boone GIS System. The Board decided to invite Mr. Costello to the next meeting to discuss this matter.

The Board discussed the policy on shutoffs for delinquent bills. The Board decided to keep the present policy and John Stevenson, who appeared at a Board meeting recently, will be notified of the Board's decision.

ORSANCO requested a financial contribution and a one thousand dollar contribution was approved on motion of Mr. Keeney, seconded by Mr. Hemmer.

An agreement with Arrowhead Estates Mobile Home Park was discussed. Motion was made by Mr. Hemmer, seconded by Ms. Sommerkamp, that the agreement be approved and the motion carried 3 to 1 with 1 abstention. Voting aye were Mr. Hemmer, Ms. Sommerkamp and Mr. Noll. Voting nay was Mr. Hatfield and abstaining was Mr. Keeney.

Chemical bids for the next year were received and the staff made a recommendation concerning the lowest and best conforming bid and all bids were accepted as being the lowest and best conforming bid on motion of Mr. Hemmer, seconded by Mr. Hatfield.

A discussion was held concerning a possible chemical spill and the fact that liquid chlorine is safer than gas. Ms. Joslyn was requested to review this matter.

Mr. Harrison reported that Subdistrict R is approximately 50% completed. The money has not been released by the state as yet to help with the slide area.

The subcommittee studying improvements to the Taylor Mill treatment plant will meet on July 16.

Mr. Willaman announced that the company picnic will be held at Marydale on July 13.

Mr. Willaman announced that there had not been a lost time accident for one year and the employees are to be commended for a job well done. Mr. Willaman recommended that each employee get four hours PTO and after one year, that they receive one additional hour for each quarter where everything is accident free. This was approved on motion of Mr. Keeney, seconded by Ms. Sommerkamp.

Mr. Bridges reported that one Havens wishes to refinance his property and there is an assessment for approximately \$1,800.00 on the property which is the Kimberly Drive and Dorothy Drive area, off Independence Station Road. The lending institution requested the District to waive priority and sign a subordination agreement. The landowner is nearly three years delinquent in paying the direct assessment and the Board declined to sign the agreement.


Mr. Willaman announced that the District is reviewing the possibility of letting customers pay their water bills by credit card.

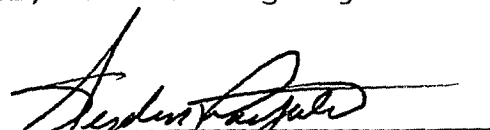
Mr. Noll announced that Mr. Willaman is the coordinator for the merger with Campbell County Water District. The committee has discussed a general manager, the employees, and the vehicles, and will report to the Board.

The expenses for the month of May, totaling \$851,383.79 was approved on motion of Ms. Sommerkamp, seconded by Mr. Hemmer.

The next regularly scheduled meeting shall be July 16, 1996 at 4:00 p.m.

There being no further business, the meeting adjourned.


CHAIRMAN


SECRETARY

December 17, 1996

The Northern Kentucky Water Service District Board met on this date at 3:00 p.m. at the Ft. Thomas Treatment Plant. All members of the Board were present except Mr. Tieman who was absent. Also present were Dennis Willaman and Ron Barrow, together with several staff members and attorney Wayne Bridges.

The minutes of the previous meeting of November 19, 1996, of the Northern Kentucky Water Service District were presented and approved on motion of Ms. Sommerkamp, seconded by Mr. Hatfield.

Larry Gaddis of Black & Veatch was present and gave the Board the projected demands for water to the year 2040.

Mr. Bridges reported that he had not heard from the Attorney General's Office yet about the conflict of interest question presented to them. He will follow up on this.

A motion was made by Mr. Hatfield, seconded by Mr. Keeney about the Board going into executive session to discuss a law suit. The Board met with Charles Pangburn. A motion was made by Mr. Veatch, seconded by Ms. Sommerkamp that the board adjourn the executive session.

Mr. Barrow presented a trust agreement for sick leave benefits for the Campbell County employees, and the trustee will be Fifth-Third Bank. Mr. Veatch was authorized to sign this on behalf of the Campbell District, and all members of the Campbell Board voted in favor.

Mr. Barrow reported that bids were taken for a new office trailer on Aqua Drive. After a discussion it was determined that the committee would determine the lowest and best bid. This was approved on motion of Mr. Payne and seconded by Mr. Veatch.

Mr. Barrow also presented the cost for telephone improvements. The committee will study and purchase the equipment based upon the lowest and best bid. This was approved on motion of Mr. Adams, seconded by Mr. Hatfield.

Insurance bids for the new water district were received and approved on motion of Mr. Keeney, seconded by Mr. Adams and the insurance will be through the Bilz agency. It was suggested that a risk analysis be done on the insurance in the near future.

Mr. Harrison reported that bids were received for Locust Pike on subdistrict R. The surcharge may have to increase unless more residents sign up for water in this area. The bids were passed until the next meeting.

Mr. Barrow reported that Old State No. 4 tank site needs to have another tank built there. The staff will obtain an appraisal and make an offer on the property. This was approved on motion of Mr. Adams, seconded by Mr. Veatch.

Mr. Willaman reported that the Harris Pike project will be approved by Judge Middleton. Mr. Bridges will prepare the order on this deferred assessment project.

Mr. Harrison reported that a new water line will be built for Ft. Mitchell Road to West Orchard Road in Ft. Mitchell. An easement must be purchased from the Ft. Mitchell Country Club. The staff will negotiate to acquire the necessary easement.

The following policies were approved on motion of Mr. Veatch, seconded by Ms. Sommerkamp as follows:

- Standards of Conduct
- Sick Time
- Aids
- Drug-Free Workplace
- Disability Beyond FMLA
- Workplace Harassment
- Professional Travel
- Commercial Drivers License
- Professional Licenses
- Safety Shoes
- Back Supports
- Posting & Distribution

Mr. Harrison reported on the road slippage on Mook Road. He will continue to monitor this situation.

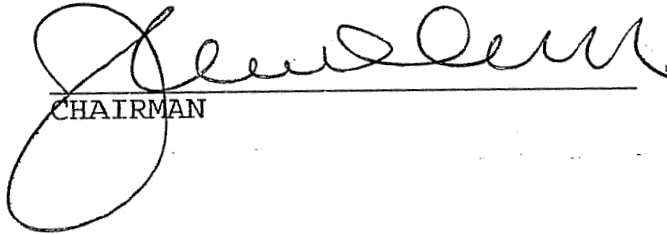
The operations budget for 1997 was presented by Mr. Willaman and approved on motion of Mr. Keeney, seconded by Mr. Veatch.

The transition committee recommended that a three and one-half percent bonus be awarded to Mr. Barrow and Mr. Willaman and that they each receive a four percent increase in salary effective January 1, 1997. This was approved on motion of Mr. Veatch, seconded by Mr. Hemmer.

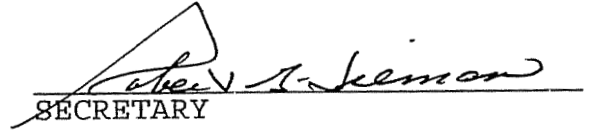
It was recommended that construction account checks be signed by the staff, being a recommendation from the transition committee. This was approved on motion of Mr. Keeney, seconded by Mr. Veatch.

The expenses for the month of November totalling \$864,463.68 were approved on motion of Mr. Veatch, seconded by Ms. Almoslechmer.

The next meeting is scheduled for January 21, 1997 at 3:00 p.m. There being no further business the meeting adjourned.



CHAIRMAN



SECRETARY

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January 21, 1997

The regular meeting of the Northern Kentucky Water Service District was held on this date at 3:00 p.m. at the Fort Thomas Treatment Plant. All Commissioners were present except Jack Payne who was absent. Also present were Dennis Willaman and Ron Barrow, together with several staff members and attorney Wayne Bridges.

The minutes of the previous meeting of December 17, 1996 were presented and approved on Motion by Mr. Adams, seconded by Ms. Almoslechner.

Mr. Willaman reported on the status of the Ohio River Pump Station and the construction is proceeding. There has been no answer from Fru Con concerning our offer in December, 1996.

Tom Ratzki was present and discussed the additional water supply situation. The subcommittee discussed the pros and cons of purchasing water from Cincinnati or building a treatment plant in Boone County.

Frank Lauer retired recently from the Campbell County Water District after 42 years of dedicated service. He was presented a plaque by Mr. Veatch and thanked for his many years of service by the Board.

Mr. Bridges reported on the Opinion received from the Attorney General's office. It was reported that there would be no conflict to do banking with the bank where Mr. Veatch is employed, but it would be a conflict to borrow money from that bank as the District would be paying interest on a loan from that bank.

A Motion was made by Mr. Tieman, seconded by Ms. Almoslechner and carried unanimously that Citizen's Bank of Campbell County will handle the general banking needs for the District and that the previous decision concerning banking be rescinded. This would not include any loans from said bank. All voted in favor except Mr. Veatch abstained.

Mr. Willaman reported that the District is still experiencing a billing problem with the computers of the Sanitation District. They are attempting to catch up the billing and are about two million dollars behind in cash flow and have had to use some reserve funds and certificates of deposits. The District has lost about \$32,000.00 in interest and paid about \$5,000.00 in overtime in the attempt to get the bills out. A committee met with Judge Middleton recently concerning this problem and the Sanitation District seems open to negotiating the issues in this matter.

Mr. Willaman recommended that two full time clerks be employed to replace the temporary clerks that have been working for the District. A Motion was made by Mr. Hatfield, seconded by Mr. Keeney that the employees not be hired for six months or so.

Voting for the Motion were Mr. Hatfield, Mr. Hemmer, Mr. Noll and Mr. Keeney. Voting against were Mr. Tieman, Mr. Adams, Ms. Sommerkamp, Mr. Veatch and Ms. Almoslechner.

A Motion was made by Ms. Almoslechner, seconded by Mr. Veatch that the District post the position and hire two additional clerks. All voted in favor except Mr. Hatfield and Mr. Keeney voted nay.

Mr. Willaman presented a tardiness policy for the District and it was discussed by the Board. A Motion was made by Mr. Tieman, seconded by Mr. Adams to adopt the policy and it was approved by all members of the Board except Mr. Keeney, Mr. Hemmer and Mr. Hatfield voted nay.

Mr. Harrison presented an update on the hydraulic analysis for the master plan and stated that Campbell County should be included in the service area. Approximately \$85,000 will be needed to update this project and he will report at the next meeting.

Mr. Willaman presented a Water Quality Goal Statement and this was approved by the Board on a Motion of Mr. Adams, seconded by Ms. Sommerkamp.

Mr. Harrison reported on the Mook Road slippage problem and stated the hill is still stable at this time but it will continue to be monitored.

Mr. Harrison also reported on the 36" concrete pressure pipe corrosion investigation near Taylor Mill Road and Madison Pike in Kenton County.

The Board was given an update on negotiations concerning the purchase of an easement from the Fort Mitchell Country Club and negotiations are continuing.

A discussion was held concerning improvements at the Taylor Mill Treatment Plant. A Motion was made by Mr. Keeney, seconded by Mr. Veatch and carried that phases one and two proceed with the design for improvements at the plant.

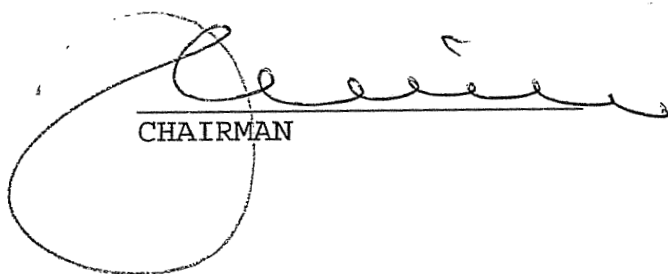
A Motion was made by Mr. Keeney, seconded by Mr. Veatch and carried that bids be received to remodel the Edgewood office. The engineering office has been moved to Edgewood and the finance office to the Cold Spring office.

Mr. Harrison reported that the City of Ryland Heights had rejected the bids for Locust Pike extension as the surcharges would be too much for the residents. The Board rejected the bids also for the Locust Pike project on Motion of Mr. Hatfield, seconded by Ms. Almoslechner.

The next meeting shall be held on February 18, 1997 at 3:00 p.m.

The expenses for the month of December were approved on a Motion of Ms. Sommerkamp, seconded by Mr. Veatch in the sum of \$940,959.35.

There being no further business, the meeting was adjourned on Motion of Mr. Veatch, seconded by Mr. Adams.



CHAIRMAN



SECRETARY

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March 18, 1997

The regular meeting of the Northern Kentucky Water Service District was held on this date at the Ft. Thomas Treatment Plant at 3:00 p.m. All commissioners were present except Mr. Veatch, who was absent. Also present were Dennis Willaman, Ron Barrow and Wayne Bridges.

The minutes of the previous meeting of February 18, 1997 were presented and approved on motion of Mr. Tieman, second by Ms. Sommerkamp.

A discussion was held concerning a possible consolidation of four of the district's facilities into one location.

Mr. Minkhaus was present from the Winston Park Water Department. He stated that Winston Park is interested in merging with Northern Kentucky Water Service District. Mr. Willaman suggested that a contract be prepared to operate the system on a temporary basis until the legality can be determined. Mr. Bridges said that it may be owned by the City of Taylor Mill as the City of Winston Park had merged with the City of Taylor Mill and there may be a vote of the people required. Mr. Barrow suggested that perhaps a vote may not be required as the system has no production facilities.

Dirk Bedarff was present and presented the Bond Anticipation Notes. Bids were received for the \$1.6 million dollars to be repaid over a two year period. The lowest and best bid was from Provident Bank for 4.5%. This is to finance Subdistrict R. The bond resolution was approved on motion of Mr. Payne, second by Mr. Adams and unanimously carried. The Bond Anticipation Notes were approved on motion of Mr. Payne and second by Ms. Almoslechner and unanimously carried.

Mr. Willaman stated that the district may be interested in purchasing a house located at 666 Alexandria Pike in Ft. Thomas. On motion of Ms. Sommerkamp, second by Mr. Adams, the committee will negotiate and attempt to obtain an option on the property.

Mr. Willaman reported on the evaluation of an additional water supply and stated that phases A and B are completed and another phase will be started in the near future.

Ms. Joslyn reviewed the SCADA Project. On motion of Mr. Keeney, second by Mr. Tieman and unanimously carried, the Board approved the design of phase 1 by the engineers.

Bids were received for a water main extension on Kuhrs Lane. The lowest and best bid was from Hartman and Smith in the amount of \$194,826.00. This was approved on motion of Mr. Keeney, second by Mr. Adams and all voted in favor, except Mr. Noll abstained..

Bids were received for the Harris Pike project. The lowest

and best bid was from Howell Construction in the amount of \$317,985.00 for a 12 inch line and the alternate for an 8 inch line was \$225,961.00. This will be a deferred assessment project which has been approved by the County Judge Executive. The bids were accepted on motion of Mr. Tieman, second by Ms. Almoslechner and unanimously carried and the larger line will be constructed and the residents will be assessed the smaller amount.

Mr. Harrison reported that a developer is constructing a main on Thomas More Parkway and the district would like to have this upsized to a 12 inch. This was approved on motion of Mr. Hemmer, second by Ms. Sommerkamp and unanimously carried that the district pay the additional costs, which should be less than \$10,000.00.

A motion by Mr. Adams, second by Mr. Payne was unanimously carried that Mr. Barrow shall obtain credit cards at one bank for the use of employees and the secretary was authorized to sign the Resolution.

Mr. Willaman presented a Threats And Violence Policy for the district and this was unanimously approved on motion of Mr. Hemmer, second by Ms. Almoslechner.

Mr. Willaman reported that he will be advertising to dispose of surplus items that the district no longer needs.

The five year Statistic Report prepared by Mr. Barrow was reviewed.

The committee reported that bids were taken for the Barrington tank painting job and the lowest and best bid was \$317,500.00 by United and the committee approved this contract.

Mr. Willaman and Mr. Harrison reported on the water line slippage on Mook Road and they will monitor this and they are working with the engineers for repair estimates. They will also check with the utility company and the highway department for possible sharing of the expense.

The bills for the month of February totalling \$1,183,135.96 were approved on motion by Mr. Hemmer, second by Mr. Hatfield and unanimously carried.

There being no further business, the meeting adjourned on motion of Mr. Adams, second by Ms. Sommerkamp, and carried unanimously. The next regularly scheduled meeting shall be held on April 15, 1997 at 3:00 p.m. at the treatment plant.


CHAIRMAN


SECRETARY

June 24, 1997

The regular meeting of the Northern Kentucky Water Service District was held on this date at 3:00 p.m. at the Fort Thomas Treatment Plant. Present were all commissioners, except Mr. Hatfield who was absent. Present also were Mr. Willaman, Mr. Barrow, Mr. Bridges, and several staff members.

The minutes of the previous meeting of May 29, 1997 were approved on motion of Mr. Noll and second by Mr. Payne.

David Malone was present and presented a resolution to defease the Campbell County bonds and to issue new bonds totalling approximately \$9.63 million dollars. He stated that this would save the District nearly \$1 million dollars in interest. The resolution was approved on motion by Mr. Noll and second by Mr. Adams.

Mr. Malone also presented a resolution for the District to show its intent to reimburse expenses from the proceeds of tax exempt bonds in connection with the issuance of bank anticipation notes. This resolution was approved by the Board unanimously on motion of Mr. Noll and second by Mr. Keeney.

Mr. Willaman presented several new draft proposals of the tariff and these were approved unanimously on motion of Mr. Noll and second by Mr. Keeney.

Mr. Willaman presented agreements for antennas on the tanks in Alexandria, Rossford, and the Ida Spence Tank. Mr. Willaman was authorized to sign the agreements on motion of Mr. Adams and second Mr. Hemmer and all voted aye.

Chemical bids were received and the staff recommended the low bid in each case and this was approved on motion of Mr. Payne and second by Mr. Adams and all voted aye.

Bids were received on Mooock Road improvements and low bid was from Richard Goettle, Inc. in the amount of \$678,000. Motion was made by Mr. Hemmer and second by Mr. Keeney and carried unanimously that the contract be awarded to the lowest and best bidder, but the shop drawings be started and no more than \$10,000 be expended until the easement or land has been obtained for this project. Mr. Bridges is negotiating to obtain the necessary easement or land.

Mr. Harrison presented the proposal to conclude the construction on Belle Monte Avenue and the lowest and best bid was from Spartan Construction in the amount of \$15,673.50. This was approved on motion of Ms. Sommerkamp and second by Mr. Adams and all voted aye.

Mr. Willaman reported that a new pump needs to be installed at the Richardson Road pump station and this is an emergency situation because of the recent problems there and the price quotes have been obtained. This was approved on motion of Mr. Noll and second Ms. Almoslechner and all voted aye.

Mr. Harrison stated that Harris Pike project is nearly completed and would like a change order to extend the main further to help the Ryland Heights area. This would cost approximately \$66,769.00 and the contractor will keep the same prices as the Harris project. This was approved on motion of Mr. Noll and second by Ms. Almoslechner and all voted aye.

A discussion was held concerning a possible water project on Kentucky 9 in Campbell County but no action was taken at this time.

Mr. Harrison stated that two small extensions should be made at this time in the Ryland Heights sub district and the surcharge would be the same. The cost would be approximately \$61,517.50 and the same contractor would hold his prices. This was approved on motion of Ms. Sommerkamp and second by Mr. Noll and all voted aye.

Mr. Willaman stated that we should apply for another grant from the state for sub district C and the District should ask the Kenton Fiscal Court to apply for the grant and to contribute up to \$100,000. This was approved on motion of Mr. Noll and second by Ms. Almoslechmer and all voted aye.

The Campbell Fiscal Court will be requested to prepare a letter of intent to apply for a grant for Grandview Road. This was approved on motion of Mr. Noll and second by Mr. Adams and carried unanimously.

Mr. Bridges reported on the negotiations which are ongoing to purchase the property at 666 Alexandria Pike.

Mr. Willaman and Mr. Bridges reported on the negotiations with Winston Park and Taylor Mill concerning the merger of the Water Districts.

A discussion was held concerning the financial comparisons for the water supply alternatives but no action was taken at this time.

The Chairman announced that the next meeting will be July 22, 1997 at 3:00 p.m.

Mr. Barrow presented a lease between the Water District and Campbell Fiscal Court. Mr. Willaman is authorized to sign on behalf of the District and this was approved on motion of Mr. Keeney and second by Ms. Sommerkamp and all voted aye.

Motion was made by Ms. Sommerkamp and second by Mr. Adams and carried unanimously that the Board go into Executive Session to discuss a personnel matter.

After the personnel matter concluded the Board came into regular session once again.

Proposed contracts between the District and Dennis Willaman as General Manager and Ron Barrow as Assistant General Manager were presented. Motion was made by Mr. Tieman and second by Mr. Adams that the contracts be approved and the Chairman be authorized to sign the same. Voting affirmatively were Mr. Noll, Mr. Veatch, Ms. Almoslechmer, Mr. Tieman, Mr. Adams, and Mr. Payne. Voting no were Ms. Sommerkamp, Mr. Keeney, and Mr. Hemmer. Ms. Sommerkamp stated in explaining her vote that she supported the General Manager and Assistant General Manager and was not against the contract but felt the Board should not enter the contract at this time being only two months before the new Board would be organized. Mr. Hemmer stated that both men have done an excellent job but he feels the new Board should enter into the contract. Mr. Keeney stated that he agreed with Ms. Sommerkamp and Mr. Hemmer. The motion carried six to three. A letter from Mr. Hatfield was read by the Chairman concerning the contracts.

The Chairman announced that after the August 19, 1997 meeting there will be a dinner for the Board Members together with Mr. Willaman, Mr. Barrow, and Mr. Bridges.

July 22, 1997

The regular meeting of the Northern Kentucky Water Service District was held on this date at 3:00 p.m. All commissioners were present together with Mr. Barrow and Mr. Bridges. Mr. Willaman was absent.

The minutes of the previous meeting of June 24, 1997 were presented and approved on a Motion of Ms. Sommerkamp, seconded by Mr. Adams.

Mr. Bridges reported that he is still negotiating with the owners of the property along Moock Road.

Mr. Peterman was present and discussed the bond resolution with the Board. On a Motion of Mr. Hatfield, seconded by Mr. Noll, the District shall request bids for a bond paying agent. Two of the Board members and Mr. Barrow will review these and decide which is the best bid. The Chairman and the General Manager may sign any necessary documents.

A 1997 bond resolution was presented and approved on Motion of Mr. Noll, seconded by Mr. Tieman and the Chairman was authorized to sign on behalf of the District.

A Motion was made by Mr. Noll, seconded by Mr. Hatfield and carried that the General Manager may sign an Agreement with AT&T concerning an antenna.

Mr. Harrison discussed the main replacement program and recommended that the District authorize a construction of a new main on East 19th Street, near St. Elizabeth Hospital. Motion was made by Mr. Hemmer, seconded by Ms. Almoslechner that the engineers proceed with the design of this project.

On Motion by Mr. Keeney, seconded by Ms. Sommerkamp and carried, the Clover Avenue project was approved and will proceed.

On Motion by Ms. Sommerkamp, seconded by Mr. Tieman and carried, the projects recommended by Mr. Harrison will be reviewed by the Main Improvement Committee and they will report how these projects are to be constructed and financed by the next meeting. Mr. Harrison expressed concern that the isolated low pressure problems experienced during the past week's record demand will become more extensive because much of the distribution system is at capacity and without the additional supply in place by 2000, the number of low pressure problems will be much higher.

The Board reviewed the Main Line Extension Policy and a committee will study this further.

A Motion was made by Mr. Hatfield, seconded by Mr. Noll and carried that the District participate in the Leadership of Northern Kentucky Program. All voted aye except Mr. Adams voted nay.

September 09, 1997

The regular meeting of the Northern Kentucky Water Service District was held at the Edgewood office on this date at 3 p.m. All 6 commissioners were present, together with Dennis Willaman, Ron Barrow, Wayne Bridges and several staff members.

The minutes of the previous meeting of August 19, 1997, were approved on motion of Mr. Hatfield, seconded by Mr. Hemmer.

The staff recommended certain changes in the insurance policies and these changes were approved on motion of Mr. Hatfield seconded by Ms. Almoslechner.

Mr. Barrow reported that the Public Service Commission had approved the defeasance of the Campbell County Bond Issue. He stated that the bonds will be sold on September 18, 1997.

The bank anticipation notes are on hold at this time and the Board will wait until the bonds are sold.

The staff recommended certain changes to the Mainline Extension Policy. Mr. Bridges recommended that the district refund the money to the person paying the assessment at the last known address and that if the money was unable to be delivered it would be placed in the general fund. The policy with this addition was approved on motion by Mr. Keeney seconded by Mr. Hatfield and all members voted aye.

The application for Subdistrict C, was discussed. The certain pledges and cash totaling approximately \$10,000.00 have been raised in the community. The Department of Local Government will permit the district to make a presentation before it on September 15, 1997. Mr. Willaman announced that the local legislators have been contacted to support this project.

A discussion was held concerning the main replacement projects and the future project list.

A discussion was held concerning the Mook Road Project. The gas company has agreed to contribute \$50,000.00 towards this project but the highway department declined to make any payment. The deed has been obtained for the property and was recorded.

The staff recommended purchasing some equipment known as the Hoe Ram from Art's Equipment and the low bid was \$15625.95 and this was approved on motion of Mr. Veatch second by Ms. Almoslechner and carried unanimously.

The plaque for the Ohio River Pump Station was approved on motion of Mr. Keeney seconded by Mr. Veatch and all voted aye.

The next meeting will be held on October 15, 1997 at 3:00 p.m. and the November meeting will be held on November 18, at 4:00 p.m. all at the Edgewood office.


Mr. Willaman presented a proposed safety manual and stated that it will be sent to the P.S.C. for approval. This was approved on motion of Ms. Almoslechner and seconded by Mr. Veatch and all voted aye.

Mr. Bridges reported on the option for the possible purchase of property in Campbell County and the seller is agreeable to all of the terms except the price. The board decided to discuss this matter with the County Judge Executives on September 2, 1997, and then discuss the option further.

Ms. Sommerkamp stated that she believed that Attorney Charles Pangburn and Attorney Wayne Bridges should switch their roles for now. She stated that Mr. Pangburn had a multi disciplinary firm and he should come to the meetings for advice to the board and that this would not be permanent however. She stated that Mr. Bridges had been a faithful and ethical performer but there are lots of changes and a possible merger with Boone County will be coming up in the near future and she felt that Mr. Pangburn should attend the board meetings.

Several of the members of the board discussed the matter and the motion was made by Mr. Keeney and seconded by Mr. Hatfield, that Mr. Pangburn be legal counsel to the board with Mr. Bridges retained as counsel under a contract also. This motion carried 3 to 2 with Mr. Hemmer abstaining. Voting aye where Ms. Sommerkamp, Mr. Hatfield and Mr. Keeney. Voteing nay, were Ms. Almoslechner and Mr. Veatch.

There being no further business the meeting adjurned.


Chairman


Secretary

April 15, 2003

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on April 15, 2003 at the District's Aqua Drive office. All Commissioners were present. Also present were Ron Lovan, Ron Barrow, Bari Joslyn, Richard Harrison, Mark Lofland, Bob Buhrlage, Mary Alexander, Mollie Bailey, Chris Bryant, Mike Casebolt, Jim Dierig, Don Gibson, Randy Hall, Fred Hiller, Amy Kramer, Matt Piccirillo, John Ramey, Frances Robinson, Scott Shephard, Bill Wulfeck, Jill Cahill, Charles Pangburn and Connie Reekers.

Mr. Koester called the meeting to order.

Ms. Bailey of the District staff led those in attendance in the Pledge of Allegiance.

Mr. Lovan and the Board recognized District employees for their dedicated efforts in the maintenance and operation of the Fort Thomas Treatment Plant resulting in the award of Outstanding Water Plant of the Year at the KWWOA meeting in March, 2003. A Certificate of Recognition was presented to District staff. Bill Wulfeck was recognized for demonstrating commitment to the improvement of management and the technical progression of the operation and maintenance of water quality resulting in receiving the Earl T. Mitchell Award at the KWWOA meeting in March, 2003.

The Board reviewed correspondence received and news articles published since the last regular meeting.

Mr. Barrow of the District staff presented proposed Value Statements as a result of the Strategic Planning Advance held on November 7, 2002. After review and on motion of Mr. Wagner, seconded by Dr. Sommerkamp, the Board unanimously agreed to adopt the Value Statements with two modifications.

After review and on motion of Mr. Hemmer, seconded by Mr. Wagner, the Board unanimously approved the minutes for the regular meeting held on March 18, 2003 with one modification.

After review and on motion of Mr. Hemmer, seconded by Mr. Wagner, the Board unanimously approved the expenditures of the District for the month of March, 2003.

Mr. Gibson of the District staff presented the bids received for topsoil, seed and straw restoration. After review and on motion of Dr. Sommerkamp, seconded by Mr. Wagner, the Board unanimously agreed to award the contract to PLG Utility Restoration in the amount of \$14,400.

Mr. Dierig of the District staff presented proposed engineering services for the painting of the Independence tank. After review and on motion of Mr. Hemmer, seconded by Mr.

Wagner, the Board unanimously agreed to engage Quest Engineers Inc. for the project in the amount of \$23,665.00

Ms. Joslyn of the District staff presented the bids received for automatic bottling equipment. After review and on motion of Mr. Wagner, seconded by Dr. Sommerkamp, the Board unanimously approved the award of the contract to International Water Life Company in the amount of \$32,030.

Mr. Harrison of the District staff presented the additional costs needed to complete the 42-inch Transmission Water Main Project. After review and on motion of Mr. Veatch, seconded by Mr. Hemmer, the Board unanimously authorized the President/CEO to increase Howell Contractors contract amount by \$70,961.17.

Mr. Harrison presented the bids received for Phases 1, 2 and 3 of the Subdistrict E Water Main Extension Project. After review and on motion of Mr. Wagner, seconded by Dr. Sommerkamp, the Board unanimously agreed to award the contracts to Byrnes Inc. in the amount of \$773,850.30 for Phase 1, Paul Rack Excavating & Paving Co. in the amount of \$658,486.23 for Phase 2, and Lykins Contracting Inc. in the amount of \$762,859.75 for Phase 3.

Mr. Harrison presented the bids received for the Ann Street and 8th Street Main Replacement Project. After review and on motion of Mr. Veatch, seconded by Mr. Wagner, the Board unanimously approved the award of the contract to Rose Excavating & Development in the amount of \$84,267.

Mr. Bryant of the District staff presented the bids received for the Installation of Upgraded Access Control at all District Facilities. After review and on motion of Mr. Wagner, seconded by Mr. Hemmer, the Board unanimously approved the award of the contract to Guardlink LLC in the amount of \$147,193.

Ms. Kramer of the District staff presented a proposed addendum to the 2001 Distribution System Master Plan. After review and on motion of Mr. Wagner, seconded by Mr. Hemmer, the Board unanimously approved the addendum.

Mr. Lofland of the District staff presented proposals received for the consultant selection for the development of bid specifications and management of the implementation of a Customer Information System. The Board again discussed the option of Sanitation District No. 1 taking on the billing activities portion of the Customer Information System Project, but agreed to continue with a comprehensive approach in developing and implementing a modern and flexible system capable of meeting the District's current and future needs. After review and on motion of Mr. Wagner, seconded by Mr. Veatch, the Board unanimously agreed to authorize staff to execute contract documents with Malcom Pirnie, Inc. for \$488,000 for the aforementioned consulting services.

Mr. Harrison presented proposed engineering services to perform the Water System Asset Management Program Services. After review and on motion of Mr. Hemmer, seconded

by Mr. Wagner, the Board unanimously agreed to engage Black & Veatch for the project for \$292,890.

Ms. Joslyn presented the bids received for the sale of the Dixie Highway Pump Station. After review and on motion of Dr. Sommerkamp, seconded by Mr. Hemmer, the Board unanimously approved the sale of the property to Stamm Brothers Realty for \$35,278.

The Board reviewed the District finance reports and Department reports.

Other matters of a general nature were discussed.

There being no further business to come before the Board, the meeting was adjourned.

May 20, 2003

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on May 20, 2003 at the District's Aqua Drive office. All Commissioners were present. Also present were Ron Lovan, Ron Barrow, Bari Joslyn, Richard Harrison, Mark Lofland, Jim Dierig, Don Gibson, Amy Kramer, Mary Carol Wagner, Bill Wulfeck, Jill Cahill, Charles Pangburn and Connie Reekers.

Mr. Koester called the meeting to order.

Ms. Cahill of Pinger Public Relations led those in attendance in the Pledge of Allegiance.

Mary Carol Wagner, NKWD Laboratory Manager, was recognized for receiving the Award of Excellence in Public Health from the Northern Kentucky Health Department on May 14, 2003 for her dedication to public health efforts in providing expedient information on various water quality issues and for volunteering much time on inter-agency committees to address public health concerns related to the community's environment.

The Board reviewed correspondence received and news articles published since the last regular meeting.

After review and on motion of Mr. Wagner, seconded by Mr. Jackson, the Board unanimously approved the minutes for the regular meeting held on April 15, 2003 and the special meeting held on May 5, 2003.

After review and on motion of Mr. Veatch, seconded by Mr. Hemmer, the Board unanimously approved the expenditures of the District for the month of April, 2003.

Mr. Wulfeck of the District staff presented the bids received for chemicals. After review and on motion of Mr. Jackson, seconded by Mr. Wagner, the Board unanimously agreed to award the contract to the bidders indicated on the attached bid tabulation pending further testing by the District as indicated in the tabulation.

Mr. Gibson of the District staff presented the bids received for service work orders. After review and on motion of Dr. Sommerkamp, seconded by Mr. Hemmer, the Board unanimously agreed to award the contract to J. Daniel & Company Inc. in the amount of \$34,311.59.

Kenton County Judge-Executive Richard L. Murgatroyd arrived at the meeting and thanked the Board and District staff for their dedicated efforts on behalf of the citizens of Northern Kentucky.

Mr. Dierig of the District staff presented the bids received for the Pump Preventive Maintenance Program. After review and on motion of Mr. Wagner, seconded by Dr.

Sommerkamp, the Board unanimously approved the award of the contract to Reynolds Inc. in the amount of \$10,860.

Mr. Harrison of the District staff presented the water line change order costs to complete the Thomas Street Water Main Replacement Project. After review and on motion of Mr. Hemmer, seconded by Mr. Jackson, the Board unanimously authorized the President/CEO to execute an agreement with the City of Covington to reimburse the City for water line change order costs to complete the project.

Mr. Harrison presented the bids received for the Subdistrict RF Water Main Extension Project. After review and on motion of Dr. Sommerkamp, seconded by Mr. Jackson, the Board unanimously agreed to award the contract to Coomer Contractors in the amount of \$516,284 and to authorize staff to complete all project related documents necessary to administer the project.

Mr. Harrison informed the Board of problems encountered with the Sanford Street Water Main Replacement Project. After review and on motion of Mr. Wagner, seconded by Mr. Hemmer, the Board unanimously agreed to void and annul the award of contract and notice of award for the Sanford Street Water Main Replacement Project contract to Southeastern Contractors.

Amy Kramer of the District staff presented proposed engineering services to perform the Glenn Avenue and Madison Avenue Redundancy and Water Main Replacement Project. After review and on motion of Mr. Jackson, seconded by Mr. Hemmer, the Board unanimously agreed to engage Bayer Becker Engineering for the project for \$20,300.

Mr. Barrow of the District staff presented a resolution for approximately \$30,270,000 in revenue bonds to pay off bond anticipation notes in the amount of \$17,210,000 and to provide additional funding of \$10,445,000 for capital projects approved in Rate Case 2002-0105. After discussion and on motion of Mr. Wagner, seconded by Dr. Sommerkamp, the Board unanimously approved the resolution.

The Board reviewed the District finance reports and Department reports.

Mr. Hemmer excused himself from the meeting and departed.

On motion of Mr. Jackson, seconded by Mr. Wagner, the Commissioners present unanimously agreed to go into executive session under the provisions of KRS 61.810 (1) (b) to discuss the possible acquisition of real property.

The Board returned to open session.

Other matters of a general nature were discussed.

There being no further business to come before the Board, the meeting was adjourned.

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on October 21, 2003 at the District's Aqua Drive office. Commissioners Hemmer, Jackson, Koester, Veatch and Wagner were present. Commissioner Sommerkamp was absent. Also present were Ron Lovan, Ron Barrow, Bari Joslyn, Richard Harrison, Mark Lofland, Bob Buhrlage, Rusty Collinsworth, Jim Dierig, Don Gibson, Amy Matracia, Andy Remlinger, Mary Carol Wagner, Bill Wulfeck, Jill Cahill, Charles Pangburn and Connie Reekers.

Mr. Koester called the meeting to order.

Ms. Matracia of the District staff led those in attendance in the Pledge of Allegiance.

Mr. Lovan and the Board recognized Bari Joslyn for twenty-five years of dedicated service to the District.

Mr. Lovan and the Board recognized Mike Post, on the occasion of his retirement from the District, for thirty years of dedicated service to the District and the community.

The Commissioners present reviewed correspondence received and news articles published since the last regular meeting.

After review and on motion of Mr. Veatch, seconded by Mr. Hemmer, the Commissioners present unanimously approved the minutes for the regular meeting held on September 16, 2003.

After review and on motion of Mr. Wagner, seconded by Mr. Veatch, the Commissioners present unanimously approved the expenditures of the District for the month of September, 2003.

Mr. Dierig of the District staff presented the bids received for annual snow removal service. After review and on motion of Mr. Hemmer, seconded by Mr. Wagner, the Commissioners present unanimously agreed to award the contract to Professional Lawn Care, Inc.

Mr. Gibson of the District staff presented the bids received for annual topsoil, seed and straw restoration service. After review and on motion of Mr. Veatch, seconded by Mr. Wagner, the Commissioners present unanimously agreed to award the contract to Merkle Lawn Care, Inc.

Mr. Harrison of the District staff presented the bids received for the Subdistrict K Water Main Extension Project (Project No. WX21117201). After review and discussion and on motion of Mr. Hemmer, seconded by Mr. Wagner, the Commissioners present unanimously agreed to award the contract to Brackney, Inc.

Mr. Harrison presented the bids received for the Pleasant Ridge Road Water Main Replacement Project. After review and on motion of Mr. Veatch, seconded by Mr.

Jackson, the Commissioners present unanimously agreed to award the contract to Terry Maxedon Hauling, Inc.

Mr. Barrow of the District staff presented a resolution to authorize the issuance of the Bond Series 2003C for approximately \$24,020,000 to refinance the 1993A, 1995A and 1995B General Revenue Bonds. On motion of Mr. Wagner, seconded by Mr. Veatch, the Commissioners present unanimously adopted the resolution and approved the filing of an application with the Public Service Commission for approval of the refunding.

Mr. Wulfeck of the District staff presented the bids received for SCADA System Improvement and Access Control System Phase 1. After review and on motion of Mr. Wagner, seconded by Mr. Jackson, the Commissioners present unanimously agreed to award the contract to Wagner Smith Company.

Mr. Harrison presented a resolution regarding the execution of a water supply agreement with the Kenton County Airport Board for the sale and purchase of water to and by the Airport Board for a term of twenty (20) years and authorizing the Chairperson of the Board to execute the agreement on behalf of the District. After review and on motion of Mr. Hemmer, seconded by Mr. Wagner, the Commissioners present unanimously adopted the resolution.

The Board reviewed the District finance reports and Department reports.

After discussion, the Commissioners present unanimously agreed to have a special meeting on Tuesday, November 11, 2003 at 3:00 p.m. at the Aqua Drive office.

The Commissioners present discussed the 2003 election of Board officers to be held in December, 2003.

On motion of Mr. Wagner, seconded by Mr. Jackson, the Commissioners present unanimously agreed to go into executive session under the provisions of KRS 61.810 (1) (b) and (c) to discuss the possible acquisition of real property and threatened litigation.

The Board returned to open session.

Mr. Hemmer excused himself from the meeting and departed.

On motion of Mr. Wagner, seconded by Mr. Jackson, the Commissioners present unanimously agreed to go into executive session under the provisions of KRS 61.810 (1) (b) to discuss the possible acquisition of real property.

The Board returned to open session.

Other matters of a general nature were discussed.

There being no further business to come before the Board, the meeting was adjourned.

NORTHERN KENTUCKY WATER DISTRICT
BOARD OF COMMISSIONERS MEETING
July 12, 2004

A regular meeting of the Board of commissioners of the Northern Kentucky Water District was held on July 12, 2004 at the District's Aqua Drive office. Commissioners Collins, Jackson, Koester, Veatch, Wagner and Sommerkamp were present. Also present were Ron Lovan, Ron Barrow, Richard Harrison, Bari Joslyn, Bill Wulfeck, Mark Lofland, Don Gibson, Frances Robinson, Amy Kramer, Bob Buhrlage, Andy Remlinger, Mary Carol Wagner, Debra Decoursey, Frank Armstrong, Joe Lippert, Mark Tischner, Brett Wanner and Michael DeFrank.

Mr. Wagner called the meeting to order.

Mr. Wagner led those in attendance in the Pledge of Allegiance.

Mr. Lovan acknowledged District employees Frank Armstrong, Joe Lippert, Mark Tischner and Brett Wanner for their participation in the rodeo competition. Tim Messmer and Dave Powell also participated in the competition but could not be in attendance.

The Commissioners reviewed correspondence received and news articles published since the last regular meeting.

After review and on motion of Mr. Veatch, seconded by Mr. Koester, the Commissioners unanimously approved the minutes for the regular meeting held on June 10, 2004 and the special meeting held on June 25, 2004.

After review and on motion of Mr. Collins, seconded by Dr. Sommerkamp, the Commissioners unanimously approved the expenditures of the District for the month of June 2004.

Mr. Wulfeck of the District staff presented bids received for certain chemicals used in the water treatment process at the District's three treatment facilities. After review and discussion and on motion of Mr. Jackson, seconded by Dr. Sommerkamp, the Commissioners unanimously agreed to award the bids to the lowest and best bidders based on the chemicals having been shown to be the most cost effective for achieving the District's treatment goals.

Amy Kramer of the District staff presented for consideration the water main extension and upgrade project along Garvey Road in the City of Elsmere. Richard Harrison of the District staff excused himself from the discussion of the project due to the fact that his family owns property along Garvey Road. After review and discussion and on motion of Dr. Sommerkamp, seconded by Mr. Koester, the Commissioners unanimously agreed to authorize the upgrade and participation with the City of Elsmere and Kenton County Fiscal Court's in the water main extension project along Garvey Road.

Mr. Harrison of the District staff presented bids for the 8-inch water main relocation project on Four Mile Pike. After review and discussion and on motion of Mr. Collins, seconded by Mr. Jackson, the Commissioners unanimously agreed to authorize the execution of the contract documents to award the project to Rose Excavating and Development, Inc., the lowest responsible bidder.

Mr. Harrison of the District staff presented bids for construction of a 20-inch emergency interconnect from Memorial Parkway to Waterworks Road in Ft. Thomas. After review and discussion and on motion of Mr. Koester, seconded by Dr. Sommerkamp, the Commissioners unanimously rejected the bids received for the project because the bids significantly exceeded the engineer's construction estimate.

Mr. Harrison of the District staff presented bids for the 16-inch water main replacement project in Latonia. After review and discussion and on motion of Dr. Sommerkamp, seconded by Mr. Jackson, the Commissioners unanimously agreed to authorize the execution of the contract documents to award the project to Larry Smith Contractors, Inc., the lowest responsible bidder, and authorize the increase of the project budget to \$872,758.

Mr. Harrison of the District staff presented for consideration a bid award withdrawal for the Subdistrict K water main extension project along Klette, Rice and Marshall Roads. After review and discussion and on motion of Mr. Jackson, seconded by Mr. Koester, the Commissioners unanimously agreed to void and annul the award of contract for the Subdistrict K water main extension project to Brackney, Inc. because the Kentucky Public Service Commission delayed the approval of the project until June 14, 2004, which led to additional material costs due to the long delay and the bids expired in January, 2004.

Mr. Harrison of the District staff presented bids for the construction of a water meter pit pursuant to the Agreement Relating to Emergency Water Supply between the District and the Airport. After review and discussion and on motion of Mr. Veatch, seconded by Dr. Sommerkamp, the Commissioners authorized the execution of the contract documents to award the project to Jack Gemmer & Sons, the lowest responsible bidder.

The Commissioners reviewed the District Finance Reports.

The District reviewed the Department Reports. Mr. Lofland of the District staff made special note of the excellent work performed by the District's staff in implementing the new customer information and billing system, and noted that the staff worked an entire weekend to ensure a smooth transition from the old billing system. Mr. Lovan noted that he discussed with the Sanitation District the capabilities of the District's new customer information and billing system and offered to share information regarding the system and work with the Sanitation District to achieve efficiencies and savings if the Sanitation District is so inclined. The intent was to explore opportunities as the Sanitation District considers future upgrades to their system, and not to propose a combined system.

There being no further business to come before the Board, the meeting was adjourned.

NORTHERN KENTUCKY WATER DISTRICT
BOARD OF COMMISSIONERS MEETING
August 17, 2004

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on August 17, 2004 at the District's Aqua Drive office. Commissioners Collins, Jackson, Veatch, Wagner and Sommerkamp were present. Commissioner Koester was absent. Also present were Ron Lovan, Ron Barrow, Richard Harrison, Bari Joslyn, Bill Wulfeck, Mark Lofland, Don Gibson, Frances Robinson, Amy Kramer, Mary Carol Wagner, Bob Buhrlage, Jim Dierig, Debra Decourcy, and Michael DeFrank.

Mr. Wagner called the meeting to order.

Mr. Wagner led those in attendance in the Pledge of Allegiance.

Mr. Lovan acknowledged District employees for their participation in the tapping contest held at the Kentucky/Tennessee Section Conference in Nashville in July. The team members were Jeff Hegge, Frank Armstrong, Dave Courtney, Mark Tischner, Mollie Bailey, Amy Matracia, Laura Talarek and Becky McCormick.

The Commissioners reviewed correspondence received and news articles published since the last regular meeting.

After review and on motion of Mr. Jackson, seconded by Mr. Collins, the Commissioners unanimously approved the minutes for the regular board meeting held on July 12, 2004.

After review and on motion of Mr. Collins, seconded by Mr. Veatch, the Commissioners unanimously approved the expenditures of the District for the month of July.

Amy Kramer of the District staff presented for consideration the District's participation in the 12" water main relocation project along Garvey Road in Elsmere, Kentucky. After review and discussion and on motion of Dr. Sommerkamp, seconded by Mr. Jackson, the Commissioners unanimously authorized the District to participate in the water main relocation work related to the 12" water main project along Garvey Road, Elsmere, through an agreement with the City of Elsmere and Kenton County Fiscal Court.

Amy Kramer of the District staff presented for consideration the Taylor Mill Addendum to the Water Distribution System Hydraulic Master Plan. After review and discussion and on motion of Dr. Sommerkamp, seconded by Mr. Collins, the Commissioners unanimously approved the Taylor Mill Addendum to the Water Distribution System Hydraulic Master Plan.

Mr. Harrison of the District staff presented bids for the Lorup Avenue water main replacement project. After review and discussion and on motion of Mr. Collins, seconded by Mr. Jackson, the Commissioners unanimously authorized the execution of

the contract documents to award the project to Rose Excavating, the lowest responsible bidder.

Mr. Harrison of the District staff presented bids for the Subdistrict K Water Main Extension Project. After review and discussion and on motion of Mr. Jackson, seconded by Dr. Sommerkamp, the Commissioners unanimously authorized the execution of the contract documents with Coomer Contractors, the lowest responsible bidder and authorized an increase in the project budget to \$940,000.

Mr. Harrison of the District staff presented for consideration a request to authorize the initiation of condemnation proceedings to secure a permanent easement across the property of John and Deborah Egbers in connection with the 16" water main project along Pelly Road. After review and discussion and on motion of Mr. Veatch, seconded by Dr. Sommerkamp, the Commissioners authorized legal counsel to proceed with condemnation proceedings to secure easements on the property of John and Deborah Egbers.

Bari Joslyn of the District staff presented for consideration the rejection of bids for the Licking River Pump Station concrete improvements. After review and discussion and on motion of Mr. Veatch, seconded by Mr. Collins, the Commissioners authorized the rejection of the bid from Sunesis Construction for the concrete improvements at the Licking River Pump Station because it exceeds the engineer's estimate.

Mr. Barrow of the District staff presented a review of the District financial reports for June and July.

The Commissioners reviewed the Department Reports.

Upon motion of Mr. Collins, seconded by Dr. Sommerkamp, the Board unanimously agreed to go into executive session under the provisions of KRS 61.810(1)(c) to discuss pending litigation against the District.

The Board returned to open session.

There being no further business to come before the Board, the meeting was adjourned.

NORTHERN KENTUCKY WATER DISTRICT
BOARD OF COMMISSIONERS MEETING
September 21, 2005

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on September 21, 2005 at the District's Aqua Drive office. All Commissioners were present. Also present were Ron Lovan, Ron Barrow, Richard Harrison, Bari Joslyn, Mark Lofland, Don Gibson, Amy Kramer, Bob Buhrlage, Bill Wulfeck, Jim Dierig, Mary Carol Wagner and Charles Pangburn.

Commissioner Wagner called the meeting to order.

Commissioner Wagner requested those in attendance to observe a moment of silence in memory of Phil Perry, Distribution Supervisor, who passed away on September 20, 2005.

Commissioner Wagner led those in attendance in the Pledge of Allegiance.

Ms. Joslyn of the District staff delivered a presentation to the Board on cryptosporidiosis and also on potential work at the north reservoir at the Fort Thomas Treatment Plant.

Mr. Lovan delivered a brief presentation on the Priority Project List developed by the Northern Kentucky Consensus Committee.

The Board reviewed articles published and correspondence received since the last regular Board meeting on August 18, 2005.

On motion of Commissioner Macke, seconded by Commissioner Sommerkamp, the Board unanimously approved the minutes for the regular Board meeting held on August 18, 2005.

On motion of Commissioner Collins, seconded by Commissioner Koester, and after discussion, the Board unanimously approved the expenditures of the District for the month of August, 2005.

On motion of Commissioner Collins, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to reject the one bid received for the 8-inch Systematic Water Main Replacement Project in the Grand Avenue area in Taylor Mill.

On motion of Commissioner Sommerkamp, seconded by Commissioner Collins, and after discussion, the Board unanimously agreed to authorize the execution of contract documents to award the 8-inch Water Main Replacement Project along Lawton Road and Audubon Road in the City of Park Hills to RFH Construction.

On motion of Commissioner Macke, seconded by Commissioner Sommerkamp, and after discussion, the Board unanimously agreed to authorize the execution of contract

documents to award Phase I of the 36-inch Water Main Project across Banklick Creek to G.M. Pipeline.

On motion of Commissioner Collins, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to authorize the execution of contract documents to award the 8-inch Water Main Replacement Project along Brookwood Circle in the City of Edgewood to Rose Excavation & Development.

On motion of Commissioner Collins, seconded by Commissioner Koester, and after discussion, the Board unanimously approved two Resolutions to accept a \$1,000,000.00 grant for projects in Kenton County and a \$688,000.00 grant for projects in Campbell County from the General Assembly and a Grant Assumption and Assignment Resolution to accept the assignment of a \$600,000.00 grant provided to the Campbell County Fiscal Court from the Central Assembly for projects in Campbell County.

On motion of Commissioner Macke, seconded by Commissioner Sommerkamp, and after discussion, the Board unanimously agreed to authorize the execution of engineering contract documents with Malcolm Pirnie, Inc. for the design of the Ripple Creek Third Pump Project in Cold Spring.

Commissioner Collins excused himself from the boardroom.

On motion of Commissioner Sommerkamp, seconded by Commissioner Jackson, and after discussion, the Commissioners present unanimously agreed to authorize the execution of documents to award the Retail Lockbox Project to Fifth Third Bank of Northern Kentucky.

Commissioner Collins returned to the boardroom.

The Board reviewed the District's financial reports and department reports.

The Board agreed to move the regular monthly Board meeting in October to October 27, 2005 at 12:30 p.m.

On motion of Commissioner Collins, seconded by Commissioner Jackson, the Board unanimously agreed to go into executive session under the provisions of K.R.S. § 61.810(1)(c) to discuss litigation.

The Board returned to open session.

Other matters of a general nature were discussed including possible changes to the policy related to health care coverage for the Board of Commissioners.

There being no further business to come before the Board, the meeting was adjourned.

NORTHERN KENTUCKY WATER DISTRICT
BOARD OF COMMISSIONERS MEETING
November 17, 2005

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on November 17, 2005 at the District's Aqua Drive office. All Commissioners were present. Also present were Ron Lovan, Ron Barrow, Jeff McClure, Richard Harrison, Bari Joslyn, Mark Lofland, Jack Bragg, Don Gibson, Bob Buhrlage, Bill Wulfeck, Jim Dierig, Mary Carol Wagner, Chris Bryant, Ashley Cox, Laura Whitman, Chris Gephart, Frances Robinson, Kathy Barrow and Charles Pangburn.

Commissioner Wagner called the meeting to order.

Mr. Barrow of the District staff led those in attendance in the Pledge of Allegiance.

Mr. Lovan and the District Vice Presidents delivered a presentation to the Board on District benchmarks.

The Board recognized and honored Ron Barrow and Jeff McClure on the occasion of their retirement from the District and thanked them for their dedicated and faithful service.

The Board reviewed articles published and correspondence received since the last regular Board meeting on October 27, 2005.

On motion of Commissioner Jackson, seconded by Commissioner Macke, the Board unanimously approved the minutes for the regular Board meeting held on October 27, 2005.

On motion of Commissioner Collins, seconded by Commissioner Sommerkamp, and after discussion, the Board unanimously approved the expenditures of the District for the month of October, 2005.

On motion of Commissioner Sommerkamp, seconded by Commissioner Jackson, and after discussion, the Board unanimously approved a resolution supporting the 2006 capital funding priorities of the Northern Kentucky Consensus Committee.

On motion of Commissioner Jackson, seconded by Commissioner Collins, and after discussion, the Board unanimously agreed to authorize the District staff to execute contract documents for property, earthquake, boiler/equipment, inland marine, electronic data processing equipment, fidelity, auto, general liability, umbrella, public official, and employment practice insurance coverage with St. Paul Travelers through the Biltz Insurance Agency for the year 2006 with possible renewals in years 2007 and 2008.

On motion of Commissioner Macke, seconded by Commissioner Sommerkamp, and after discussion, all Commissioners except Commissioner Collins agreed to authorize the District staff to execute engineering contract documents with Quest Engineers for the design of the Subdistrict F water main extension project. Commissioner Collins abstained from the vote.

On motion of Commissioner Jackson, seconded by Commissioner Koester, and after discussion, the Board unanimously agreed to authorize the District staff to execute contract documents for the Mook Road drilled shaft retaining wall project with Langenheim & Thomson Company.

On motion of Commissioner Sommerkamp, seconded by Commissioner Koester, and after discussion, the Board unanimously agreed to reject all bids received for the Johns Hill Road bulk water fill station project in Wilder, Kentucky.

On motion of Commissioner Macke, seconded by Commissioner Collins, and after discussion, the Board unanimously agreed to authorize the execution of contract documents with E&H Integrated Systems for the lease of a District telephone system.

On motion of Commissioner Macke, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to authorize the District staff to execute engineering contract documents with the firm of Black & Veatch for engineering services for ultraviolet disinfection at the Taylor Mill Treatment Plant.

The Board reviewed the District's financial reports and department reports.

On motion of Commissioner Collins, seconded by Commissioner Koester, and after discussion, the Board unanimously agreed to go into executive session under the provisions of KRS § 61.810(1)(c) to discuss proposed litigation.

The Board returned to open session.

The Board addressed the election of officers of the District for calendar year 2006. On motion of Commissioner Jackson, seconded by Commissioner Sommerkamp, the Board unanimously approved the election of Commissioner Koester as Chairman of the District commencing January 1, 2006. On motion of Commissioner Jackson, seconded by Commissioner Macke, the Board unanimously approved the election of Commissioner Collins as Secretary of the District commencing January 1, 2006. On motion of Commissioner Sommerkamp, seconded by Commissioner Collins, the Board unanimously approved the election of Commissioner Macke as Treasurer of the District commencing January 1, 2006.

Mr. Pangburn departed the Board meeting.

On motion of Commissioner Sommerkamp, seconded by Commissioner Collins, the Board unanimously agreed to go into executive session under the provisions of KRS § 61.810(1)(f) to discuss individual personnel matters.

The Board returned to open session.

Other business of a general nature was discussed.

There being no further business to come before the Board, the meeting was adjourned.

**Northern Kentucky Water District
Board of Commissioners Meeting
January 19, 2006**

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on January 19, 2006 at the District's Aqua Drive office. All Commissioners were present. Also present were Ron Lovan, Richard Harrison, Bari Joslyn, Mark Lofland, Jack Bragg, Bill Wulfeck, Mary Carol Wagner, Jim Dierig, Bob Buhrlage, Amy Kramer, Don Gibson, Scott Shepherd, Connie Pangburn, Don Fritz, Adam Davey and Charles Pangburn.

Commissioner Koester called the meeting to order.

Commissioner Wagner led those in attendance in the Pledge of Allegiance.

Mr. Lofland and Mr. Harrison of the District staff delivered a presentation to the Board on the District's Rates, Rules and Regulations.

The Board recognized Commissioner Wagner for his two years of leadership and service as Chair of the Board of Commissioners.

The Board reviewed articles published and correspondence received since the last regular Board meeting on December 15, 2005.

Mr. Fritz and Mr. Davey of Von Lehman & Company, Inc. presented the results of their internal control review of the District.

On motion of Commissioner Collins, seconded by Commissioner Sommerkamp, the Board unanimously approved the minutes for the regular Board meeting held on December 15, 2005.

On motion of Commissioner Wagner, seconded by Commissioner Collins, and after discussion, the Board unanimously approved the expenditures of the District for the month of December, 2005.

On motion of Commissioner Jackson, seconded by Commissioner Collins, and after discussion, the Board unanimously agreed to award a contract for lightweight uniform apparel to Van Dyne Crotty, Inc. and to authorize the execution of contract documents.

On motion of Commissioner Wagner, seconded by Commissioner Sommerkamp, and after discussion, the Board unanimously agreed to authorize an increase in the Redstone Road Water Main Extension project budget to \$114,200.00, to award the project to United Plumbing & Sewer Repair, and to authorize the execution of contract documents.

On motion of Commissioner Wagner, seconded by Commissioner Collins, and after discussion, the Board unanimously agreed to award a contract for the construction of bulk water

fill stations on Johns Hill Road, Aqua Drive and Decoursey Pike and at a fourth location near Piner to Krebs Construction and to authorize the execution of contract documents.

On motion of Commissioner Collins, seconded by Commissioner Wagner, and after discussion, the Board unanimously agreed to award a contract, with a possible one-year extension, to Ranger Construction Services, Inc. for new water service installation and to authorize the execution of contract documents.

On motion of Commissioner Wagner, seconded by Commissioner Jackson, all Commissioners except Commissioner Collins agreed to authorize the execution of an agreement with DNS Properties, LLC for the extension of water service. Commissioner Collins abstained from the vote.

On motion of Commissioner Sommerkamp, seconded by Commissioner Wagner, and after discussion, the Board unanimously agreed to authorize the execution of engineering contract documents with Thelen Associates for the design of the Subdistrict F Water Main Extension project.

On motion of Commissioner Collins, seconded by Commissioner Macke, and after discussion, the Board unanimously agreed to authorize the execution of engineering contract documents with Viox & Viox, Inc. for the design of the Subdistrict G Water Main Extension project, including the Banklick Road addendum.

On motion of Commissioner Wagner, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to authorize the purchase of Steelcase office furniture for the new Central Facility from Loth.

On motion of Commissioner Wagner, seconded by Commissioner Macke, and after discussion, the Board unanimously agreed to authorize the execution of engineering contract documents with EMH&T Inc. for the performance of construction phase services for the new .75 MG Claryville Tank project, including the repainting and rehabilitation of the South County Tank.

On motion of Commissioner Collins, seconded by Commissioner Sommerkamp, and after discussion, the Board unanimously agreed to award the 2006 asphalt restoration contract to Hall's Paving and Sealing and to authorize the execution of contract documents.

The Board reviewed the District's financial reports and department reports.

The Board agreed to move the regular meeting in June 2006 from June 15, 2006 to June 23, 2006.

Other matters of a general nature were discussed.

On motion of Commissioner Wagner, seconded by Commissioner Jackson, the Board unanimously agreed to go into executive session under the provisions of KRS 61.810(1)(f) to discuss a personnel matter.

Mr. Pangburn departed the meeting.

The Board returned to open session.

On motion of Commissioner Wagner, seconded by Commissioner Collins, the Board unanimously agreed to authorize and direct Commissioner Koester to execute an amendment to Mr. Lovan's employment agreement incorporating changes specified by the Board.

There being no further business to come before the Board, the meeting was adjourned.

CHAIR

SECRETARY

**Northern Kentucky Water District
Board of Commissioners Meeting
March 15, 2007**

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on March 15, 2007 at the District's facility located at 2835 Crescent Springs Road in Erlanger, Kentucky. All Commissioners except Commissioner Sommerkamp were present. Commissioner Sommerkamp participated by speaker telephone. Also present were Ron Lovan, Bari Joslyn, Richard Harrison, Mark Lofland, Jack Bragg, Bill Wulfeck, Don Gibson, Amy Kramer, Jim Dierig, Bob Buhrlage, Scott Shepherd, Frances Robinson, Cathy Penick, Vince Gabbert, Brad Montgomery, Michelle Howlett, Roger Peterman, Mike Hammons, Mike Phillips and Charles Pangburn.

Commissioner Koester called the meeting to order.

Commissioner Jackson led those in attendance in the Pledge of Allegiance.

Ms. Howlett of GRW Engineers presented a commissioner training session on generators.

Mr. Hammons and Mr. Phillips of Vision 2015 delivered a presentation on the Licking River Greenway project.

The Board reviewed articles published and correspondence received since the last regular Board meeting on February 15, 2007.

On motion of Commissioner Macke, seconded by Commissioner Jackson, the Board unanimously approved the minutes for the regular Board meeting held on February 15, 2007.

On motion of Commissioner Macke, seconded by Commissioner Collins, and after discussion, the Board unanimously approved the expenditures of the District for the month of February, 2007.

On motion of Commissioner Sommerkamp, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to award the contract for durable outdoor uniform apparel, with options to renew the contract for up to two additional one year terms, to National Workwear and to authorize the District staff to execute appropriate contract documents.

On motion of Commissioner Collins, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to award the Lower Tug Fork Road water main replacement project to Jack Gemmer & Sons and to authorize the District staff to execute appropriate contract documents.

On motion of Commissioner Wagner, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to award the East Alexandria Pike 12-inch water main replacement project to G&T Excavating and to authorize the District staff to execute appropriate contract documents.

On motion of Commissioner Collins, seconded by Commissioner Jackson, and after discussion, the Board unanimously approved a resolution accepting assignment of a Kentucky Infrastructure Authority grant for project number WX21037561 from the City of Wilder and authorizing an amendment to the budget and a District representative to execute all related documents.

On motion of Commissioner Wagner, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to award Phase I of the Subdistrict G water main extension project to Howell Contractors, Phases II and III of the project to G.M. Pipeline, Inc. and Phase IV of the project to Hartman & Smith Construction Company and to authorize the District staff to execute appropriate contract documents.

On motion of Commissioner Sommerkamp, seconded by Commissioner Wagner, and after discussion, the Board unanimously agreed to award the contract for the purchase of five sodium hypochlorite pumps to Watson-Marlow and to authorize the District staff to execute appropriate contract documents.

On motion of Commissioner Collins, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to award the Licking River intake traveling screen project to Building Crafts Inc. and to authorize the District staff to execute appropriate contract documents.

On motion of Commissioner Macke, seconded by Commissioner Wagner, and after discussion, the Board unanimously agreed to award the contract for the purchase of flowable fill concrete and class A concrete to Ideal Supplies Inc. and to authorize the District staff to execute appropriate contract documents.

On motion of Commissioner Macke, seconded by Commissioner Sommerkamp, and after discussion, the Board unanimously agreed to award contracts for construction restoration materials, and to authorize the District staff to execute appropriate contract documents, for the following materials from the vendors indicated:

Krebs Construction	#2 limestone, #4 limestone, #57 limestone, fill sand, natural sand
Hilltop Stone	channel lining-CLII
Bray Trucking	#610 limestone, limestone sand, winter asphalt mix (cold patch)

On motion of Commissioner Collins, seconded by Commissioner Jackson, and after discussion, the Board unanimously approved a resolution authorizing the issuance of approximately \$30,000,000 principal amount of Water District Revenue Bonds Series 2009, designating the paying agent and registrar, authorizing and making certain improvements to the water system, approving the preparation of preliminary and final official statements and authorizing a continuing disclosure agreement and the issuance of a bond anticipation note (BAN) in the amount of up to \$27,750,000 to fund 2006 and 2007 capital projects.

On motion of Commissioner Sommerkamp, seconded by Commissioner Jackson, and after discussion, the Board unanimously agreed to award the contract for building signs to Quality Signs & Service Co., Inc. and to authorize the District staff to execute appropriate contract documents.

The Board reviewed the District's financial reports and Department reports.

The Board discussed issues related to possibly transitioning from quarterly billing to monthly billing and also the possibility of conducting joint billing with Sanitation District No. 1.

Other matters of a general nature were discussed.

There being no further business to come before the Board, the meeting was adjourned.

CHAIRMAN

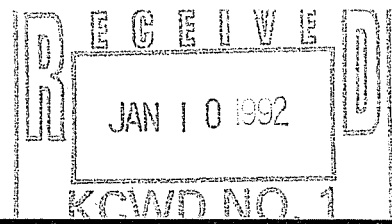
SECRETARY

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**KENTON COUNTY
JUDGE/EXECUTIVE**

CLYDE MIDDLETON



January 9, 1992

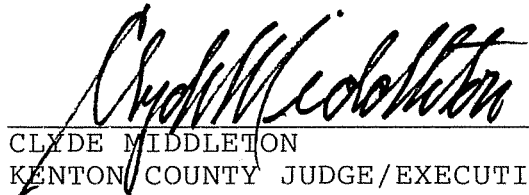
Kenton County Water District #1
3049 Dixie Highway
P.O. Box 17010
Covington, KY 41017

Attention: Mr. Dennis Willaman, General Manager

Dear Mr. Willaman:

I enclose letter of January 3rd from the Department of Local Government in Frankfort. Please make arrangements directly with Ms. McManis of that Office for your delegation to the Meeting in Louisville. If there are any problems in having representation at that Meeting, please advise me at your earliest opportunity.

Very truly yours,



CLYDE MIDDLETON
KENTON COUNTY JUDGE/EXECUTIVE

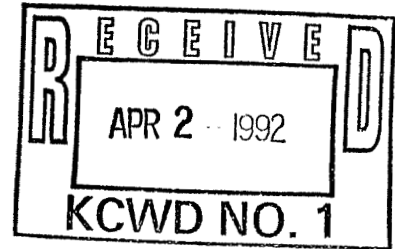
CM/jm

Enclosure



**KENTON COUNTY
JUDGE/EXECUTIVE**

CLYDE MIDDLETON



April 1, 1992

Kenton County Water District No. 1
3049 Dixie Highway
P.O. Box 17010
Covington, KY 41017

Attention: Mr. Mick Noll, Chairman

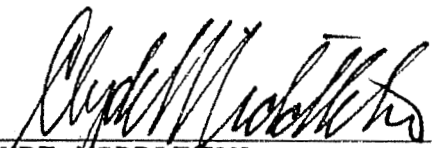
Dear Mick:

I am writing to ask whether it might be possible to extend the Water Project which is now pending to pick up the Staffordsburg Methodist Church. I believe it is on Visalia/Staffordsburg Road, which as you know, has been dropped from the Project because of the lack of customers on that road.

I am told that the Church is not far down the road, and if you see no large negatives to making an exception for this one institution, it would seem a useful way to go.

Please let me know the feelings of the Board on this subject.

Very truly yours,



CLYDE MIDDLETON
KENTON COUNTY JUDGE/EXECUTIVE

CM/jm



OFFICE OF THE GOVERNOR
DEPARTMENT OF LOCAL GOVERNMENT
FRANKFORT, KENTUCKY 40601-8204

94 AUG 30 PM 2:07

BRERETON C. JONES
GOVERNOR

BRUCE FERGUSON
COMMISSIONER

August 29, 1994

The Honorable Clyde Middleton
Kenton County Judge/Executive
Kenton County Building, 2nd Floor
303 Court Street
Covington, Kentucky 41011

RE: Kenton County Water Expansion
Project, Subdistrict B
B-94-DC-21-0001(013)

Dear Judge Middleton:

Enclosed please find three (3) copies of the Kenton County CDBG Grant Agreement for the above referenced project. The grant amount for this project is \$168,000.

Please sign all three copies and return them to this office as soon as possible. After the copies have been signed and returned, the Department of Local Government and the Finance and Administration Cabinet officials will sign. We will then forward you a fully executed copy of the Grant Agreement for your records. Please note that the county attorney must also sign the Grant Agreement.

You will receive your funds through the State CDBG Account. The funds will be sent directly from the State to your community. Your community will need to submit the enclosed signature form with the authorized signatures. This tells DLG who is permitted to sign your community's Request for Payment. During the grant administration period, if you need to change this form because of a staff change, provide DLG with a copy of the revised form, again with original signatures.

In order to transfer funds electronically directly to your community, you will need to complete the enclosed Direct Electronic Transfer of Funds Form. You will need to also sign this form as Chief Executive Officer.

Please return all three copies of the Grant Agreement to Betty Powell, Division of Community Programs, Department of Local Government, Suite 340, 1024 Capital Center Drive, Frankfort, Kentucky 40601. If you have any questions, please call Betty Powell at 502/573-2382.

Sincerely,

Nancy O. Sanders, Acting Director
Division of Community Programs

Enclosures (3)
cc: Bryan Kirby

file: Sub-district C



OFFICE OF THE GOVERNOR
DEPARTMENT OF LOCAL GOVERNMENT
FRANKFORT, KENTUCKY 40601-8204

94 JUL 25 PM 2:01

BREBETON C. JONES
GOVERNOR

BRUCE FERGUSON
COMMISSIONER

July 21, 1994

The Honorable Clyde Middleton
Kenton County Judge/Executive
Kenton County Building, 2nd Floor
303 Court Street
Covington, Kentucky 41011

- all required forms prepared & submitted to DLG

RE: Kenton County Water Expansion
Project, Subdistrict B
Application No. 94-030

Dear Judge Middleton:

As you were recently informed, the Department of Local Government (DLG) has given preliminary approval to your CDBG project in the amount of \$168,000. A Grant Agreement must now be completed between your community and the Commonwealth. Before the agreement can be drafted by DLG, you must provide DLG with:

1. A detailed Project Performance Schedule which shows project completion within eighteen (18) months. A format for the schedule and instructions are enclosed.
2. A revised Cost Summary reflecting a CDBG amount of \$168,000. This amount reflects a decrease of \$2,500 in the CDBG administration line item. A copy of the summary is enclosed.
3. An engineer's written statement that the project's design and plans will be completed and submitted to Natural Resources within three (3) months from the Notice to Proceed as stated on the site visit.
4. An updated Financial Disclosure/Update Report.

Please submit the above information no later than August 4, 1994. The enclosed administration section of the CDBG Handbook will take you through this process step by step. DLG cannot initiate the agreement until these items are completed.

Please note at this time you may not incur costs to be reimbursed with Block Grant funds except for those costs relating to engineering and planning, as applicable. Otherwise, you may not obligate any other Block Grant funds until you have received from the Commonwealth a Notice of Approval of Evidentiary Materials and Release of Funds. In order to secure the Release of Funds, you must submit to DLG a Request for Approval of Evidentiary Materials and Release of Funds to include attachments as follows:

1. Written certification by a licensed Certified Public Accountant that your accounting system is established in accordance with the "Common Rule", 24 CFR Part 85.20 and with generally accepted accounting principles.

The Honorable Clyde Middleton
July 21, 1994
Page Two

2. Environmental Certification per 24 CFR Part 58:
 - a) Copy of clearance from the State Historic Preservation Officer.
 - b) Evidence of State Clearinghouse review.
 - c) Tear sheet of applicable public notices.
 - d) Environmental Certification Form.
 - e) Environmental Review Status Form.
3. Evidence of all other funds commitments.
4. Written assurance that a Residential Antidisplacement and Relocation Assistance Plan has been adopted.

Please submit the attachments simultaneously with the request since they are part of the request. Enclosed is the request forms package including the environmental regulations (24 CFR Part 58).

You must complete these tasks by September 16, 1994. The enclosed administration section of the CDBG Handbook will take you through this process step by step. If you do not meet this deadline the grant will be withdrawn. Therefore it is imperative that you concentrate on the environmental clearance and the firm commitment of other funds.

Please be aware of any State Clearinghouse review comments received on your project. Issues and problems arising from those comments must be resolved prior to project implementation.

Please send this documentation to: Nancy O. Sanders, Acting Director, Division of Community Programs, Department of Local Government, 1024 Capital Center Drive, Suite 340, Frankfort, Kentucky 40601. If you have any questions, please contact your Program Advisor, Betty Powell at 502/573-2382.

The staff of the Department of Local Government and I look forward to working with you during the coming year. I congratulate you on the selection of your project.

Sincerely,



Nancy O. Sanders, Acting Director
Division of Community Programs

rhj
cc: Will Linder
Enclosures



KENTON COUNTY FISCAL COURT

CLYDE MIDDLETON, Judge/Executive
STEVE ARLINGHAUS, Commissioner
RICHARD COMBS, Commissioner
BERNARD MOORMAN, Commissioner
GARRY EDMONDSON, Attorney

GEORGE NEACK, Administrator
RALPH L. BAILEY, JR., Asst. Administrator
IVAN D. FRYE, Treasurer
CHRIS WARNEFORD, Supt. Public Works

Kenton County Building
2nd Floor
303 Court Street
Covington, Kentucky 41011-1679

June 8, 1995

R. Scott Kimmich, Acting Director
Division of Community Programs
Department of Local Government
1024 Capital Center Drive
Frankfort, KY 40601-8024

SUBJECT: Kenton County Water Expansion Project, Sub-District B/
B-94-DC-21-0001(013)

Dear Mr. Kimmich,

Transmitted herewith is a copy of Program Amendment #1 for the Kenton County Water Expansion Project, Sub-District B, which conforms with your letter of instructions dated April 19, 1995. This Amendment takes excess money from the rehabilitation meter setting/service lines and contingencies and reallocates these funds into the public facilities line item. These funds along with surplus Farmers Home Administration Funds will be used to extend the 16 inch transmission line along Kentucky 17 from the original 10,720 linear feet to 18,165 linear feet. All water lines included in the original Community Development Block Grant Application has been constructed.

Please note that the eleven (11) additional low and moderate income households along this extension will be provided free meter setting and service lines identical to those provided in the initial project. These meter settings and service lines for this extension, however, will be provided by the Kenton County Water District utilizing their own funds.

If you have any questions regarding this Program Amendment, please contact Will Linder, our Project Consultant, or Richard Harrison, Engineer Kenton County Water District.

Respectfully,

Clyde Middleton
County Judge Executive

331 - 5046
606 / ~~578~~ - 5456

WJL MAL
Rob TINA
File



OFFICE OF THE GOVERNOR
DEPARTMENT OF LOCAL GOVERNMENT
FRANKFORT, KENTUCKY 40601-8204

BERETON C. JONES
GOVERNOR

BRUCE FERGUSON
COMMISSIONER

April 19, 1995

The Honorable Clyde Middleton
Kenton County Judge/Executive
Kenton County Building, 2nd Floor
303 Court Street
Covington, Kentucky 41011

RE: Kenton County Water Expansion
Project, Subdistrict B
B-94-DC-21-0001(013)

Dear Judge Middleton:

Upon review of the application for the above referenced project, it has been determined that any CDBG funds not used for service lines and tap on fees can be utilized for water line construction. The target area did meet the LMI requirement.

Please submit an amendment for this proposed change of activity.

If you have any questions regarding this matter, please contact your Program Advisor, Betty Powell, at 502/573-2382.

Sincerely,

A handwritten signature in cursive script, appearing to read "R. Scott Kimmich".

R. Scott Kimmich, Acting Director
Division of Community Programs

cc: Will Linder

606/578-5456



OFFICE OF THE GOVERNOR
DEPARTMENT OF LOCAL GOVERNMENT
FRANKFORT, KENTUCKY 40601-8204

BRERETON C. JONES
GOVERNOR

BRUCE FERGUSON
COMMISSIONER

April 19, 1995

The Honorable Clyde Middleton
Kenton County Judge/Executive
Kenton County Building, 2nd Floor
303 Court Street
Covington, Kentucky 41011

RE: Kenton County Water Expansion
Project, Subdistrict B
B-94-DC-21-0001(013)

Dear Judge Middleton:

Upon review of the application for the above referenced project, it has been determined that any CDBG funds not used for service lines and tap on fees can be utilized for water line construction. The target area did meet the LMI requirement.

Please submit an amendment for this proposed change of activity.

If you have any questions regarding this matter, please contact your Program Advisor, Betty Powell, at 502/573-2382.

Sincerely,

R. Scott Kimmich, Acting Director
Division of Community Programs

cc: Will Linder



KENTON COUNTY JUDGE/EXECUTIVE

CLYDE MIDDLETON

February 11, 1998

Mr. R. Scott Kimmich, Director
Division of Community Programs
Department for Local Government
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

Atten: Jeff Hanna
Public Facilities Coordinator

RE: Kenton County 1997 Application No. 024 - Water Expansion Project
Subdistrict "C" Evidentiary Material - Request for Program Amendment #1

Dear Mr. Kimmich:

Per Mr. Hanna's instructions, attached is Request for Program Amendment #1 for the 1997 Kenton County Project. This Program Amendment adds the provision of service lines (03b line item) for an estimated 258 LMI households; the cost is paid by local funds. The County, at the Fiscal Court meeting on February 10, has approved committing a total of \$100,000 to the project. Also, the amendment shifts funds in the 04c line item to increase the RD funds.

These changes have been brought about by the Board of the Northern Kentucky Water Service District in an effort to provide the most service possible as part of the project. We feel that these changes do not reflect any deviation from the original project. The changes actually increase the benefit to the LMI households the project will serve as well as giving over-income households an incentive to sign-up early.

Also attached is a revised Cost Summary and budget pages reflecting Program Amendment #1 for your files.

The first reading of a Budget Amendment to include the CDBG funds (Ordinance No. 225.12A) was approved last night. A copy is attached. The second reading will be held on February 24, 1998, and a copy of the approved and adopted ordinance will be forwarded to your office by February 28, 1998. Should you have any questions, please do not hesitate to call.

Very truly yours,



CLYDE MIDDLETON
KENTON COUNTY JUDGE/EXECUTIVE

CM/cb

Attachments

cc: Will Linder and Associates
Northern Kentucky Water Service District

Kentucky Community Development Block Grant

REQUEST FOR PROGRAM AMENDMENT

(1) Grant No: B-97-DC-21-0001 () App. No. 97-024		(2) Amendment No: 1	(3) Date: Feb. 1998
(4) Grantee: Kenton County, Kentucky Kenton County Water Expansion, Subdistrict C		(5) Contact Person: Will Linder and Associates Phone: 606/986-8406	
(6) Activity Number	(7) Activity Category	(8) Original/Current Activity	(9) Amended Activity
03b	Rehab - grants	Not an original activity	Include provision of service lines for LMI (estimated 258 LMI Households)
04c	PF - waterlines	Provide 20.3 miles of 6", 8", 12" and 16" waterlines in the southern portion of Kenton County to six areas.	No change; decrease in CDBG from orig. application and increase in other funds
04h,i	PF-Eng. Design & Inspect.	Provision of construction design and inspection	No change; decrease in RD from orig. application; all eng. costs to be paid within RD Fee Schedule
06a	Other - Legal Services/ Bond Counsel	Provision of required legal services, bond counsel required by RD	No change
06b	Other - Interim financing	Provision of interest cost of interim financing	No change
08	Planning	Preparation of CDBG application, environmental review an evidentiary materials as required	No change

REQUEST FOR PROGRAM AMENDMENT

Feb., 1998

(6) Activity Number	(7) Activity Category	(8) Original/Current Activity	(9) Amended Activity
9	Administration	Service to assure compliance with all regulations, file maintenance, financial management & closeout.	No change
10	Contingencies	Funds to provide for unforeseen developments during construction	No change
(10) Reasons for Proposed Changes:			
03c	The Northern Kentucky Water Service District has asked that in addition to waiving Tap-ons for LMI, that provision of service lines for LMI households be included in the project (per survey, 258 HH @ 64 ft. per household @ \$6 per ft. for an estimate of \$99,072, utilizing 100 ft. maximum). This cost will be paid with County contribution of \$100,000 to the project.		
04c	Funds shifted in 04c as NKWSD is promoting early sign-ups with \$100 off tap-on fees for OI until bidding (178 OI + 44 commercial = 222 x \$650 providing estimate of \$144,300); the increase in costs will be paid by non-CDBG funds.		

(11) BUDGET AMENDMENT

Grant No.: B-97-DC-21-0001 ()
Kenton County - Water Expansion Project Subdistrict C


Activity Number	Activity Category	Original/Current Budget			Budget Amendment			Other Funds Source					
		CDBG Funds	Program Income	Other Funds	Total	CDBG Funds	Program Income		Other Funds	Total			
1)	ACQUISITION												
2)	CLEARANCE												
3)	REHABILITATION												
a)	code enforcement												
b)	grants												
c)	forgivable-deferred loans												
d)	leveraged loans												
e)	public housing mod.												
f)	lead based/lead hazard/abate												
g)	residential-historic preservation												
h)	non-residential-historic preserv.												
	Total Rehabilitation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4)	PUBLIC FACILITIES												
a)	parks & recreational facilities												
b)	street improvements												
c)	water lines	\$811,755	\$0	\$1,842,090	\$2,653,845	\$811,755	\$0	\$1,842,090	\$2,653,845	\$0	\$0	\$0	RD, Tap-ons, Com. Funds
d)	water treatment facilities												
e)	sewer lines												
f)	sewer treatment facilities												
g)	flood & drainage facilities												
h)	engineering design	\$0		\$126,200	\$126,200	\$0			\$126,200				RD
i)	engineering inspection	\$0		\$63,093	\$63,093	\$0			\$63,093				RD

(11) BUDGET AMENDMENT

Grant No.: B-97-DC-21-0001 ()
 Kenton County - Water Expansion Project Subdistrict C

Activity Number	Activity Category	Original/Current Budget			Budget Amendment			Total	Other Funds Source
		CDBG Funds	Program Income	Other Funds	CDBG Funds	Program Income	Other Funds		
4)	Public Facilities (continued)								
j)									
1.								\$0	
2.								\$0	
3.								\$0	
4.								\$0	
	Total Public Facilities	\$811,755	\$0	\$2,031,383	\$811,755	\$0	\$2,031,383	\$2,843,138	
5)	Public Services							\$0	
6)	Other								
a)	Legal Services/Bond Counsel	\$0		\$20,000	\$0		\$20,000	\$20,000	RD
b)	Interim Financing	\$0		\$120,000	\$0		\$120,000	\$120,000	RD
c)								\$0	
	Total Other	\$0	\$0	\$140,000	\$0	\$0	\$140,000	\$140,000	
7)	Subtotal	\$811,755	\$0	\$2,171,383	\$811,755	\$0	\$2,271,383	\$3,083,138	
8)	Planning	\$9,500		\$0	\$9,500		\$0	\$9,500	
9)	Administration	\$40,000		\$0	\$40,000		\$0	\$40,000	
10)	Contingencies	\$25,500		\$185,176	\$25,500		\$185,176	\$210,676	RD
11)	TOTAL PROJECT COSTS	\$886,755	\$0	\$2,356,559	\$886,755	\$0	\$2,456,559	\$3,343,314	

(12) GRANTEE

Signature: 
 Title: Kenton County Judge/Executive

Date: February 11, 1998

(13) APPROVAL (State Use Only)

Signature: _____
 Title: _____

Date: _____

COST SUMMARY
Public Facilities Projects
Kenton County

Applicant:

DLG USE ONLY:
Exhibit C
B- 97 -DC-21-0001()

UD D.	DLG NO.	ACTIVITY CATEGORY	CDBG FUNDS	OTHER FUNDS	TOTAL	SOURCE
01	1)	ACQUISITION	\$0	\$0	\$0	
04	2)	CLEARANCE	\$0	\$0	\$0	
	3)	REHABILITATION				
15	a)	code enforcement			\$0	
14A	b)	grants		\$100,000	\$100,000	Kenton Co.
14A	c)	forgivable-def. loans			\$0	
14A	d)	leveraged loans			\$0	
14C	e)	public housing mod.			\$0	
14I	f)	lead based/lead hazard/abate			\$0	
16A	g)	residential-historic preservation			\$0	
16B	h)	non-residential-historic preserv.			\$0	
		TOTAL REHAB.	\$0	\$100,000	\$100,000	
	4)	PUBLIC FACILITIES				
03F	a)	parks & rec. facilities			\$0	
03K	b)	street improvements			\$0	
	c)	water lines	\$811,755	\$1,842,090	\$2,653,845	\$1,687,790 RD/\$144,300
03J	d)	water treatment facilities			\$0	Tap-ons, \$10,000 Com.Fnds
	e)	sewer lines			\$0	
	f)	sewage treatment fac.			\$0	
03I	g)	flood & drainage fac.			\$0	
	h)	engineering design		\$126,200	\$126,200	RD
	i)	engineering inspection		\$63,093	\$63,093	RD
	j)	other public facilities				
	1.					
	2.					
	3.					
		TOTAL PUBLIC FAC.	\$811,755	\$2,031,383	\$2,843,138	
05	5)	PUBLIC SERVICES	\$0	\$0	\$0	
	6)	OTHER				
	a)	Legal Services/Bond Counsel		\$20,000	\$20,000	RD
	b)	Interim Financing		\$120,000	\$120,000	RD
	c)				\$0	
		TOTAL OTHER	\$0	\$140,000	\$140,000	
	7)	SUBTOTAL	\$811,755	\$2,271,383	\$3,083,138	
20	8)	PLANNING	\$9,500		\$9,500	
21A	9)	ADMINISTRATION	\$40,000		\$40,000	
22	10)	CONTINGENCIES	\$25,500	\$185,176	\$210,676	RD
	11)	TOTAL PROJECT COSTS	\$886,755	\$2,456,559	\$3,343,314	

Feb., 1998
Reflects Prog.Amen. #1

Kenton County/Northern Kentucky Water Service District
 Subdistrict C Water Line Extension Project

Rev. 2/98

CDBG / RD PROJECT

Project Cost Act. No. Activity	CDBG (8")		RD (8")	Kenton Co. Tap-ons	Com.Funds	Total
03b Rehab - grants			\$0	\$100,000		\$100,000
Subtotal:			\$0	\$100,000	\$0	\$100,000
04c Waterlines:						
- Staffordsburg	\$100,000		\$223,100			\$323,100
- Spillman	\$90,000		\$42,905			\$132,905
- Rector	\$25,000		\$45,695			\$70,695
- Hempfling	\$160,000		\$100,720		\$154,300	\$260,720
- Madison Pike	\$86,755		\$555,485			\$796,540
- US 25/Green	\$350,000		\$719,885			\$1,069,885
Subtotal:	\$811,755		\$1,687,790	\$0	\$154,300	\$2,653,845
4h Engineering Design			\$126,200			\$126,200
4i Engineering Inspection			\$63,093			\$63,093
Subtotal	\$0		\$189,293	\$0	\$0	\$189,293
06a Legal Services/Bond Counsel			\$20,000			\$20,000
06b Interim Financing			\$120,000			\$120,000
Subtotal	\$0		\$140,000	\$0	\$0	\$140,000
8 Planning	\$9,500					\$9,500
9 Administration	\$40,000					\$40,000
10 Contingencies	\$25,500		\$185,176			\$210,676
Total Project Costs:	\$886,755		\$2,202,259	\$100,000	\$154,300	\$3,343,314
CDBG / RD Project Funding						
Community Development Block Grant	\$886,755					\$886,755
Rural Development	\$2,202,259					\$2,202,259
Kenton County Fiscal Court	\$100,000					\$100,000
Community Fund Raising	\$10,000					\$10,000
Tap-on Fees (OI & Com: 222 @ \$650)	\$144,300					\$144,300
Total Project Funding:	\$3,343,314					\$3,343,314



KENTON COUNTY FISCAL COURT

RODNEY "BIZ" CAIN, Judge/Executive
STEVE ARLINGHAUS, Commissioner
NYOKA JOHNSTON, Commissioner
BERNARD MOORMAN, Commissioner

GEORGE NEACK, Deputy Judge/Executive
IVAN D. FRYE, Treasurer
GARRY EDMONDSON, Attorney
MICHAEL BROWNING, Police Chief

RALPH L. BAILEY, JR, County Administrator
CHRIS WARNEFORD, Supt. Public Works
ALINE SUMME, Dir., Animal Shelter
BILL H. GIBBONS, Gen. Mgr., Golf Course

September 21, 1998

R. Scott Kimmich, Director
Division of Community Programs
Department for Local Government
1024 Capital Center Drive
Suite 340
Frankfort, KY 40601-8204

RE: Kenton County Water Expansion Program
Grant Number: B97-DC-21-0001(021)

Dear Mr. Kimmich:

On January 16, 1998, you notified Kenton County Judge/Executive Clyde W. Middleton, that Kenton County had been awarded a Community Development Block Grant in the amount of \$886,755.00 to expand waterlines in Sub-District C of southern Kenton County. This January 16, 1998 correspondence also notified Kenton County that it must have all approvals of non CDBG funds committed by November 1, 1998 and that the waterline project must be advertised for construction bid also by November 1, 1998.

This proposed water extension project is being administered by the Northern Kentucky Water Service District under a cooperation agreement with the Kenton County Fiscal Court. The Northern Kentucky Water Service District has, in all good faith, attempted to provide a commitment of all non CDBG funds, but have found that unmitigated circumstances have prevented Rural Development from awarding the \$2,287,363.00 designated as their portion of the proposed project. As both Kenton County and the Northern Kentucky Water Service District have been due diligent in addressing the requirements of the Community Development Block Grant 1997 CDBG Public Facilities Application, we request an extension of the November 1, 1998 deadline for providing Rural Development commitment to the project and advertising for construction bids prior to November 1, 1998. Please be aware the Northern Kentucky Water Service District has progressed with construction drawings to the point where they can be submitted to the Kentucky Division of Water prior to the second week in

September, 1998. It is our understanding that this problem with Rural Development affects other communities as well as Kenton County and withdrawal of grant funds by November 1, 1998 (per your letter of January 16, 1998) would seem inappropriate based upon the County's efforts to comply with your requirements.

I would like to meet with you and Commissioner Arnold to discuss this potential withdrawal of grant funds prior to the November 1, 1998 deadline.

If you have any questions regarding this letter, please contact me.

Respectfully,

A handwritten signature in black ink, appearing to read 'Rodney Cain', with a long horizontal flourish extending to the right.

RODNEY "BIZ" CAIN
KENTON COUNTY JUDGE/EXECUTIVE

RC/CB

cc: Dennis Willaman, General Manager
Northern Kentucky Water Service District



KENTON COUNTY FISCAL COURT

RODNEY "BIZ" CAIN, Judge/Executive
STEVE ARLINGHAUS, Commissioner
NYOKA JOHNSTON, Commissioner
BERNARD MOORMAN, Commissioner

GEORGE NEACK, Deputy Judge/Executive
IVAN D. FRYE, Treasurer
GARRY EDMONDSON, Attorney
MICHAEL BROWNING, Police Chief

RALPH L. BAILEY, JR, County Administrator
CHRIS WARNEFORD, Supt. Public Works
ALINE SUMME, Dir., Animal Shelter
BILL H. GIBBONS, Gen. Mgr., Golf Course

October 16, 1998

Mr. R. Scott Kimmich, Director
Division of Community Development
Department for Local Government
1024 Capital Center Drive, Suite 340
Frankfort, KY40601

RE: Kenton County Water Expansion Subdistrict C Project
Evidentiary Material (97-021)

Dear Mr. ^{Scott}Kimmich:

Attached please find the following items of evidentiary material for the Kenton County Subdistrict C Water Project:

1. Commitments of Other Funds

Kenton County Fiscal Court	\$ 100,000
Rural Development App.	\$2,287,363
NKWSD	\$1,821,012
Community Funds	\$ 10,000
Tap-on Fee Commitment	\$ 144,300
2. Authorized Signature Form
3. Direct Electronic Transfer of Funds form

Should you have any questions, please do not hesitate to call.

Sincerely,


RODNEY "BIZ" CAIN
KENTON COUNTY JUDGE/EXECUTIVE

RC/cb

cc: Will Linder & Associates
Richard Harrison, NKWSD



Fifth Third Bank
 OF NORTHERN KENTUCKY, INC.
 P O BOX 427 FLORENCE KY 41042

PUBLIC FUNDS SWEEP		1
ACCOUNT TYPE		PAGE
09/01/98	THROUGH 09/30/98	742-53115
STATEMENT PERIOD		ACCOUNT NUMBER
COVINGTON		431-0810
OFFICE		TELEPHONE NUMBER
09/01	BALANCE	479,941.64
0	DEPOSITS	0.00
1	WITHDRAWALS/FEES	44,324.24
	INTEREST EARNED	1,938.19
	INTEREST WITHHELD	
09/30	BALANCE	437,555.59

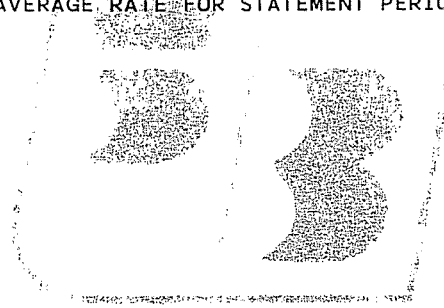
KENTON COUNTY FISCAL COURT
 CDGB FUND
 303 COURT ST BOX 792
 COVINGTON KY 41011-1693

VISIT FIFTH THIRD TODAY FOR SPECIAL RATES ON HOME EQUITY LOANS OR LINES OF CREDIT. YOU MAY BE ELIGIBLE FOR BELOW-PRIME EQUITY LOAN RATES! TAKE ADVANTAGE OF LOW MONTHLY PAYMENTS AND NO PAYMENTS FOR 120 DAYS ON A NEW EQUITY LOAN! VISIT ANY ONE OF FIFTH THIRD'S CONVENIENT LOCATIONS TO APPLY TODAY. FIFTH THIRD IS AN EQUAL HOUSING LENDER.

1998 INTEREST EARNED 18,808.56 FOR TAX ID 61-6000743

DATE	AMOUNT	DESCRIPTION
09/10	44,324.24	DEBIT MEMO
09/30	1,938.19+	INTEREST - DAILY INVESTMENT
•-----DAILY BALANCE-----• •-----DAILY BALANCE-----• •-----DAILY BALANCE-----• •-----DAILY BALANCE-----•		
09/10	435,617.40	09/30 437,555.59

5.170% IS AVERAGE RATE FOR STATEMENT PERIOD.



Fifth Third Bank

FIFTH THIRD CAN SERVE YOUR EQUIPMENT LEASING NEEDS! WITH AS LITTLE AS A 2 HOUR RESPONSE TIME AND VENDOR FINANCE PROGRAMS, YOU'LL ENJOY THE MANY BENEFITS. PLEASE CALL 1-800-783-1616 FOR ALL THE DETAILS.

Estimated Receipts 1998-99

SOURCE	CODE NUMBER	01 GENERAL FUND	02 ROAD FUND	03 JAIL FUND	04 LGEA FUND	07 CDBG FUND	22 GOLF FUND	23 COLT FUND	TOTAL
1. Real Property Taxes	4101	6,200,000							6,200,000
2. Tangible Personal Property Taxes	4102	750,000							750,000
3. Motor Vehicle Property Taxes	4103	900,000							900,000
4. Del. Property Taxes	4104	50,000							50,000
5. Bromley Fire Fees	4112	3,600							3,600
6. Advertising Cost	4121	3,000							3,000
7. Bank Shares Tax	4130	315,000							315,000
8. Corp. Franchise Tax	4131	325,000							325,000
9. Occup. Lic. Tax	4134							8,900,000	8,900,000
10. Deed Transfer	4135	400,000							400,000
11. Vehicle Rental Tax	4141	500							500
12. Payments in Lieu of Taxes	4209	35,000							35,000
13. County Clerk Ex Fees	4302	550,000							550,000
14. County Sheriff Ex Fees	4304	475,000							475,000
15. Excess Fees 75 % Acct	4307	1,500,000							1,500,000
16. Business License	4401	10,000							10,000
7. Building Permit	4407	40,000							40,000
18. CATV Franchise Fee	4417	35,000							35,000
19. Federal Prisoners	4502			250,000					250,000
20. CDBG Grant Funds	4504 05					886,755			886,755
21. Del/Omitted Tax Other Co.	4505	200,000							200,000
22. Reimb. Non Public Sch Tra	4509							300,000	300,000
23. Jail Education Grant	4510			76,000					76,000
24. Truck License	4516		152,000						152,000
25. Drivers License	4517		13,000						13,000
26. County Road Aid	4518		320,000						320,000
27. Muni. Road Aid	4519		0						0
28. Election Exp Reimb	4520	50,000							50,000
29. Assess Appeals	4521	1,000							1,000
30. Legal Process	4522	1,000							1,000
31. Dog License	4523	300							300
32. Net Court Rev.	4524	26,900							26,900
33. LGEA	4528				19,500				19,500
34. Jail Operations	4533			472,147					472,147

Estimated Receipts 1998-99

SOURCE	CODE NUMBER	01 GENERAL FUND	02 ROAD FUND	03 JAIL FUND	04 LGEA FUND	07 CDBG FUND	22 GOLF FUND	23 COLT FUND	TOTAL
35. Medical Payment	4534			75,000					75,000
36. Court Costs	4535			107,000					107,000
37. State Prisoners	4537			525,000					525,000
38. DUI Service Fee	4538			30,000					30,000
39. Police Incentive	4539	95,000							95,000
40. DES/Hazard Cleanup	4541	25,000							25,000
41. Fed/State DES Reimb.	4542	25,000							25,000
42. Misc Payments	4543								0
43. Juvenile Fee	4556			200,000					200,000
44. Class D Felons	4557			450,000					450,000
45. Park/Ball Field Fees	4604		5,000						5,000
46. Green Fees	4606					1,725,000			1,725,000
47. Dispatch Service	4610	225,000							225,000
48. Animal Shelter Fees	4612	90,000							90,000
49. Data Processing Svc.	4615	135,000							135,000
50. Work Release	4618			90,000					90,000
51. Road Maint/Snow Removal	4619		25,000						25,000
52. Road Signs	4620		3,000						3,000
53. Home Incarceration	4624			25,000					25,000
54. Collection Bond Fees	4633			26,000					26,000
55. Vehicle Service/Repairs	4641		175,000						175,000
56. Warrant System Receipts	4644	10,000							10,000
57. Phone Commission	4702	2,500		144,000					146,500
58. Lunchroom Commissions	4703		15,000			130,000			145,000
59. Surplus Equip.	4704	10,000	10,000						20,000
60. Gas Sales	4708	1,000	40,000						41,000
61. Health Bldg Lease	4711	94,500							94,500
62. Courthouse Rent	4712	391,000							391,000
63. Pro Shop Sales	4722					215,000			215,000
64. Golf Equipment Rentals	4723					17,000			17,000
65. Power Golf Cart Rental	4724					700,000			700,000
66. Insurance Claims Proceeds	4726	5,000	5,000						10,000
67. Copy Fees/Accident Rpts	4730								
68. Misc. Rec.	4731	25,553	1,000	27,000					53,553
69. Loan Repayments	4732					51,400			51,400

Estimated Receipts 1998-99

SOURCE	CODE NUMBER	01 GENERAL FUND	02 ROAD FUND	03 JAIL FUND	04 LGEA FUND	07 CDBG FUND	22 GOLF FUND	23 COLT FUND	TOTAL
70. Insurance Reimbursements	4733	45,000							45,000
71. Gift Certificates	4735						2,000		2,000
72. CATV Salaries	4751	130,000							130,000
73. Drug Strike Force	4755	30,000							30,000
74. Reimb. Police Services	4756	15,000							15,000
75. Drug Asset Forfeiture	4761	50,000							50,000
76. City Payroll Tax Coll	4771	75,000							75,000
77. Reimb of City Tax Refunds	4772							50,000	50,000
78. COLT Tax Collect	4799	500,000							500,000
79. Interest on CDs	4802							30,000	30,000
80. Int. Ck. Acct.	4806	400,000	40,000	30,000	500	21,845	25,000	470,000	987,345
81. Total Revenues		14,250,853	804,000	2,527,147	20,000	960,000	2,814,000	9,750,000	31,126,000
82. KARP Note	4911	5,000,000							5,000,000
83. Bond Proceeds	4905	16,000,000							16,000,000
84. Interfund Transfers Out	4909	(4,843,853)							(4,843,853)
85. Interfund Transfers In	4910		3,346,000	1,497,853					4,843,853
86. Surplus Prior Year	4901	4,443,000	850,000	400,000	8,000	500,000	364,000	10,000,000	16,565,000
Total Available for Year		34,850,000	5,000,000	4,425,000	28,000	1,460,000	3,178,000	19,750,000	68,691,000

BUDGET APPROPRIATIONS

Code Number	Description	1998-1999 Appropriation Amount
L.G.E.A. FUND		
04 6106 447	Road Materials	28,000
TOTAL LGEA FUND		<u>28,000</u>
CDBG FUND		
07 5076 326	CDBG Financial Adv. Services	10,000
07 5076 342	County Match/Grant	100,000
07 5076 743	Water Line Construction	886,755
5076 902	FEMA Grant Disbursement	53,706
07 5076 990	Economic Development Loans	200,000
07 9200 999	CDBG Reserve for Transfer	209,539
TOTAL CDBG FUND		<u>1,460,000</u>

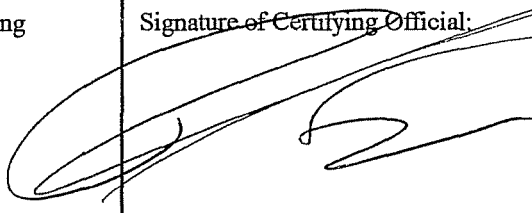
**CERTIFICATION OF
COMMITMENTS OF OTHER FUNDS**

Firm Financial Commitments have been received for the following activities:

Activity Name	Amount	Funding Source
1. 03b - Rehab - grants (service lines)	\$ 100,000	Kenton County Fiscal Ct.
2. 05c - PF - Waterlines	\$ 1,764,185 144,300 10,000 1,462,655	Rural Dev. Tap-ons Community Funds NKWSD Bond Issue
3. 05h - PF - Eng. Design	\$ 131,700 105,311	Rural Dev. NKWSD Bond Issue
4. 05i - PF - Eng. Inspection	\$ 66,302 61,432	Rural Development NKWSD Bond Issue
5. 06a - Other - Legal Services/Bond Counsel	\$ 20,000	Rural Development
6. 06b - Other - Interim Financing	\$ 120,000	Rural Development
7. 10 - Contingencies	\$ 185,176 191,614	Rural Development NKWSD Bond Issue

TOTAL: \$ 4,462,675

Copies of Letters of Commitment from each funding source are attached for your records.

Name and title of Certifying Official:	Signature of Certifying Official:	Date:
Rodney "Biz" Cain, Judge Executive Kenton County, KY		10/09/98

APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

		2. DATE SUBMITTED	REV: 2-12-98	Applicant Identifier	
TYPE OF SUBMISSION: <i>Application</i>	<i>Preapplication</i>	3. DATE RECEIVED BY STATE		State Application Identifier KY 960715-0792	
	<input type="checkbox"/> Construction	<input checked="" type="checkbox"/> Construction	4. DATE RECEIVED BY FEDERAL AGENCY		Federal Identifier
<input type="checkbox"/> Non-Construction	<input type="checkbox"/> Non-Construction				

5. APPLICANT INFORMATION

Legal Name	Northern Kentucky Water Service District	Organizational Unit	Special District
Address (give City, County, state and zip code) P.O. Box 17010 Covington, Kenton County, Kentucky 41017		Name and telephone number of the person to be contacted on matters involving this application (give area code) Richard Harrison, NKWSD OR Will Linder & Assoc., Consultants 606/578-7890 606/986-8408 FAX Number: 606/578-5456 606/986-4886	

6. EMPLOYER IDENTIFICATION NUMBER (EIN):

61-1311695

7. TYPE OF APPLICANT: (enter appropriate letter in box) **G**

A. State	H. Independent School Dist.
B. County	I. State Controlled Institution of Higher Learning
C. Municipal	J. Private University
D. Township	K. Indian Tribe
E. Interstate	L. Individual
F. Intermunicipal	M. Profit Organization
G. Special District	

Other (Specify):

8. TYPE OF APPLICATION:

New Continuation Revision

If Revision, enter appropriate letter(s) in box(es): Other
 A. Increase Award B. Decrease Award C. Increase Duration
 D. Decrease Duration Other (specify): Modification in Budget

9. NAME OF FEDERAL AGENCY:
USDA Rural Development Administration

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:

1 0 - 7 6 0

Title: Water Systems for Rural Communities

AREAS AFFECTED BY PROJECT (cities, counties, states, etc.):
Southern Kenton County, Kentucky

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT:

The project will provide water to seven areas in southwestern Kenton County. The system will utilize a combination of PVC and ductile iron to accommodate various pressures.

An expanded Description of the Project and Needs and a detailed budget breakdown is attached.

13. PROPOSED PROJECT:

Start Date
6-98

Ending Date
6-99

14. CONGRESSIONAL DISTRICTS OF: Kentucky

a. Applicant
4th District - Jim Bunning, Representative

b. Project
4th District, Jim Bunning, Representative

15. ESTIMATED FUNDING:

a. Federal (RD)	\$	2,287,363.00
b. Applicant	\$	144,300.00
c. State (CDBG)	\$	886,755.00
d. Local Kenton Co.	\$	100,000.00
e. Other -Community	\$	10,000.00
f. Other-NKWSD Bond Issue	\$	1,821,012.00
g. TOTAL	\$	5,249,430.00

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

- a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:
DATE Sept. 4, 1996 Submitted with Ky. 96 CDBG Application
Copy of A-95 Comments are attached
- b. NO. PROGRAM IS NOT COVERED BY E.O. 12372
 OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?

Yes If "Yes", attach an explanation. No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

Typed Name of Authorized Representative Dennis Willaman	b. Title General Manager Northern Kentucky Water Service District	c. Telephone number 606 / 578-7890
d. Signature of Authorized Representative <i>Dennis L. Willaman</i>		e. Date Signed 2/13/98

BUDGET INFORMATION - Construction Programs

NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case you will be notified.

COST CLASSIFICATION		a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Column a-b)
1.	Administrative and legal expenses (admin./planning/legal/bond con.)	\$20,000.00	\$49,500.00	\$69,500.00
2.	Land, structures, rights-of-way, appraisals, etc.	\$0.00	\$0.00	\$0.00
3.	Relocation expenses and payments	\$0.00	\$0.00	\$0.00
4.	Architectural and engineering fees (Eng. Design and 201 Plan)	\$131,700.00	\$105,311.00	\$237,011.00
5.	Other architectural and engineering fees	\$0.00	\$0.00	\$0.00
6.	Project inspection fees (Eng. Insp.)	\$66,302.00	\$61,432.00	\$127,734.00
7.	Site work	\$0.00	\$0.00	\$0.00
8.	Demolition and removal	\$0.00	\$0.00	\$0.00
9.	Construction (Water lines)	\$1,764,185.00	\$2,428,710.00	\$4,192,895.00
10.	Equipment	\$0.00	\$0.00	\$0.00
11.	Miscellaneous Interim Financing Rehab grant - Service Lines	\$120,000.00	\$0.00	\$120,000.00
12.	SUBTOTAL (sum of lines 1-11)	\$0.00	\$100,000.00	\$100,000.00
13.	Contingencies	\$0.00	\$0.00	\$0.00
14.	SUBTOTAL	\$185,176.00	\$217,114.00	\$402,290.00
15.	Project (program) income	\$2,287,363.00	\$2,962,067.00	\$5,249,430.00
16.	TOTAL PROJECT COSTS (subtract #15 from #14)	\$0.00	\$0.00	\$0.00
FEDERAL FUNDING				
17.	Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share). Enter the resulting federal share.	Enter eligible costs from line 16c.	Multiply x _____%	\$2,287,363.00

Standard Form 424C (488)
Prescribed by OMB Circular A 102

Authorized for Local Reproduction

Kentucky Department of Local Government

Direct Electronic Transfer of Funds

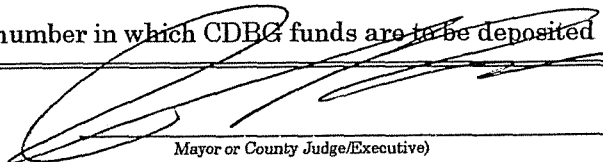
The Kenton County Fiscal Court hereby authorizes the State Treasurer to transfer funds due from the Kentucky Department of Local Government by electronic transfer. Such transfers shall only be made to the depository and account (as noted below) designated for the receipt of Community Development Block Grant funds for the project listed below:

Community and Project Information

City or County Name Kenton County Fiscal Court
Federal Tax ID Number 61-6000743
Project Title Kenton County Water Expansion Project, Subdistrict C
CDBG Pass-through Number B-97-DC-21-0001 (021)

Depository Information

Name of Bank 5/3RD BANK CINCINNATI FURTHER CREDIT
Address KENTON COUNTY FISCAL COURT
5/3 BANK of No. Ky.
Phone Number (513) 579-5385
area code
Contact person at depository bank 5/3RD TREASURY DEPT
ACH routing and transit number of depository bank 042 000 314
Account number in which CDBG funds are to be deposited 742-53115

Signed 
Mayor or County Judge/Executive
Printed Name Rodney "Biz" Cain
Title Kenton County Judge Executive
Date 10/19/98



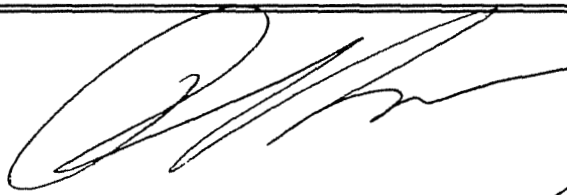
Note: ALL blanks must be completed

KENTUCKY COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

AUTHORIZED SIGNATURE FORM

Name/Address of Recipient Kenton County Fiscal Court P.O. Box 792 Covington, KY 41011	Grant Agreement Number B- 97 - DC-21-0001 (021)
---	---

AUTHORIZED SIGNATURES FOR REQUEST FOR PAYMENT

Typed Name and Signature  Ivan D. Frye	Typed Name and Signature  George Neack
 Rodney "Biz" Cain Date: <u>10/19/98</u> Date and Signature of Chief Executive Officer	For State Use Only APPROVED: Date and Signature Department of Local Government

June 28, 1996

Judge Clyde Middleton
Kenton County Judge/Executive
P. O. Box 792
Covington, Kentucky 41011

RE: PUBLIC HEARING ON PROPOSED 1996 CDBG
APPLICATION & RELATED MATERIALS

Dear Judge Middleton:

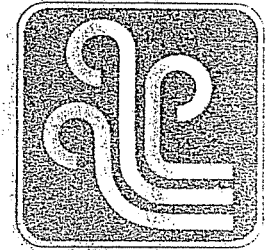
As you may be aware, due to a miscommunication, the public hearing held on May 14, 1996, was inadvertently not published in the local newspaper. As this is a required procedure, the public hearing will have to be held again.

Attached are the following items relative to the proposed 1996 CDBG application:

1. Public Notice - attached is a copy of the notice which was faxed to the The Kentucky Post for publication on July 2, 1996 to inform people of the public hearing scheduled for July 9, 1996.

I will need a tear sheet and affidavit of publication for this notice when it is published as a copy must be included in the CDBG application. I have requested that the newspaper send the affidavit and tear sheet to my attention. I also requested that the newspaper bill KENTON COUNTY for publication of the legal notice.

2. AGENDA - an agenda for the CDBG public hearing.
3. Public Hearing "Fact Sheet" - this fact sheet is referred to in the public hearing notice as being available at your office on the Community Development Block Grant Program, prior to the public hearing.
4. ATTENDANCE LIST - for keeping a record of the persons attending the public hearing. This attendance list is required to be submitted along with the application.
5. ORDER AUTHORIZING FILING - The filing of this application was previously approved on June 25, 1996, and I have a signed original in my files. However, since the initial hearing was inadvertently not advertised in the newspaper and the second hearing will not be held until July 9, 1996, there needs to be a sentence added as I have demonstrated on the attached copy. Please have this revision made and resign. The remainder



Will Linder
& Associates,
Consultants,
Inc.

Grant and Loan
Planning, Packaging,
and Administration

Economic Development,
Public Facilities,
and Housing Projects

218 Swiss Hills
Berea, KY 40403
(606) 986-8406

FAX (606) 986-4886

TDD# 1-800-247-2150
For Hearing Impaired

of the Resolution is acceptable. This Resolution must be included in the CDBG application which is due to DLG on July 15, 1996, please send an original to our office upon approval and signature to be in our office by July 9, 1996.

A representative from our office will be attending the public hearing and will have all the material necessary; the attached material is for your review and files.

If you have any questions concerning this material, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Stacey Epperson" followed by a stylized monogram "SEE".

Stacey Epperson

Enclosures

cc: **Kenton County Water and Sewer Project**
1996 CDBG Application File
Reading File

Date of Publication: **JULY 9, 1996**

PUBLIC HEARING NOTICE

To all interested citizens of **KENTON COUNTY**, Kentucky. The Kentucky Department of Local Government is accepting applications under the 1996 Community Development Block Grant (CDBG) Program. The following information concerning the CDBG program is available for public inspection:

- A. Amount of funds available and range of activities that may be undertaken.
- B. Estimated amount of funds proposed to be used for activities benefiting persons of low and moderate income.
- C. Plans for minimizing displacement of persons as a result of activities assisted with CDBG funds and plans for providing assistance to those persons to be actually displaced as a result of CDBG funded activities.
- D. Records regarding the past use of CDBG funds.
- E. A summary of other important program requirements.

The above information is available at the Office of the **KENTON COUNTY JUDGE/EXECUTIVE, KENTON COUNTY COURTHOUSE, COVINGTON, KENTUCKY 41011**, on **JULY 2, 1996**, through **JULY 9, 1996**, during regular business hours.

The **KENTON COUNTY** will hold a public hearing prior to the submission of the applications for the 1996 CDBG Project. The public hearing will be held on **TUESDAY, JULY 9, 1996**, at **2:00 p.m.** in the **KENTON COUNTY WATER DISTRICT, 3049 DIXIE HIGHWAY, EDGEWOOD, KENTUCKY**. The purpose of this hearing is to obtain views on housing and community development needs, review proposed activities, review the proposed application, solicit public comments and inform citizens that technical assistance is available to help groups representing low and moderate income persons in developing proposals.

COMMENTS ON APPLICATIONS

A copy of the CDBG application will be on file at the office of the **KENTON COUNTY JUDGE/EXECUTIVE, KENTON COUNTY COURTHOUSE, COVINGTON, KENTUCKY**, for citizen review and comment during regular business hours from **JULY 2, 1996**, through **JULY 9, 1996**. Comments on the proposed application may be submitted to the attention of **JUDGE CLYDE MIDDLETON** until **JULY 9, 1996**.

TDD for the hearing impaired--1-800-247-2510

1996 FACT SHEET ON KENTUCKY COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAMS

STATE GOALS AND OBJECTIVES

- GOAL 1: Improve local economies and the economic well-being of the people of Kentucky while protecting the environment.
- GOAL 2: To provide public facilities to eliminate conditions which are detrimental to the public health and safety and which thus detract from further community development, or which are necessary to meet other essential community needs.
- GOAL 3: To improve the condition of housing and expand fair housing opportunities especially for persons of low and moderate income.
- GOAL 4: To improve the quality of life through funding community projects requested by individual communities to enhance community pride and involvement, and perpetuate local identity.
- GOAL 5: To assure that not less than 70% of the total amount of CDBG funds received for Fiscal Years 1996, 1997, and 1998 shall be used for support of activities that benefit low and moderate income persons.

NATIONAL OBJECTIVES

The Housing and Community Development Act of 1974, as amended in 1983 and 1987, states that an activity must meet at least one of the three National Objectives, which are:

1. Benefit to low and moderate income persons
2. Prevention or elimination of slums and blight, and
3. Meeting community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community, which needs are of recent origin, and no other source of funds is available to finance the activity.

<u>Program Area</u>	<u>% of Allocation Available</u>	<u>Dollars Available</u>
Economic Development	27.96%	\$ 8,850,000
Public Facilities	41.5%	14,250,240
Housing	25%	8,585,000
Special Projects	4.8%	1,650,000
Micro enterprise Development	.73%	<u>\$ 250,000</u>

Total \$34,335,240

Grant Ceilings:

Economic Development Traditional	\$ 1,000,000.00
Non-Traditional	150,000.00
Public Facilities	\$ 1,000,000.00
Housing	\$ 1,000,000.00
Special Projects	\$ 500,000.00
Microenterprise Development	\$ 50,000.00

Application Types:

1. Individual
2. Joint

Number of Applications

Each jurisdiction must choose whether to submit a Public Facilities, Housing or Community Project Application. A jurisdiction cannot submit two applications. If a community participates in a joint application, it may not submit another application and the total amount of dollars requested by the joint application cannot exceed \$1,000,000 for a Public Facilities application or a Housing application. A community may not have under review an application for the same project in both Public Facilities, Housing, or Special Projects at the same time.

Program Areas:

1. Economic Development
2. Public Facilities
3. Housing
4. Community Projects
5. Microenterprise Development

Eligible Activities:

1. Acquisition/Disposition
2. Public Facilities
3. Clearance
4. Interim Assistance
5. Removal of Architectural Barriers
6. Public Services
7. Payment of Non-Federal Share
8. Relocation
9. Rehabilitation
10. Activities by Non-profit Entities
11. Administration/Planning

Submission Dates:

Housing and Public Facilities Applications - July 15, 1996
Community Projects Applications - August 15, 1996
Economic Development Applications - Traditional - July 1, 1996 through May 15, 1997
Non-Traditional - October 15, 1996
Microenterprise Development - November 15, 1996

Scoring/Evaluation

Information as presented on the standard application forms will be rated by State teams according to the rating criteria, then points will be added to achieve a total program score. Applications will be compared to others within the same program area.

<u>Category</u>	Maximum Points <u>Public Facilities</u>	Maximum Points <u>Housing</u>
Community Need	100	100
Project Need	350	300
Comparative Costs	150	150
Financing	200	200
Project Effectiveness	<u>200</u>	<u>200</u>
Total Score	1,000	950

AGENDA

CDBG PUBLIC HEARING

KENTUCKY 1996 COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM

KENTON COUNTY-JULY 9, 1996

- I. INTRODUCTION
- II. REVIEW CDBG PROGRAM - GOALS & PAST PERFORMANCE
- III. LOCAL EVALUATION
 1. VIEW OF CITIZENS ON HOUSING AND COMMUNITY DEVELOPMENT NEEDS
 2. ECONOMIC DEVELOPMENT NEEDS
- IV. REVIEW OF APPLICATION/ACTIVITIES PROPOSED FOR 1996 CDBG APPLICATION AND CITIZEN COMMENTS
 1. ESTIMATED AMOUNT OF FUNDS FOR ACTIVITIES TO BENEFIT LOW AND MODERATE INCOME PERSONS
 2. FUNDING
 3. EFFORTS TO BENEFIT LOW & MODERATE INCOME PERSONS
- V. LOCAL EVALUATION
 1. VIEW OF CITIZENS ON SCOPE OF PROJECT
 2. VIEW OF CITIZENS ON FUNDING PROPOSED

**RESOLUTION
NO. 96-20**

**A RESOLUTION AUTHORIZING THE FILING OF A 1996 KENTUCKY
COMMUNITY DEVELOPMENT BLOCK GRANT APPLICATION**

WHEREAS, it is necessary and in the public interest that the County avail itself of the financial assistance provided by Title I of the Housing and Community Development Act of 1974, and the 1981 Amendments permitting the Kentucky Department of Local Government, Division of Community Programs, to commence a Community Development Program within the community; and,

WHEREAS, it is recognized that the Federal/State contract for such financial assistance pursuant to said Title I will impose certain obligations and responsibilities upon the County and will require among other things:

1. Approval of a satisfactory application transmitted to the Kentucky Department of Local Government, Division of Community Programs;
2. Certification by the County relating to activities such as civil rights, citizen participation, relocation payments, acquisition of properties, national environmental policies, and accounting practices; and,
3. Other local obligations and responsibilities in connection with the undertaking and carrying out of the Kentucky Community Development Block Grant Program; and,

WHEREAS, in those areas where acquisition and clearance is proposed, the objectives of the program cannot be achieved through more extensive rehabilitation, and a displacement strategy has been formulated;

**NOW, THEREFORE, BE IT RESOLVED BY THE FISCAL COURT,
COUNTY OF KENTON, COMMONWEALTH OF KENTUCKY, THAT:**

1. That the United States of America and the Commonwealth of Kentucky be, and hereby are, assured of full compliance by the County with certification relating to all regulations and administration of Civil Rights Act, citizen participation, relocation payments, acquisition processes, accounting procedures, the Hatch Act, minimum wage and minimum hour provisions of the Fair Labor Standards Act, and all requirements of the National Environmental Policy Act of 1968.
2. That the Judge/Executive is authorized and directed to prepare such certification and to assure full compliance with all certifications as outlined in (1) above, and all other pertinent regulations.

RESOLUTION - NO. 96-20

(pending a favorable response from the community as observed at the public hearing)

3. That an application on behalf of the County for a grant of up to \$1,000,000 of said Title I funds is hereby approved and that the Judge/Executive is hereby authorized to execute and file such application with the State Department of Local Government, to provide such additional information and to furnish such documentation as may be required, and to act as the authorized correspondent of the County relating to the Kentucky Community Development Block Grant Program.

This the 25th day of June, 1996.

**FISCAL COURT OF
KENTON COUNTY, KENTUCKY**

BY: *Clyde W. Middleton*
CLYDE W. MIDDLETON
JUDGE/EXECUTIVE

ATTEST:

Carol Brockell
FISCAL COURT CLERK



OFFICE OF THE GOVERNOR
DEPARTMENT FOR LOCAL GOVERNMENT
FRANKFORT, KENTUCKY 40601-8204

PAUL E. PATTON
GOVERNOR

BOB ARNOLD
COMMISSIONER

February 11, 2000

The Honorable Richard L. Murgatroyd
Kenton County Judge-Executive
Post Office Box 792
Covington, Kentucky 41012-0792

Post-it® Fax Note	7671	Date	2-14	# of pages	2
To	Richard/Paul C.		From	Vonda	
Co./Dept.			Co.		
Phone #	578-7890		Phone #	986-8406	
Fax #	578-5456		Fax #		

HAPPY Valentine's Day!

Dear Judge Murgatroyd:

RE: Kenton County Subdistrict C Project
97-021

The Department for Local Government (DLG) is in receipt of your Request for Program/Budget Amendment No. 2 for the above referenced project. An approved copy of the amendment is attached to be filed with your CDBG Grant Agreement.

If you have any questions or need future assistance, please contact Jeff Hanna of my staff at 502/573-2382.

Sincerely,

James E. Claycomb, Director
Division of Community Development

Enclosure

c: Vonda Poynter ✓



Kentucky Community Development Block Grant
 Request for Project Amendment
 Budget Change

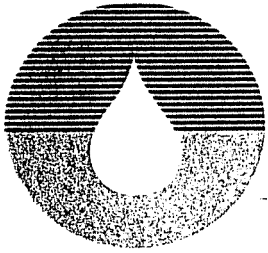
Amendment Number 1
 Date Dec., 1999

Grant Number: B-97-DC-21-0001(021)
 Grantee: Kenton County

Activity Number	Activity Category	CDBG	Program Income	Other Funds	Total	CDBG	Program Income	Other Funds	Total	Other Funds (Source)
1	Acq - easements			100,000	100,000			10,000	10,000	NKWS
3b	Rehab-grants							100,000	100,000	Kenton Co.
04c	PF - waterlines	811,755		3,381,140	4,192,895	837,255		3,450,396	4,287,651	RD, Tapfees NKWS, Com.
04h	PF - Eng. Design			237,011	237,011			261,633	261,633	RD, NKWS
04i	PF - Eng. Insp.			127,734	127,734			127,734	127,734	RD, NKWS
04j	PF-Other-geotechnical							29,560	29,560	NKWS
06a	Other-Legal Services			20,000	20,000			20,000	20,000	RD
06b	Other-Interim Fin.			120,000	120,000			120,000	120,000	RD
08	Planning	9,500			9,500	9,500			9,500	
09	Administration	40,000			40,000	40,000			40,000	
10	Contingencies	25,500		376,790	402,290			243,352	243,352	
	TOTAL	886,755		4,362,676	5,249,430	886,755		4,362,676	5,249,430	

Signature: Peter J. Bellamy
 Title: Kenton County Judge Executive
 Date: 1/12/00

Signature: [Signature]
 Title: Director
 Date: 02/10/00



Northern Kentucky
Water Service District

January 19, 1999

Hon. Steve Pendery, County Judge Executive
Campbell County Fiscal Court
24 West 4th Street
Newport, Kentucky 41071

Dear Judge Pendery:

Please accept this letter as the commitment of the Northern Kentucky Water Service District (NKWSD) to secure no less than \$1,175,986 in loan funds for the Campbell County Subdistrict D water line extension project. This loan will be an obligation of NKWSD and will be repaid from a \$30.00 surcharge paid by all Subdistrict D water users.

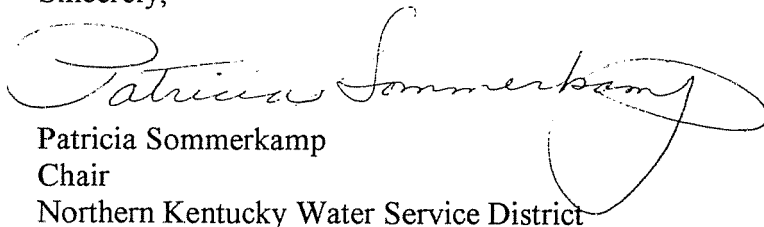
The Northern Kentucky Water Service District will collect connection fees from households and nonresidential users required paying these fees and these fees will pay costs associated with design and construction of this project. The Subdistrict D project budget requires \$39,000 in connection fees to be collected and used for project expenses.

Should less than \$39,000 in connection fees be collected, NKWSD will fund any short fall in these monies. If more than \$39,000 in connection fees is collected during the project, these additional fees will also defray project costs. After the project is complete, future connection fees collected in Subdistrict D will become NKWSD assets and will be expended in accordance with our operational policies.

Please be advised the commitments set forth herein were approved by our Board of Commissioners at our regular meeting of January 19, 1999. As set forth in the minutes of the meeting of that date.

We look forward to working with the Fiscal Court as we complete this badly needed water line extension project.

Sincerely,


Patricia Sommerkamp
Chair
Northern Kentucky Water Service District

FROM : ATKINS-ELROD/GENE WEAVER

FAX NO. : 8594311703

Feb. 17 2003 01:59PM P3



PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
OFFICE OF THE GOVERNOR
DEPARTMENT FOR LOCAL GOVERNMENT
1024 CAPITAL CENTER DRIVE, SUITE 340
FRANKFORT, KENTUCKY 40601-8204
(502) 573-2382



JODY A. LASSITER
COMMISSIONER

June 28, 2002

The Honorable Steve Pendery
Campbell County Judge/Executive
Post Office 72340
Newport, Kentucky 41072-0340

Dear Judge Pendery:

RE: Campbell County Water Expansion Project
98-007

The Department for Local Government (DLG) is in receipt of your request for Project Amendment number 2. The amendment has been reviewed and approved, and a copy is enclosed for your files.

The county has advised our office that this additional work will have to be advertised for bid and some engineering design will be required. However, we want to make you aware that we expect the county to make every effort to accomplish all activities in a timely manner and bring this project to a close as soon as possible.

If you have any questions regarding the above, please contact Betty Powell, 502/573-2382, ext. 229.

Sincerely,

Ventra R. Mapp
Ventra R. Mapp, Director
Division of Community Development

Enclosure

c: Dennis Elrod



Kentucky Community Development Block Grant
Request for Activity Amendment

Grantant: Campbell Co. Fiscal Court
Grant Number: 98-007

Amendment Number 2
Date 6/10/02

Activity Number	Activity Category	Original/Current Activity	Amended Activity
4b	Rehab Grants	Water service line grants to estimated 90 LMI households.	Increase number of households served to 100.
5c	Water Lines	Construction of 10.3 mi. of 8" water line to serve an estimated 185 users.	Construction of 10.3 mi. of 8" water line and an additional 1.7± of 4" waterline to serve an additional 24 residential users.
9	Planning	CDBG App. & EIR preparation	Activity to be funded with non-CDBG resources.
10	Administration	Project management and closeout.	No change in activity.
5j1	Geotechnical	Subsurface investigation engineering.	No change in activity.
5j2	Legal	Legal costs related to bond financing.	No change in activity.
5j3	Interim Interest	Interest paid on bond financing.	No change in activity.
5h	Engineering Design	Project design.	No change in activity. Cost increase to cover additional work.
5i	Engineering Inspection	Project construction oversight.	Eliminate activity from project budget.
11	Contingencies	Cost overrun financing.	No change in activity. Decrease in budget to fund additional work.

Reason(s) for Proposed Changes

4b-Rehab Grants- Change reflects cost overruns on service lines for original project, plus new costs for an additional 13 LMI HH to served by new lines.
5c-Water Lines- Installation of 7,700 LF on Licking Pike and 1,050 LF on Steffen Road adds an estimated 24 additional residential water users.
5h-Engineering Design-Increases in costs associated with additional construction activities.
5i-Engineering Inspection- Services to be provided at no cost by Water District personnel.
9-Planning- Activities will be funded with non-CDBG sources.
11-Contingencies- Decrease Contingencies to allocate funds to other line items.

GRANTEE: Campbell County Fiscal Court

Signature: [Signature]

Title: County Judge/Executive

Date: 6/10/02

APPROVAL (State Use Only) [Signature]
Signature: [Signature]
Title: Director
Date: 6/10/02
ENTIRE OFFICE DIRECTOR
DIVISION OF COMMUNITY DEVELOPMENT
DEPARTMENT FOR LOCAL GOVERNMENT

NOTE CDBG funds are budgeted for 4" lines on Steffen Road and 8" lines on Licking Pike. Local funds will pay 100% of the 8" and 12" lines respectively. No CDBG funds will be used to increase line sizes

FROM : ATKINS-ELROD/GENE WEAVER

FAX NO. : 8594311703

Feb. 17 2003 01:58PM P2

**Kentucky Community Development Block Grant
Request for Project Amendment
Budget Change**

Grantee: Campbell Co. Fiscal Court
Grant Number: 98-007

Amendment Number 2
Date 6/10/02

Activity Number	Activity Category	Original/Current Budget			
		CDBG	Program Income	Other Funds	Total
4b	Rehab Grants	48,600			48,600
5c	Water Lines	901,900		936,178	1,838,078
5h	Engineering Design			128,666	128,666
5i	Engineering Insp.			40,142	40,142
5j1	Geotechnical			15,000	15,000
5j2	Legal			10,000	10,000
5j3	Interim Interest			90,000	90,000
9	Planning		9,500		9,500
10	Administration		40,000		40,000
11	Contingencies			180,000	180,000
TOTALS		1,000,000		1,399,986	2,399,986

CDBG	Budget Amendment			Other Funds (Source)
	Program Income	Other Funds	Total	
69,600			69,600	
890,400		1,001,091	1,891,491	NKWS/D/State Surplus
		143,066	143,066	County/NKWS/D
		38,975	38,975	NKWS/D
		25,000	25,000	NKWS/D/County
		10,000	10,000	NKWS/D
		90,000	90,000	NKWS/D
		9,500	9,500	County
40,000			40,000	
		82,354	82,354	NKWS/D
1,000,000		1,399,986	2,399,986	

GRANTEE: Campbell County Fiscal Court
Signature: *Gene Weaver*
Title: COUNTY JUDGE/EXECUTIVE
Date: 6/10/02

APPROVAL (State Use Only)
Signature: *Debra R. Mapp*
Title: DIRECTOR
DIVISION OF COMMUNITY DEVELOPMENT
DEPARTMENT OF LOCAL GOVERNMENT
Date: 6/10/02



Offices of the Judge-Executive
Kenton County, Kentucky

RICHARD L. MURGATROYD
COUNTY JUDGE-EXECUTIVE

RICHARD S. KIMMICH
DEPUTY JUDGE & CHIEF OF STAFF

March 17, 2000

Mr. Jim Claycomb
Division of Community Programs
Department for Local Government
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601


RE: Kenton County Subdistrict C -- Phase IV Extension
Request for Change Order Approval -- Phase II Contract

Dear Mr. Claycomb,

Attached, please find a letter from the Northern Kentucky Water Service District requesting approval of a contract change order that exceeds 20% of the original contract amount. The letter explains the cost savings that the change order allows the project to benefit from.

Please contact my office or Mr. Richard Harrison of the Northern Kentucky Water Service District if you have any questions.

Sincerely,


Richard L. Murgatroyd
County Judge-Executive

Dedicated to improving the quality of life for ALL Kenton Countians!



OFFICE OF THE GOVERNOR
DEPARTMENT FOR LOCAL GOVERNMENT
FRANKFORT, KENTUCKY 40601-8204

PAUL E. PATTON
GOVERNOR

Send copy to
Richard Harrison

RECEIVED
Office of the Judge-Executive
County of Kenton Kentucky

APR 24 2000 BOB ARMOLD
COMMISSIONER

Routing No. 00-4-127

April 19, 2000

The Honorable Richard L. Murgatroyd
Kenton County Judge-Executive
Post Office Box 792
Covington, Kentucky 41012-0792

Dear Judge Murgatroyd:

RE: Kenton County Subdistrict C Project
97-021

The Department for Local Government (DLG) is in receipt of your Request for Approval of a Change Order that exceeds 20% of the original contract amount for the above referenced project. Since the original contract has been completed under budget and two additional LMI areas will be served, DLG will agree to allow this change order to exceed the 20% requirement.

Please contact Jeff Hanna at (502) 573-2382 if you have questions or need further assistance.

Sincerely,

James E. Claycomb, Director
Division of Community Development

c: Vonda Poynter



AN EQUAL OPPORTUNITY EMPLOYER M/F/D
1024 CAPITAL CENTER DRIVE, SUITE 340
(502) 573-2382



Water District

January 22, 2001

Judge Steve Pendry
Campbell County Fiscal Court
24 West 4th Street
Newport, Ky. 41071

Dear Judge Pendry:

Don Gibson and I appreciate the time you took to meet with us last Friday. I have thought about some potential changes in the Department for Local Government's rating process that would help our projects score higher. The DLG Commissioner and his staff meet annually about this time of year to set program guidelines for the upcoming funding cycle. This includes the establishment of the scoring criteria for the year. The program guidelines are then submitted to the Legislative Research Committee for approval. At that point HUD has to approve the program guidelines before they are considered final.


Historically, cost factors have been the most challenging criteria for our projects to overcome. DLG utilizes a \$10,000 cost per household for their threshold when considering a project's cost effectiveness. As we discussed, this is very difficult for our projects to achieve when we design the projects to include reasonable growth and to provide fire protection. Another area that has hurt us in the past is DLG staff's opinion that surcharges should not be charged to help pay for the cost of construction. They have told us in informal meetings that they think the County and the Water District should contribute matching funds to eliminate the surcharge.

There are changes that DLG could make that would significantly improve our funding chances. I think the main area would be to allow a higher cost per household threshold for projects that provide fire protection and can demonstrate that they will meet reasonable residential growth over an established time frame such as 20 years. Long term, we would probably need a cost per household value of between \$17,000 and \$20,000 to be able to compete. Also regional water systems could be rewarded with higher scores since these systems are generally more efficient than their counterparts. Another idea would be to look at grant amount requested per household instead of total cost per household as the scoring criteria. That would allow us to complete larger projects with a higher match and to receive a higher score because the grant funds would benefit more households. One final idea might be for the DLG to only consider cost for a basic domestic system per household and look at upsizing mains to provide fire

protection and to meet growth as additional funds that do not impact cost in the selection criteria.

These are a few ideas that would help our projects score higher and therefore have a greater chance of being funded. Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Harrison". The signature is written in a cursive style with a large initial "R" and "H".

Richard Harrison

Cc Norm Veatch, Ron Barrow

Northern Kentucky
Water District

June 12, 2001

Honorable Richard Murgatroyd
Kenton County Judge Executive
Kenton County Courthouse
P.O. Box 792
Covington, KY 41012

ATTN: Mr. Ivan D. Frye, County Treasurer

RE: Kenton County Subdistrict C Extensions

Dear Judge Murgatroyd,

The Northern Kentucky Water District is nearing the completion of the Kenton County Subdistrict C Extensions which were possible due to savings on the original bids for the Subdistrict C Project. The County committed additional funds for LMI services lines and LMI service connections as part of the extensions for Subdistrict C.

The Subdistrict C project contractors have completed the LMI service lines and LMI service connections as part of the construction of the Subdistrict C extensions. Therefore the Northern Kentucky Water District is requesting that the County provide their contribution of \$72,800.

Should you have any questions, please do not hesitate to call.

Sincerely,



Richard Harrison
Director of Engineering and Distribution

Cc: Will Linder and Associates, Consultants

Northern Kentucky Water District

October 1, 2001

Bullock Pen Water District
Attn: Mr. Bobby Burgess
P.O. Box 188
Crittenden, Kentucky 41030

Re: Water Line Extension Bagby Road

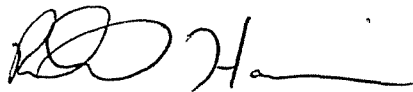
Dear Mr. Burgess,

The Northern Kentucky Water District is very pleased to have Bullock Pen Water District as a Wholesale Customer. The meter on U.S. 25 was turned on last week and billing should commence in November. It is our understanding that Bullock Pen is currently finalizing a proposal to serve Bagby Road, in Kenton County within the next few months. We have had several conversations with residents along Bagby Road as to the timing of this extension by Bullock Pen Water District. We have informed them that this was dependent upon the completion of the connection project on U.S. 25 that would allow Bullock Pen to purchase water from the Northern Kentucky Water District.

We would appreciate a tentative schedule to complete this project so we can keep the residents and Kenton County Judge Executive Murgatroyd informed since he has also received several calls about the proposed extension. Also, when Bullock Pen finalizes its schedule, a written request to serve the area in Kenton County needs to be submitted. You may send that to my attention. Approval will need to be secured by the Northern Kentucky Water District's Board of Commissioner's. This approval would include a provision that the extension and any customers served by the extension could be purchased by the Northern Kentucky Water District at the depreciated construction value of the installation.

Our CEO, Ron Lovan and I would welcome the opportunity to meet with you and discuss any ways the Northern Kentucky Water District can maximize it's service to the Bullock Pen Water District. Please contact me if you have any questions at (859) 578-5458 or if you would like to schedule a meeting date.

Sincerely,



Richard Harrison
Director of Engineering
& Distribution

cc Judge Murgatroyd, Ron Lovan

Northern Kentucky
Water District

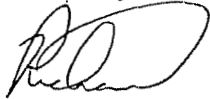
November 21, 2001

The Honorable Richard Murgatroyd
Kenton County Judge/Executive
Post Office Box 792
Covington, Kentucky 41012

Dear Judge Murgatroyd:

Per Ron Lovan's request, attached is a copy of the letter that was sent to the Department For Local Government in reference to the Campbell County Water Project. If you have any questions or comments please call (859) 578-5458.

Sincerely,



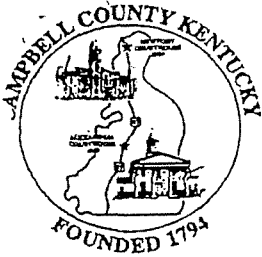
Richard Harrison
Director of Engineering & Distribution

C 07

RECEIVED

OCT 05 2001

Division of Community
Development



CAMPBELL COUNTY FISCAL COURT

County Judge/Executive
STEVE PENDERY

October 1, 2001

County Commissioners
DAVID E. OTTO
WILLIAM J. VERST
ROLAND T. VORLES

Mr. Jeff Hanna
Department of Local Government
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

Post-it® Fax Note	7671	Date	11/21/01	# of pages	2
To	Ruth	From	MELISSA		
Co./Dept.	NKWD	Co.	CCFC		
Phone #		Phone #			
Fax #	578-7893	Fax #			

Dear Mr. Hanna,

Thank you for your interest in projects, which have brought water service to Campbell County.

Our Project Manager Dennis Elrod and Richard Harrison of the Northern Kentucky Water District have spoken to you about our desire to seek a program amendment allowing our unobligated CDBG funds to be combined with Water District dollars to serve the Licking Pike/Steffen Road areas. I understand your initial response was to advise such an amendment to serve those areas should request funds for the smallest dimension line possible to serve these areas and still meet Public Service Commission regulations governing quality of public water service.

You are aware of the Water District's desire to install a twelve-inch line on Licking Pike and an eight-inch line on Steffen Road. The twelve-inch line would allow households on Licking Pike to be served by future extensions and the eight-inch line on Steffen Road represents the smallest dimension line current Water District policies permit to be installed. The Northern Kentucky Water District intends to pay for any additional costs to upgrade the line from an eight-inch diameter to the twelve-inch diameter. I understand it is your assertion these areas could and should be served by four-inch or six-inch lines and that is the only costs that should include CDBG funds.

The Water District's policy is to install a minimum eight-inch dimension line, permitting fire protection flows and future system expansion. Installing the minimum size line needed to meet immediate needs will result in these lines being replaced at a future date so additional users may be added to the system. With Governor Patton's desire to see every Kentucky household receive water service by 2020, projects meeting current needs, which allow for future system expansion allow that goal to be attainable in Campbell County. I respectfully request DLG review its policy of permitting CDBG funds to be spent only on lines sized to meet current, localized needs.

We understand the issues related to CDBG funding, which may be raised by HUD and we understand LMI benefit and reasonable expenditure of CDBG funds must be maintained. However, it seems shortsighted to use federal funds for a minimum dimension line only to remove that line and likely use federal funds to install a larger line, once demand increases beyond the original area which was served.

We would like to seek common ground on this issue. This would include the Water District funding the increased cost to enlarge the diameter of the Licking Pike line from an eight-inch main to a twelve-inch main and utilizing DLG funds for the entire eight-inch portion of the amendment. We have no interest in an adversarial relationship with DKG staff who has generously provided time and expertise toward successful completion of our CDBG projects. We hope to discuss this further so we may submit a CDBG amendment request, which will meet with your approval and allow us to best serve our citizens. I hope to hear from you soon regarding this correspondence.

Regards,



Steve Pendery
County Judge/Executive

Cc: Mr. Ron Lovan
Mr. Dennis Elrod



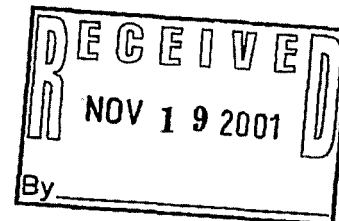
PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
OFFICE OF THE GOVERNOR
DEPARTMENT FOR LOCAL GOVERNMENT
1024 CAPITAL CENTER DRIVE, SUITE 340
FRANKFORT, KENTUCKY 40601-8204
(502) 573-2382



JODY A. LASSITER
COMMISSIONER

November 14, 2001



The Honorable Steve Pendery
Campbell County Judge/Executive
Post Office Box 72340
Newport, Kentucky 41072-0340

Dear Judge Pendery:

RE: Campbell County Water Expansion Project
98-007

The Department for Local Government (DLG) is in receipt of your recent correspondence regarding the above referenced project. Your letter proposes to extend water service to the Steffen Road and Licking Pike areas. It also states that line sizing for the proposed additional line extension on Steffen Road would be 8 inches and on Licking Pike would be 12 inches. We understand the water district's policy of installing a minimum 8-inch line. It is our understanding that the line extension will only serve approximately 20 households. It is DLG's policy to use CDBG funds to provide the minimal size lines required to serve the existing households and the twenty-year growth in the project area.

If the water district wants to increase the size of the line to an 8 inch or a 12 inch line and is willing to pay the difference in the construction cost, then DLG will be glad to work with Campbell County on extending water service to these additional households. The rates to these 20 households will need to be the same as the rest of this current CDBG project rates if CDBG funds are used to construct these additional lines.

Thank you for your efforts to provide water service to additional residents of the area. Please advise this office of your decision on this issue. If you have any questions, please contact Betty Powell 502/573-2382, ext. 229.

Sincerely,

Margaret Smith-Cowley
Margaret R. Mapp, Director
Division of Community Development

cc: Dennis Elrod



Northern Kentucky Water District

Engineering Department
3049 Dixie Highway
Edgewood, Kentucky 41017
Phone: 859-578-9898
Fax: 859-578-7893
Website: www.nkywater.org

To: Judge Mergoteayl + Scott Kimmich
From: Richard Harrison
Date: 1/22/02
Regarding: Act relating to public water systems
Number of Pages (including cover): 17

Comments:

Northern Kentucky
Water District

January 22, 2002

Judge Executive Steve Pendery
Campbell County Fiscal Court
24 West 4th Street
Newport, KY 41071

Dear Judge Pendery:

Ron Lovan asked that I fax this information to you. This is a draft of a bill that we have become aware of regarding water line extensions. To our knowledge it has not be filed yet.

If you have any questions feel free to contact me at 859-578-5458.

Sincerely,



Richard Harrison
Vice President of Engineering & Distribution

cc: Melissa Williams

Northern Kentucky
Water District

January 22, 2002

Judge Executive Richard Murgatroyd
Kenton County Fiscal Court
303 Court Street
Covington, KY 41011

Dear Judge Murgatroyd:

Ron Lovan asked that I fax this information to you. This is a draft of a bill that we have become aware of regarding water line extensions. To our knowledge it has not be filed yet.

If you have any questions feel free to contact me at 859-578-5458.

Sincerely,



Richard Harrison
Vice President of Engineering & Distribution

cc: Scott Kimmich

AN ACT relating to public water systems.

Be it enacted by the General Assembly of the Commonwealth of Kentucky:

1 SECTION 1. KRS 278.010 is amended as follows:

2 As used in KRS 278.010, and in KRS 278.990, unless the context otherwise requires:

3 (1) "Corporation" includes private, quasipublic, and public corporations, and all boards,
4 agencies, and instrumentalities thereof, associations, joint-stock companies, and business
5 trusts;

6 (2) "Person" includes natural persons, partnerships, corporations, and two (2) or more
7 persons having a joint or common interest;

8 (3) "Utility" means any person except, for purposes of paragraphs (a), (b), (c), (d), and (f)
9 of this subsection, a city, who owns, controls, operates, or manages any facility used or to be
10 used for or in connection with:

11 (a) The generation, production, transmission, or distribution of electricity to or for the public,
12 for compensation, for lights, heat, power, or other uses;

13 (b) The production, manufacture, storage, distribution, sale, or furnishing of natural or
14 manufactured gas, or a mixture of same, to or for the public, for compensation, for light, heat,
15 power, or other uses;

16 (c) The transporting or conveying of gas, crude oil, or other fluid substance by pipeline to or
17 for the public, for compensation;

18 (d) The diverting, developing, pumping, impounding, distributing, or furnishing of water to
19 or for the public, for compensation;

20 (e) The transmission or conveyance over wire, in air, or otherwise, of any message by
21 telephone or telegraph for the public, for compensation; or

- 1 (10) "Distribution cooperative" means a utility formed under KRS Chapter 279 that
2 provides retail electric service;
- 3 (11) "Facility" includes all property, means, and instrumentalities owned, operated, leased,
4 licensed, used, furnished, or supplied for, by, or in connection with the business of any
5 utility;
- 6 (12) "Rate" means any individual or joint fare, toll, charge, rental, or other compensation
7 for service rendered or to be rendered by any utility, and any rule, regulation, practice, act,
8 requirement, or privilege in any way relating to such fare, toll, charge, rental, or other
9 compensation, and any schedule or tariff or part of a schedule or tariff thereof;
- 10 (13) "Service" includes any practice or requirement in any way relating to the service of
11 any utility, including the voltage of electricity, the heat units and pressure of gas, the purity,
12 pressure, and quantity of water, and in general the quality, quantity, and pressure of any
13 commodity or product used or to be used for or in connection with the business of any utility;
- 14 (14) "Adequate service" means having sufficient capacity to meet the maximum estimated
15 requirements of the customer to be served during the year following the commencement of
16 permanent service and to meet the maximum estimated requirements of other actual
17 customers to be supplied from the same lines or facilities during such year and to assure such
18 customers of reasonable continuity of service;
- 19 (15) "Commission" means the Public Service Commission of Kentucky;
- 20 (16) "Commissioner" means one (1) of the members of the commission;
- 21 (17) "Demand-side management" means any conservation, load management, or other
22 utility activity intended to influence the level or pattern of customer usage or demand,
23 including home energy assistance programs;

1 (18) "Affiliate" means a person that controls or that is controlled by, or is under common
2 control with, a utility;

3 (19) "Control" means the power to direct the management or policies of a person through
4 ownership, by contract, or otherwise;

5 (20) "CAM" means a cost allocation manual which is an indexed compilation and
6 documentation of a company's cost allocation policies and related procedures;

7 (21) "Nonregulated activity" means the provision of competitive retail gas or electric
8 services or other products or services over which the commission exerts no regulatory
9 authority;

10 (22) "Nonregulated" means that which is not subject to regulation by the commission;

11 (23) "Regulated activity" means a service provided by a utility, the rates and charges of
12 which are regulated by the commission;

13 (24) "USoA" means uniform system of accounts which is a system of accounts for public
14 utilities established by the FERC and adopted by the commission;

15 (25) "Arm's length" means the standard of conduct under which unrelated parties, each
16 party acting in its own best interest, would negotiate and carry out a particular transaction;

17 (26) "Subsidize" means the recovery of costs or the transfer of value from one (1) class of
18 customer, activity, or business unit that is attributable to another;

19 (27) "Solicit" means to engage in or offer for sale a good or service, either directly or
20 indirectly and irrespective of place or audience;

21 (28) "USDA" means the United States Department of Agriculture;

22 (29) "FERC" means the Federal Energy Regulatory Commission; [and]

23 (30) "SEC" means the Securities and Exchange Commission; and

1 (31) "Public Water System" means a water system that provides to the public for
2 compensation water for human consumption through a pipe or other constructed
3 conveyance that is affixed to real property.

4 SECTION 2. A new section of KRS Chapter 151 is created to read as follows:

5 (1) It is hereby declared to be in the public interest that, in order to meet the goal of
6 making potable water available to all Kentuckians, to avoid wasteful duplication of
7 utility facilities, and to minimize disputes between public water systems, the
8 Commonwealth be divided into geographical areas within which each public water
9 system shall provide potable water to the public for compensation, and no public water
10 system shall furnish water to the public within the certified territory of another public
11 water system.

12 (2) No later than June 30, 2003, each of the 2020 water management planning councils
13 shall, with the assistance of the area development districts, prepare a map of the entire
14 area of the area development district that shows, accurately and clearly, the proposed
15 boundaries of the certified territory of each public water system within the district.
16 The map shall be published in a newspaper of general circulation in the area served by
17 the area development district together with notice furnishes the address of the area
18 development district and states that public comment on the proposed boundaries may
19 be sent to the area development district. No later than sixty (60) days after publication
20 of the map, the water management planning councils, after consideration of the
21 comments, shall, with the assistance of the area development district, submit the map,
22 with any modifications, to the Kentucky Infrastructure Authority for certification to
23 the Public Service Commission pursuant to Section 3 of this Act.

1 party aggrieved by a water management council's decision petitions the commission for
2 override of the decision, the commission shall schedule a hearing upon twenty (20) days'
3 notice to the parties, to the water management council, and to the Kentucky Infrastructure
4 Authority. After hearing, the commission shall issue findings as to whether the public
5 water system in question is rendering or proposes to render adequate service to the water-
6 consuming facility. If the commission finds that such public water system is not
7 rendering or does not propose to render adequate service, the commission may enter an
8 order specifying in what particulars such public water system has failed to render or
9 propose to render adequate service and order that such failure be corrected within a
10 reasonable time, such time to be fixed in the order. If the public water system ordered to
11 correct such failure fails to comply with the order within the time specified, the
12 commission may authorize another public water system to furnish water service to such
13 facility.

14 (3) Notwithstanding the certification of territories pursuant to Sections 2 and 3 of this
15 Act, a public water system may contract with another public water system for the purpose
16 of allocating territories and consumers between such public water systems and designating
17 which territories and consumers are to be served by which of said public water systems.
18 Notwithstanding any other provision of law, a contract between public water systems as
19 herein provided, after review by the affected water management planning council and
20 approval by the commission, shall be valid and enforceable. The commission shall approve
21 such a contract if it finds that the contract will result in the provision of adequate and
22 reasonable service to all areas and consumers affected thereby.

23 SECTION 5. KRS 74.110 is amended to read as follows:

1 (3) If a water management planning council receives a referral from the Public Service
2 Commission pursuant to Section 4(2) of this Act, it shall review the matter referred
3 and shall, within sixty (60) days of the referral, file its written determination with the
4 Public Service Commission, with copies to the affected customers and public water
5 systems. A person aggrieved by the decision of the water management council may so
6 notify the Public Service Commission, in writing, within ten (10) days after the
7 council's decision has been filed. If no such notification is filed with the Public
8 Service Commission within ten (10) days, the water management council's decision
9 shall be final. It shall then certify its decision to the Kentucky Infrastructure
10 Authority, which shall, if necessary, modify its map showing the certified water
11 territories of the Commonwealth.

12 SECTION 3. A new section of KRS Chapter 278 is created to read as follows:

13 (1) No later than October 1, 2003, the Kentucky Infrastructure Authority shall submit to
14 the commission, with notice to the public and to the public water systems affected, a map of
15 the Commonwealth of Kentucky that shows, accurately and clearly, the boundaries, as
16 certified pursuant to Section 2 of this Act, of the territory of each public water system
17 operating in the Commonwealth. Any public water system wishing to dispute the
18 boundaries assigned to its certified territory may, within sixty (60) days of the date of
19 public notification that a map showing the boundaries has been filed, protest the
20 certification of territory. Upon the filing of the protest of a public water system, the
21 commission may, after hearing, revise the boundaries proposed.
22 (2) In a hearing held pursuant to subsection (1) of this section, the commission shall
23 consider:

- 1 (a) The location of existing distribution facilities;
- 2 (b) The age and condition of existing distribution facilities;
- 3 (c) The adequacy and dependability of existing facilities to provide dependable, high
- 4 quality water service at reasonable cost; and
- 5 (d) The prevention of duplication of facilities serving the area.

6 SECTION 4. A new section of KRS Chapter 278 is created to read as follows:

7 (1) Except as otherwise provided in this section, each public water system shall have

8 the exclusive right to operate a public water system located within its certified territory,

* 9 and shall not furnish, make available, render or extend its retail water service to facilities

10 located within the certified territory of another public water system; provided that any

11 public water system may extend its facilities through the certified territory of another

12 public water system, if the extension is necessary for such system to connect any of its

13 facilities or to serve its consumers within its own certified territory. If a water-consuming

14 facility locates in two (2) or more adjacent certified territories, the commission shall

15 determine which public water system shall serve said facility based on criteria in Section 3

16 of this Act.

17 (2) Any person may file with the commission a petition requesting a modification of

18 service territories of public water systems based on a showing that the public water system

19 servng the certified territory in which a water-consuming facility is located does not

20 provide, and does not propose to provide, adequate service; and that an adjacent public

21 water system is capable of providing such service. Upon receipt of such petition, the

22 commission shall refer the matter to the affected water management council. If, after the

23 water management council has rendered a decision pursuant to Section 2(3) of this Act, a

1 The territorial limits of an established water district may be enlarged or diminished in the
2 following way:

3 (1) The commission shall file a petition with the county judge/executive, describing the
4 territory to be annexed or stricken off, and setting out the reasons therefor.

5 (2) Notice of the petition shall be given. Within thirty (30) days after the notice, any resident
6 of the water district or the territory proposed to be annexed or any public water system
7 affected may file objections and exceptions.

8 (3) The county judge/executive shall set the matter for hearing, and if the county
9 judge/executive finds that it is reasonably necessary, he shall advise the Public Service
10 Commission of his findings and, with notice to any affected public water system, the
11 affected water management council, and the Kentucky Infrastructure Authority, request
12 that the Public Service Commission enter an Order modifying the water district's certified
13 service territory area to reflect the proposed change in the water district's territory. If the
14 Public Service Commission, after a hearing, if requested, finds that the proposed change is
15 in accordance with purposes of Section 3 of this Act and approves it, the county
16 judge/executive shall enter an order annexing or striking off the proposed territory. A copy
17 of the judge/executive's order shall be served upon the Kentucky Infrastructure Authority,
18 which shall modify its map showing the certified water territories of the Commonwealth
19 accordingly. If the county judge/executive finds that the proposed change is unnecessary,
20 he shall dismiss the petition. Either party may appeal the county judge/executive's order
21 dismissing the petition to the Circuit Court.

22 (4) Notwithstanding subsections (1) through (3) of this Section, the Public Service
23 Commission, on its own motion, may order the enlargement or diminishment of a water

1 district's territory to ensure that its territory is identical to the water district's certified
 2 service territory as established in Sections 2 and 3 of this Act. The Public Service
 3 Commission shall give notice of its proposed action to the affected water district, the
 4 affected water management planning council, the county judge/executive of each county in
 5 which the affected water district is located and to any other affected public water system.
 6 Prior to entering its order, the commission shall, if requested, hold a hearing on the
 7 reasonableness of its proposed action.

8 (5) If any of the territory stricken off has been assessed to pay the costs of any
 9 improvements, the commission shall strike the assessments from the assessment roll and
 10 refund to the respective owners any assessments collected on the land which have been
 11 stricken off.

12 (6) If a deficit is incurred by striking off part of a water district, or by striking assessments
 13 from the assessment roll, so that the assessment roll is insufficient to pay the bonded
 14 indebtedness of the district, the deficit shall be paid out of the general fund of the district,
 15 realized from all other resources in the district.

16 SECTION 5. KRS 96.150 is amended to read as follows:

17 (1) Subject to the provisions of Sections 2, 3, and 4 of this Act, a[A]ny city that owns or
 18 operates a water supply or sanitary sewer system may extend the system into, and furnish and
 19 sell water and provide sanitary sewers to any person within, any territory contiguous to the
 20 city, and may install within that territory necessary apparatus; provided, however, that the
 21 extension of a water supply or sanitary sewer system shall not enter into any territory served
 22 by an existing water supply or sanitary sewer district unless such district requests the
 23 extension of water or sewer services from a city. For these purposes the city or sanitation

1 authority established by an interlocal agreement may condemn or otherwise acquire
2 franchises, rights, and rights-of-way, as private corporations may do.

3 (2) When extending the system to any person, water district, or water association, the city
4 may consider the installation of fire hydrants on the extended lines. The city may extend
5 water lines which are incapable of servicing fire hydrants only if the city determines that
6 servicing hydrants is not feasible. The determination shall include consideration of the
7 incremental costs of adequately sized pipe and associated pumps and towers, and the benefits
8 of real estate development, water sales, the availability of fire protection insurance, and the
9 reduction in fire insurance premiums which may result from the installation of hydrants at
10 specified intervals. When extending lines to a water district or water association, the
11 determination may be made in consultation with the district or association, taking into
12 consideration their fiscal capacity.



Offices of the Judge-Executive
Kenton County, Kentucky

RICHARD L. MURGATROYD
COUNTY JUDGE-EXECUTIVE

RICHARD S. KIMMICH
DEPUTY JUDGE & CHIEF OF STAFF

June 21, 2002

Ventra R. Mapp, Director
Division of Community Development
Department for Local Government
1024 Capital Center Drive
Frankfort, Kentucky 40601

Re: CDBG Subdistrict E Water Expansion Project/Project 01-059

Dear Mrs. Mapp:

This letter is in response to the correspondence dated June 10, 2002 from Jodi A. Lassiter, Commissioner, Department for Local Government, announcing the Community Development Block Grant award to Kenton County on behalf of himself and Governor Paul Patton.

Kenton County and the Northern Kentucky Water Service District agree to the three conditions listed in the June 10, 2002 letter from your office. Project approvals have been obtained from the Kentucky Division of Water and the proposed waterlines will be advertised for bids upon completion of the Environmental Assessment and CDBG Release of Funds by your office.

I would like to take this opportunity to thank you and the Office of the Governor for your assistance in helping Kenton County in obtaining funds to provide portable water to the families of southern Kenton County. If you have any questions please contact me.

Respectfully,

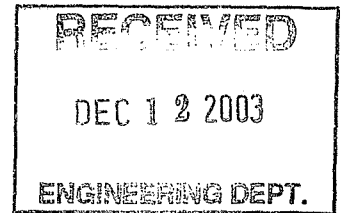
Richard L. Murgatroyd
County Judge Executive

Cc: Will Linder, Project Consultant
Richard Harrison, Northern Kentucky Water Service District

Dedicated to improving the quality of life for ALL Kenton Countians!

COVINGTON OFFICE - 303 COURT STREET, ROOM 205 COVINGTON, KY 41012 (859) 491-2800 FAX (859) 491-5226
INDEPENDENCE OFFICE - 5272 MADISON PIKE INDEPENDENCE, KY 41051 (859) 356-3214 FAX (859) 356-8922





Office of the Judge-Executive
County of Kenton, Kentucky

Richard L. Murgatroyd
Judge-Executive

R. Scott Kimmich
Deputy Judge-Executive

December 11, 2003

FILE
184-078

Ms. Ventra Mapp, Director
Division of Community Programs
Department for Local Government
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

ATTN: Susan Metts, Program Advisor
Jeff Hanna, Public Facilities Manager

RE: Kenton County Subdistrict E Water Extension Project (01-059)

Dear Ms. Mapp:

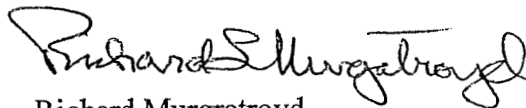
Attached please find several draft documents for your review. The County, working with the Northern Kentucky Water District, will be formally requesting a Program Amendment #1 to delete Hogrefee Road from the Kenton County Subdistrict E Project within the next few weeks. The attached are the draft documents that have been worked out between DLG, our consultant, the Northern Kentucky Water District, and our office to keep the residents that will be affected informed as well as informing the public of the change in the project and to provide the documentation required by your staff:

1. Letter to the 16 households on Hogrefee Road informing them that they will receive water service but with a different source than the Subdistrict E Project. The letter also explains the financial savings to the household in the long-term.
2. Public Notice to be advertised to inform the public of the change in the scope of the project.
3. Program amendment #1.

Ms. Ventra Mapp, Director
December 11, 2003
Page 3

Should you have any questions, please do not hesitate to call. Our office will be sending out the residents' letters next week.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Murgratroyd". The signature is written in a cursive style with a large initial "R" and a long, sweeping underline.

Richard Murgratroyd
Judge Executive

Cc: Richard Harrison, NKWD
Vonda Poynter, Will Linder & Associates

GEOFF DAVIS
4TH DISTRICT, KENTUCKY

COMMITTEE ON ARMED SERVICES
SUBCOMMITTEE ON STRATEGIC FORCES
SUBCOMMITTEE ON TERRORISM,
UNCONVENTIONAL THREATS AND CAPABILITIES

ASSISTANT MAJORITY WHIP

Congress of the United States
House of Representatives

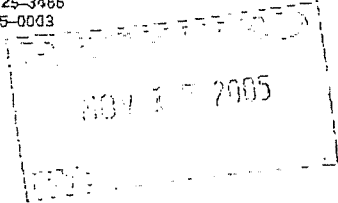
COMMITTEE ON FINANCIAL SERVICES
SUBCOMMITTEE ON CAPITAL MARKETS, INSURANCE,
AND GOVERNMENT SPONSORED ENTERPRISES

WASHINGTON, DC OFFICE:
1541 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
PHONE: (202) 225-3465
FAX: (202) 225-0003

Washington, DC 20515

SUBCOMMITTEE ON HOUSING AND
COMMUNITY OPPORTUNITY

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS



November 15, 2005

Org - Steve
cy - Josh - inquiry
cy - Robert
Murry
FAX - Richard House
NKW

Judge Executive Steve Pendery
24 W. Fourth Street
P.O. Box 72340
Newport, Kentucky 41072

Dear Judge Pendery:

Our constituent, Mr. Carmack has contacted me regarding funding for water lines to bring clean water into his home in Campbell County.

I have explained that this matter is within the jurisdiction of the Commonwealth of Kentucky and local officials such as yourself, but that I would bring this to your attention for whatever response you feel is appropriate.

Please contact Mr. Carmak directly with any information that may help him.

Thank you for your attention to this matter.

Sincerely,

Geoff Davis
Member of Congress

GD/rd

GEOFF DAVIS
4TH DISTRICT, KENTUCKY

ASSISTANT MAJORITY WHIP

WASHINGTON, DC OFFICE:
1541 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
PHONE: (202) 225-5485
FAX: (202) 225-0003

Congress of the United States House of Representatives

Washington, DC 20515
November 15, 2005

COMMITTEE ON ARMED SERVICES
SUBCOMMITTEE ON STRATEGIC FORCES
SUBCOMMITTEE ON TERRORISM,
UNCONVENTIONAL THREATS AND CAPABILITIES

COMMITTEE ON FINANCIAL SERVICES
SUBCOMMITTEE ON CAPITAL MARKETS, INSURANCE,
AND GOVERNMENT SPONSORED ENTERPRISES

SUBCOMMITTEE ON HOUSING AND
COMMUNITY OPPORTUNITY
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

Mr. Robert L. Carmack
11184 Washington Trace Rd
California, Kentucky 41007-8405

Dear Mr. Carmack:

Thank you for contacting our office regarding funding to extend water lines to your home. I understand that this matter is of great importance to you.

I appreciate the opportunity to try to be of assistance to you. I always want to help everyone who contacts me. As your concern is a state matter, I have contacted the Governor's Office and County Judge Executive Steve Pendery's Office on your behalf. I have advised them of my interest in your request, and have asked that this matter be reviewed. If in the future I have an opportunity to better your circumstances in this matter I will certainly take your situation into consideration.

Thank you for contacting me. If you have any questions you can contact the Governor's Office at (502) 564-2611 or Judge Pendery's office at (859) 292-3838.

Sincerely,



Geoff Davis
Member of Congress

GD/rd
Cc: Judge Executive Steve Pendery
24 W. Fourth Street
P.O. Box 72340
Newport, Kentucky 41072

Office of the Governor
Constituent Services
700 Capitol Avenue
Suite 76
Frankfort, KY 40602

FORT MITCHELL OFFICE:
277 BUTTERMILK PIKE
FORT MITCHELL, KY 41017
PHONE: (859) 426-0080
FAX: (859) 426-0061

ASHLAND OFFICE:
1405 GREENUP AVENUE, SUITE 236
ASHLAND, KY 41101
PHONE: (806) 324-9806
FAX: (806) 325-9868

Congressman Geoff Davis
277 Buttermilk Pike
Fort Mitchell, Ky. 41017

COPY

Nov. 12 2005

Dear Congressman Davis:

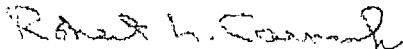
As spokesman for a local neighborhood group we have been trying to get water to our homes for the past couple of years to no avail. The problem is the money. Our local water district wants \$780,000.00 to extend the water line to our homes, which we can't afford. We're just working middle class people with families and there is no way we could afford the cost.

With all the millions and millions of our tax dollars we send overseas in the form of foreign aid we would just like to see some of it spent here in Southern Campbell County to see that the residents have a safe and clean source of water. It doesn't make sense that in order to have a clean source of water we have to haul it home in the back of a truck. I consider clean water a health necessity. If you are low income there is help available but we are just middle class people who want some of our tax money sent home.

To make a long story short we can't afford to have the water lines extended to our homes and if you can do anything to help we would greatly appreciate it.

Thank you very much for your time.

Sincerely



Robert L. Carmack
11184 Washington Trace Road
California, Ky. 41007
859-694-3350

Average Cost Per Foot	50' Participation by District for each Customer	Total # of Customers	District's Total Portion of Project
\$64.00	\$3,200.00	11	\$35,200.00
Total Cost	\$121,602.00		
District's Total Portion of Cost	\$35,200.00		
Total	\$86,402.00		
# of Customers Connecting to Main	Total Customer Cost	Cost For Each Customer	
1	\$118,402.00	\$118,402.00	
2	\$115,202.00	\$57,601.00	
3	\$112,002.00	\$37,334.00	
4	\$108,802.00	\$27,200.50	
5	\$105,602.00	\$21,120.40	
6	\$102,402.00	\$17,067.00	
7	\$99,202.00	\$14,171.71	
8	\$96,002.00	\$12,000.25	
9	\$92,802.00	\$10,311.33	
10	\$89,602.00	\$8,960.20	
11	\$86,402.00	\$7,854.73	Actual Sign Ups
Cost does not include \$750.00 Service Tap Fee for each house.	(3/4 service tap) cost may change yearly		

Washington - Proposed
 8" Water Main Extension -
 Cost Estimate

ITEM	QUANTITY	UNIT	TOTAL UNIT COST	COST
8" PVC Pipe & Fittings	1,900	LF	\$35.00	\$66,500.00
8" Cast Iron Resil. Seat Gate Valve & Box	6	EA	\$650.00	\$3,900.00
6" Cast Iron Resil. Seat Gate Valve & Box	0	EA	\$650.00	\$0.00
8" x 8" x 8" Ductile Iron Anchoring Tee & Block	4	EA	\$250.00	\$1,000.00
6" Tapping Sleeve	0	EA	\$1,250.00	\$0.00
8" Plug & Block	1	EA	\$150.00	\$150.00
2" Flushing Device	1	EA	\$3,000.00	\$3,000.00
Fire Hydrant Assembly	4	EA	\$1,600.00	\$6,400.00
Driveway Restoration	11	SY	\$35.00	\$385.00
Restoration	1	LS	\$20,000.00	\$20,000.00
Sub-Total				\$101,335.00
20% Contingency (Eng., Etc)				\$20,267.00
Total Cost				\$121,602.00

Northern Kentucky Water District

May 23, 2006

Judge Executive Ralph Drees
303 Court Street
Covington, KY 41011

Dear Judge Drees,

The Northern Kentucky Water District greatly appreciates your efforts in helping to secure much needed funding in the Kentucky State Budget (FY 2007 -- FY 2008). These funds are very important to the District's efforts to help keep water service affordable to the more than 300,000 people that it serves.

Thank you again for your assistance in making this much needed infrastructure funding happen for our region.

Sincerely,



Ron Lovan, P.E.
President/CEO



Richard Harrison, P.E.
Vice President of
Engineering & Distribution

Northern Kentucky
Water District

May 23, 2006

Judge Executive Steve Pendery
24 West 4th Street
Newport, KY 41071

Dear Judge Pendery,

The Northern Kentucky Water District greatly appreciates your efforts in helping to secure much needed funding in the Kentucky State Budget (FY 2007 – FY 2008). These funds are very important to the District's efforts to help keep water service affordable to the more than 300,000 people that it serves.

Thank you again for your assistance in making this much needed infrastructure funding happen for our region.

Sincerely,



Ron Lovan, P.E.
President/CEO



Richard Harrison, P.E.
Vice President of
Engineering & Distribution



JUN 29 2006

OFFICE OF THE GOVERNOR

**OFFICE OF THE GOVERNOR
GOVERNOR'S OFFICE FOR LOCAL DEVELOPMENT**

Ernie Fletcher
Governor

1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601
Phone (502) 573-2382
Fax (502) 573-2939
Toll Free (800) 346-5606
www.gold.ky.gov
June 19, 2006

Steve Robertson
Commissioner

The Honorable Ralph Drees
Kenton County Judge/Executive
Post Office Box 792
Covington, Kentucky 41012-0792

Dear Judge Drees:

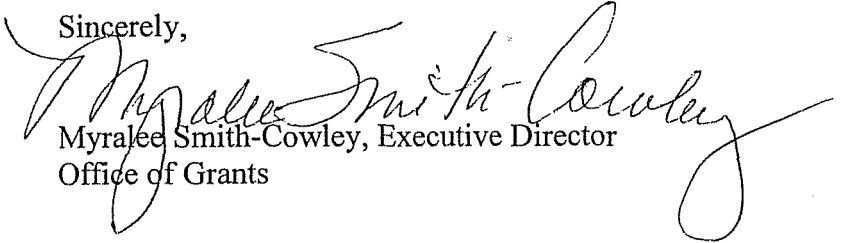
RE: Kenton County Subdistrict E Water Extension Project
01-059

The Governor's Office for Local Development (GOLD) is in receipt of an e-mail from Vonda Poynter and Richard Harrison in which they requested the Northern Kentucky Water District be allowed to use Kenton County's remaining CDBG grant funds of \$56,120 to pay down the bond used on the Subdistrict E project. GOLD has considered this proposal and will agree to this request provided that the county provides the following documentation.

- 1). Letter from bonding company stating that a \$56,120 lump sum payment (without penalty) is allowable and written details of how the transaction process will need to occur.
- 2). Receipt of payment upon the completion of the \$56,120 lump sum payment.
- 3). Written clarification of item #2 of the Kenton County water district's attached e-mail dated June 6, 2006 to GOLD.

Please contact Susan Metts at 502/573-2382 ext 275 if you have any questions.

Sincerely,


Myralee Smith-Cowley, Executive Director
Office of Grants

Attachment

c: Vonda Poynter, Will Linder & Associates
Richard Harrison, Northern Ky Water District



**OFFICE OF THE GOVERNOR
GOVERNOR'S OFFICE FOR LOCAL DEVELOPMENT**

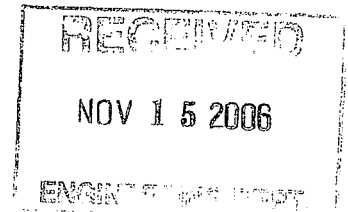
Ernie Fletcher
Governor

1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601
Phone (502) 573-2382
Fax (502) 573-2939
Toll Free (800) 346-5606
www.gold.ky.gov

Steve Robertson
Commissioner

November 6, 2006

The Honorable Ralph Drees
Kenton County Judge/Executive
Post Office Box 792
Covington, Kentucky 41012-0792



Dear Judge Drees:

RE: Kenton County Subdistrict E Water Extension Project
01-059

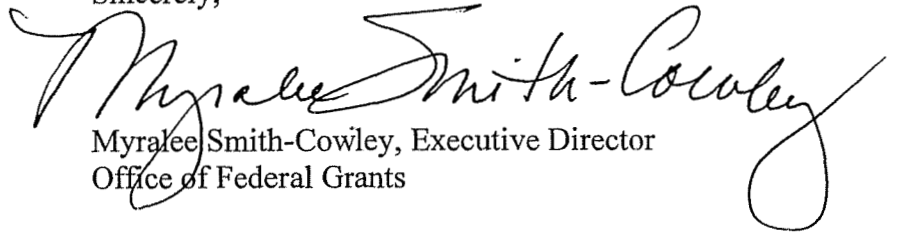
The Governor's Office for Local Development (GOLD) is in receipt of previous documentation from Vonda Poynter and Richard Harrison in which they requested the Northern Kentucky Water District be allowed to use Kenton County's remaining CDBG grant funds of \$56,120 to pay down the bond used on the Subdistrict E project. GOLD requested that the bonding company provide written details of how the transaction process would occur, if approved by GOLD. GOLD received documentation from Chris Pastura with the Bank of New York detailing the process for the bond payment against the principal and we appreciate his response.

GOLD has considered the proposal to allow the remaining funds to be used to pay down the bond on the above mentioned project. After careful consideration this agency requests that the county initiate closeout procedures on this project. We appreciate the county's judicious use of CDBG funds but as you know there are numerous other communities that can also benefit from the funding. A closeout public hearing should be held as soon as possible in order to closeout this project. The remaining funds should be shown as recaptured funds on the Program Completion Report that is submitted to GOLD.

The Honorable Ralph Drees
November 6, 2006
Page 2

Please contact Susan Metts at 502/573-2382 ext 275 if you have any questions.

Sincerely,



Myralee Smith-Cowley, Executive Director
Office of Federal Grants

c: Vonda Poynter, CEDA/WJL Associates/FAHE
Richard Harrison, Northern Ky Water District



OFFICE OF THE COUNTY JUDGE-EXECUTIVE

Suite 205
303 Court Street
Post Office Box 792
Covington, Kentucky 41012-0792
859-392-1400
FAX 859-392-1412

RALPH A. DREES
COUNTY JUDGE-EXECUTIVE

May 22, 2007

R. SCOTT KIMMICH
DEPUTY JUDGE & CHIEF OF STAFF

Ms. Myralee Smith-Cowley, Executive Director
Office of Federal Grants
Governor's Office for Local Development
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

ATTN: Susan Metts, Program Advisor

RE: Kenton County Subdistrict E Waterline Extension Project
Program Completion Report (01-059)


Dear Ms. Smith-Cowley,

On behalf of Kenton County, attached please find the Program Completion Report for the Subdistrict E Waterline Extension CDBG Projects documenting the completion of the project for your review.

The County's FY 2004 audit has already been provided to your office.

Should you have any questions regarding the closeout of this project or need additional material, please do not hesitate to call.

Sincerely,


Ralph Drees
County Judge Executive

Cc: Richard Harrison, Northern Kentucky Water District
Vonda Poynter

Kentucky Community Development Block Grant Project Completion Report Documents and Certification

Grantee Kenton County Project Name Kenton County Subdistrict E Project Grant Number 01-059

Public Hearing

Please provide evidence of project performance public hearing

- a) tearsheet of public hearing notice
- b) a copy of the public hearing minutes
- c) a list of attendees

Citizens Written Comments

Submit with this report a copy of the following documents

- a) a copy of each written comment on the grantee's community development performance under this grant which was received during the period since the grant was approved
- b) the grantee's assessment of the comment
- c) a description of any action taken or to be taken in response to the comment

Program Income Report


For all projects that have generated or will generate program income, attach a current Program Income/Miscellaneous Revenue Report

Housing One for One Replacement

For all housing projects that require a one-for-one replacement of bedroom units, complete and attach an updated HUD form # 4949.4 (see CDBG Handbook)

Certification of Recipient

It is hereby certified that all activities undertaken by the Recipient with funds provided under the Grant Agreement identified herein, have been carried out in accordance with the Grant Agreement; that proper provision has been made by the Grantee for the payment of all unpaid costs and unsettled third party claims identified herein; that the State of Kentucky is under no obligation to make any further payment to the Recipient under the Grant Agreement in excess of the amount identified on page 2 hereof, and that every statement and amount set forth in the instrument is true and correct as of this date.

Signature 
Chief Executive Officer
 Title Kenton County Judge Executive
 Date May 22, 2007

Governors Office for Local Development Approval

This Certification of Completion is hereby approved. Therefore, I authorize cancellation of the unutilized CDBG grant and related funds reservation and obligation.

Signature _____
 Title _____
 Date _____

Kentucky Community Development Block Grant Project Benefit Profile by Person

Kenton County Grantee Total Beneficiaries 615 Project #

Racial Category	Activity		05c		Activity		Activity		Activity	
	Total	Hispanic	Total	Hispanic	Total	Hispanic	Total	Hispanic	Total	Hispanic
White	612	2								
Black/African American										
Asian										
American Indian/Alaskan Native										
Native Hawaiian/Other Pacific Islander										
American Indian/Alaskan Native & White										
Asian & White										
Black/African American & White										
American Indian/Alaskan Native & Black/African American										
Other Multi-Racial										
Total Beneficiaries	612	2								
Female Head of Household	107									
Low to Moderate Income Breakdown	Number	%	Number	%	Number	%	Number	%	Number	%
Extremely Low Income (0 - 30%)	75	12.3%								
Very Low Income (31 - 50 %)	142	23.2%								
Low Income (51 - 80%)	185	30.2%								
Total LMI	402	65.7%								
Not LMI (81% and above)	210									
Total Beneficiaries	612									
Source of Funds										
CDBG										
HOME										
ESG										
HOPWA										
Appalachian Regional Commission (ARC)										
Other Federal Funds										
State/Local Funds										
Private										
Other										
Total Cost of Activity	\$		\$		\$		\$		\$	

5/25/2007

Kentucky Community Development Block Grant
 NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE NOT APPLICABLE

Project Benefit Profile by Household

NOT APPLICABLE _____ Total Households _____ Project # _____

Racial Category	Activity		Activity		Activity		Activity		Activity	
	Total	Hispanic	Total	Hispanic	Total	Hispanic	Total	Hispanic	Total	Hispanic
White										
Black/African American										
Asian										
American Indian/Alaskan Native										
Native Hawaiian/Other Pacific Islander										
American Indian/Alaskan Native & White										
Asian & White										
Black/African American & White										
American Indian/Alaskan Native & Black/African American										
Other Multi-Racial										
Total Beneficiaries										
Female Head of Household										
Number of Disabled Persons										
	<input type="checkbox"/> Owner	<input type="checkbox"/> Renter	<input type="checkbox"/> Owner	<input type="checkbox"/> Renter	<input type="checkbox"/> Owner	<input type="checkbox"/> Renter	<input type="checkbox"/> Owner	<input type="checkbox"/> Renter	<input type="checkbox"/> Owner	<input type="checkbox"/> Renter
	Number	%	Number	%	Number	%	Number	%	Number	%
Low to Moderate Income Breakdown										
Extremely Low Income (0 - 30%)										
Very Low Income (31 - 50 %)										
Low Income (51 - 80%)										
Total LMI										
Not LMI (81% and above)										
Total Beneficiaries										
Source of Funds										
CDBG										
HOME										
ESG										
HOPWA										
Appalachian Regional Commission (ARC)										
Other Federal Funds										
State/Local Funds										
Private										
Other										
Total Cost of Activity	\$	-	\$	-	\$	-	\$	-	\$	-

Kentucky Community Development Block Grant Project Completion Report Jobs Created and Retained

Grantee Kenton County

Grant Number 01-059

Job Creation/Retention Requirements

Date that jobs are required to be created/retained by Not Applicable

Jobs Projection per Grant Agreement
Actual Jobs to Date

TOTAL		LMI	
Created	Retained	Created	Retained

Please attach a list of any factors affecting the creation of the required number of jobs.

Kentucky Community Development Block Grant Project Completion Report Audit Information

Grantee Kenton County

Grant Number 01-059

Breakdown of CDBG project expenditures by fiscal year

1	2	3		4		5		6	
Fiscal Year	Amount	A-133 Single Audit Done		Audit Submitted to DCD		Audit Attached		Certify Federal Funds < \$500,000	
FY 01	\$ -	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
FY 02	\$ -	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
FY 03	\$ -	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
FY 04	\$ 771,472.00	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
FY 05	\$ 170,408.00	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
FY 06	\$ -	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No
TOTAL	\$ 941,880.00								

Out of Balance

Note: By marking **yes** in the column "Certify Federal Funds < \$500,000", the person signing the Certification Page is stating that their city/county did not or will not expend more than \$500,000 in Federal funds from any source during that fiscal year.

Kentucky Community Development Block Grant Project Completion Report Unpaid Obligations

Grantee Kenton County

Grant Number 01-059

Unpaid Costs and Unsettled Third Party Claims

List any unpaid costs and unsettled third party claims. Describe the circumstances and amounts involved.

Amount	Due To	Explanation
		NOT APPLICABLE

Kentucky Community Development Block Grant Project Completion Report Fair Housing

Grantee Kenton County

Grant Number 01-059

List actions to further Fair Housing or increase fair housing opportunities. See instructions

Actions to Affirmatively Further Fair Housing	
Action Taken	Results
Fair Housing Policy was adopted by community	Policy established the community's intent to further fair housing in the community and prevent <i>discrimination in housing opportunities</i> .
Proclamation of April as Fair Housing Month	Proclamation by the County reaffirmed that Fair Housing is an individual's right that is protected by federal and state laws and the community intends to abide by those laws.
Copies of the Fair Housing Policy & "Impediments to Fair Housing" were sent to area realtors, banks and apartment complexes.	This action served as a reminder to these area businesses of fair housing regulations.
Consulting services include assistance in fair housing actions as well as attendance at training programs.	Consulting services provide the community with appropriate options to further affirmative fair housing activities.

Actions to Increase Housing Opportunities for Lower-Income Households
<p>This project does not directly increase housing opportunities for LMI households; however, the provision of reliable water service in Kenton County increases opportunities for development of housing for low and moderate income persons.</p>

KENTON COUNTY WATERLINE EXTENSION PROJECT
SUBDISTRICT E CDBG PROJECT
KENTON COUNTY, KENTUCKY

CLOSEOUT PUBLIC HEARING

MINUTES

The closeout public hearing for the Kenton County Subdistrict E CDBG Waterline Extension Project was held on Tuesday, November 28, 2006, at the offices of the Northern Kentucky Water District, located at 2835 Crescent Springs Pike, Erlanger, Kentucky. The hearing was held at 11:00 am in the conference room. An attendance list is attached.

Vonda Poynter referenced a project summary that noted CDBG project activities completed included the construction of waterline extensions in six areas of Kenton County. Construction was completed in accordance with approved plans and specifications and in accordance with federal guidelines of the funding sources. The County partnered with Northern Kentucky Water District as the utility owner for the implementation of the project. Area benefit for low and moderate income persons is 65%, well in excess of the required 51% LMI.

As the persons attending the public hearing were familiar with the project, there were not questions and the public hearing adjourned.


Vonda Poynter

KENTON COUNTY WATERLINE EXTENSION PROJECT
SUBDISTRICT E CDBG PROJECT
COMMUNITY DEVELOPMENT BLOCK GRANT
CLOSEOUT PUBLIC HEARING ATTENDANCE LIST

Attendees:

Vonda Poynter

Bryan Lively

RD Ham

Published: November 20, 2006

PUBLIC HEARING NOTICE
KENTON COUNTY, KENTUCKY

KENTON COUNTY SUBDISTRICT E PROJECT
CDBG PROJECT CLOSEOUT

TO ALL INTERESTED CITIZENS OF KENTON COUNTY, KENTUCKY

The Kenton County Fiscal Court has completed activities of a 2001 Community Development Block Grant for a public facilities project to extend waterlines in areas of Kenton County (CDBG # B-01-DC-21-0001(059)). A public hearing will be held at 11:00 a.m., Tuesday, November 28, 2006, at the Northern Kentucky Water District Office located at 2835 Crescent Springs Road, Erlanger, Kentucky, 41018. The purpose is to solicit comments in regard to performance of the public facilities project. Information concerning the public facilities project is available for public inspection at the Kenton County Courthouse, Office of the County Judge Executive, 303 Court Street, P.O. Box 792 Covington, KY 41012, and at the Northern Kentucky Water District, 2835 Crescent Springs Road, Erlanger, Kentucky, through November 28, 2006, during regular business hours. Comments on the Kenton County Sub-district E Project may be submitted in writing to the attention of Judge Executive Ralph Drees, at the above address, until 11:00 am, Tuesday, November 28, 2006. Kentucky Relay for the hearing and speech impaired: 1-800-648-6057. Anyone requiring special accommodations, please contact the Northern Kentucky Water District Office 48 hours prior to the public hearing.

State of Ohio, }
Hamilton County, } SS.

Personally appeared before me, a Notary Public, in and for Hamilton County, Ohio Judy Smith, who, being duly sworn, says that the annexed Advertisement was published in the

**PUBLIC HEARING NOTICE
KENTON COUNTY, KENTUCKY
KENTON COUNTY SUBDISTRICT E PROJECT
CDBG PROJECT CLOSEOUT
TO ALL INTERESTED CITIZENS OF
KENTON COUNTY, KENTUCKY**

The Kenton County Fiscal Court has completed activities of a 2001 Community Development Block Grant for a public facilities project to extend waterlines in areas of Kenton County (CDBG # B-01-DC-21-0001(059)). A public hearing will be held at 11:00 a.m., Tuesday, November 28, 2006, at the Northern Kentucky Water District Office located at 2835 Crescent Springs Road, Erlanger, Kentucky, 41018. The purpose is to solicit comments in regard to performance of the public facilities project. Information concerning the public facilities project is available for public inspection at the Kenton County Courthouse, Office of the County Judge Executive, 303 Court Street, P.O. Box 792 Covington, KY 41012, and at the Northern Kentucky Water District, 2835 Crescent Springs Road, Erlanger, Kentucky, through November 28, 2006, during regular business hours. Comments on the Kenton County Subdistrict E Project may be submitted in writing to the attention of Judge Executive Ralph Drees, at the above address, until 11:00 am, Tuesday, November 28, 2006. Kentucky Relay for the hearing and speech impaired: 1-800-648-6057. Anyone requiring special accommodations, please contact the Northern Kentucky Water District Office 48 hours prior to the public hearing. 388012/1000571093

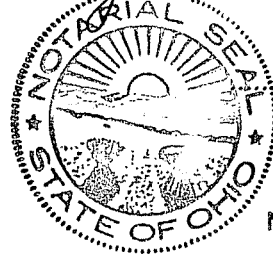
- Cincinnati Enquirer
- Cincinnati Post
- Kentucky Post
- Kentucky Enquirer

Daily Newspapers one time to wit: 11/20/06

commencing on the day of
20.....and that each insertion was upon the same
day of the week, viz:

Judy Smith
Affiant

Sworn to and subscribed before me this 23 day
of May 2007



Doris Thomas
Notary Public

DORIS THOMAS
Notary Public, State of Ohio
My Commission Expires Jan. 23, 2007

TO: Governor's Office for Local Government
Division of Grants
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

Mr. Tony Bacon
US Department of Housing and Urban Development
Office of Labor Relations, 4ASL
Five Points Plaza, 40 Marietta Street, 4th Floor
Atlanta, GA 30303-2806

FROM: Will Linder & Associates on behalf of
Kenton County and the Northern Kentucky Water District

DATE: March 16, 2005

SUBJECT: Final Wage Compliance Report -- Contract I -- Byrnes, Inc.
Kenton County Subdistrict E Project

Project Name: Kenton County/Northern Kentucky Water District Subdistrict E Project
Grant Number: B-01-DC-21-0001 (059) Project Completion Date: August, 2004

1. While you or your representative were reviewing the Contractor's payrolls, were any laborers or mechanics paid less than the minimum wage rate plus fringe benefits as specified in the Secretary of Labor's Wage Decision that applied to this project?

No Yes

2. If yes, provide the following information: NOT APPLICABLE

a. Total Amount of Restitution Paid (difference between what was first paid and what was required to be paid): \$ _____

b. Method of Restitution: _____ paid by contractor
_____ paid by County with funds withheld from payment to contractor

<u>Contractor or Subcontractor Name</u>	<u>Names of Affected Employees</u>	<u>Amt. of Restitution Paid to Employee</u>	<u>Nature of Violation Leading to Restitution</u>
---	------------------------------------	---	---

Signed: Vanda Pogoda Title: Project Consultant Date: March 16, 2005
Will Linder & Associates

TO: Governor's Office for Local Government
Division of Grants
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

Mr. Tony Bacon
US Department of Housing and Urban Development
Office of Labor Relations, 4ASL
Five Points Plaza, 40 Marietta Street, 4th Floor
Atlanta, GA 30303-2806

FROM: Will Linder & Associates on behalf of
Kenton County and the Northern Kentucky Water District

DATE: March 16, 2005

SUBJECT: Final Wage Compliance Report – Contract II – Paul Rack, Inc.
Kenton County Subdistrict E Project

Project Name: Kenton County/Northern Kentucky Water District Subdistrict E Project
Grant Number: B-01-DC-21-0001 (059) Project Completion Date: August, 2004

2. While you or your representative were reviewing the Contractor's payrolls, were any laborers or mechanics paid less than the minimum wage rate plus fringe benefits as specified in the Secretary of Labor's Wage Decision that applied to this project?
No _____ Yes X

3. If yes, provide the following information:

a. Total Amount of Restitution Paid (difference between what was first paid and what was required to be paid): \$ 173.84

b. Method of Restitution: X paid by contractor
_____ paid by County with funds withheld from payment to contractor

<u>Contractor or Subcontractor Name</u>	<u>Names of Affected Employees</u>	<u>Amt. of Restitution Paid to Employee</u>	<u>Nature of Violation Leading to Restitution</u>
Paul Rack Excavating	Cindy Sulliken	\$ 16.63	Unpaid OT
	Donna Daugherty	\$ 22.17	Unpaid OT
	Robert Moore	\$ 3.55	Unpaid OT
	Charles Oakes	\$ 12.74	Unpaid OT
	Danny Dickson	\$ 30.01	Unpaid OT
	Michael Frye	\$ 5.54	Unpaid OT
	William Lefevers	\$ 30.18	Unpaid OT
	Douglas Moerlien	\$ 25.31	Unpaid OT
	Daniel Riehle	\$ 5.55	Unpaid OT
	Kathy Willoughby	\$ 11.08	Unpaid OT
Josh Stegman	\$ 11.08	Unpaid OT	

Signed: Vonda Poppe Title: Project Consultant Date: March 16, 2005
Will Linder & Associates

TO: Governor's Office for Local Development
Division of Grants
1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601

Mr. Tony Bacon
U. S. Department of HUD, Office of Labor Relations, 4 ASL
Five Points Plaza, 40 Marietta Street, 4th Floor
Atlanta, GA 30303-2806

FROM: Will Linder & Associates on behalf of
Kenton County and the northern Kentucky Water District

DATE: March 16, 2005

SUBJECT: Final Wage Compliance Report – Contract III – Lykins, Inc.
Kenton County Subdistrict E Water Project

Project Name: Kenton County/Northern Kentucky Water District – Subdistrict E Project
Grant Number: B-01-DC-21-0001 (059) Project Completion Date: August, 2004

1. While you or your representative were reviewing the Contractor's payrolls, were any laborers or mechanics paid less than the minimum wage rate plus fringe benefits as specified in the Secretary of Labor's Wage Decision that applied to this project?
No Yes

2. If yes, provide the following information:

a. Total Amount of Restitution Paid (difference between what was first paid and what was required to be paid): \$ 139.09

b. Method of Restitution: paid by contractor
 paid by city/county with funds withheld from payment to contractor

<u>Contractor or Subcontractor Name</u>	<u>Names of Affected Employees</u>	<u>Amount of Restitution Paid to Employee</u>	<u>Nature of Violation Leading to Restitution</u>
Lykins Contracting, Inc.	Ken Kessens	\$23.29	Unpaid OT
	John Billman	\$ 5.57	Unpaid OT
Queen City Blacktop (sub)	Dennis Abner	\$ 7.75	Unpaid OT
	Din Christian	\$ 7.75	Unpaid OT
	Anthony Estridge	\$12.90	Unpaid OT
	David Rice	\$ 7.02	Unpaid OT
	Andrew Steinbach	\$ 7.72	Unpaid OT
	Jefferson Cottman	\$14.50	Unpaid OT
	David Arkenau	\$ 7.10	Unpaid OT
	Stan Black	\$ 7.88	Unpaid OT
	Hershall Hall	\$12.37	Unpaid OT
Dan Reihle	\$12.87	Unpaid OT	
Nathan Steinbach	\$12.37	Unpaid OT	

Signed: *Vonda Peay* Title: Project Consultant Date: March 16, 2005
Will Linder & Associates

Northern Kentucky
Water District

10/31/05

Mr. Vic Dawn
Riverside Market
118 6th Street
Dayton, Ky 41001

Re: Flagg Springs Road proposed water main improvement

Dear Mr. Dawn,

The Northern Kentucky Water District is in the preliminary design phase for the eight-inch water main improvement that is being planned to serve your proposed Riverside Market Development located at the corner of Flagg Springs Road and Ivor Road in Southern Campbell County. This proposed water main improvement is planned to be a part of the District's Subdistrict F project. The phase of the Subdistrict F project that would serve your proposed development is anticipated to be completed in November or December of 2006.

The completion of this water main improvement is dependent upon the District's receipt of satisfactory bids and the commitment from Riverside Market to contribute \$55,000 towards the funding of the eight-inch water main that will serve your development. Water service from this proposed project is anticipated to include a \$30 monthly surcharge for each service connection to the new main in addition to the cost for water usage per the Northern Kentucky Water District's current rate structure. Construction is also contingent upon the approval of the Northern Kentucky Water District Board of Commissioners, the approval by the Kentucky Division of Water and the approval of the Kentucky Public Service Commission. Please contact me at (859) 578-5458 if you have any questions.

Sincerely,



Richard Harrison; P.E.
Vice President of Engineering
& Distribution

cc: Ron Lovan

MESSAGE CONFIRMATION

01/09/2006 15:23
ID=NKWD - ENGINEERING

DATE	S,R-TIME	DISTANT STATION ID	MODE	PAGES	RESULT
01/09	01'02"	8593928033	TX	03	OK 0000

01/09/2006 15:21 NKWD - ENGINEERING → 3928033

NO.095 001

Northern Kentucky Water District

Engineering
3049 Dixie Highway
Erlanger, Kentucky 41018
Phone: 859-578-9898
Fax: 859-578-7893
Website: www.nkywater.org

To: Mr. Vic Dawn

Company Name: RIVERSIDE SUPERVALS

Fax Number: 392-8033

From: RICHARD HARRIS

Date: Jan 9th, 2006

Regarding: Proposed Development

Northern Kentucky Water District

Engineering
3049 Dixie Highway
Erlanger, Kentucky 41018
Phone: 859-578-9898
Fax: 859-578-7893
Website: www.nkywater.org

To: Mr. Vic Dawn

Company Name: RIVERSIDE SUPERVALU

Fax Number: 392-8033

From: RICHARD HARRISON

Date: Jan 9th, 2006

Regarding: Proposed Development

Number of Pages (including cover): 3

Comments:

Mr. Dawn, Please review & call
me at 578-5458 with any concerns

RD

Flagg Springs Water Main Extension Agreement

This agreement made and entered into this ____ day of _____, 2006, by and between DNS PROPERTIES, LLC. (hereinafter, the "DEVELOPER") and the NORTHERN KENTUCKY WATER DISTRICT (hereinafter, the "DISTRICT").

WHEREAS, the DISTRICT has plans to construct a Sub-District F Water Main Extension Project in Campbell County (hereinafter, the "Project"), and

WHEREAS, the DEVELOPER has plans to develop a piece of property located at Ivor Road and AA Highway in Campbell County, and

WHEREAS, the DEVELOPER desires to have access to a public water main along Ivor Road to provide water service to the DEVELOPER'S development, located at Ivor Road and AA Highway in Campbell County, Kentucky, and

WHEREAS, the DISTRICT is willing to add Flagg Springs Road and Ivor Road to the Project, and

WHEREAS, the DEVELOPER is willing to participate with the Project if Flagg Springs Road and Ivor Road are added to the Project, and

WHEREAS, the parties desire to enter into an agreement to set forth the DISTRICT's and the DEVELOPER's participation and responsibilities with respect to the aforementioned water main extension;

NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. The DEVELOPER agrees to contribute a total amount of \$55,000.00 towards the Project in order to add Flagg Springs Road and Ivor Road to the Project. The DEVELOPER shall pay the DISTRICT an initial contribution of \$27,500.00 by April 15, 2006. The DEVELOPER further agrees to pay the remaining contribution of \$27,500.00 to the DISTRICT within 60 days after the water main along Flagg Springs Road and Ivor Road is placed in-service by the DISTRICT. The DEVELOPER or the DISTRICT may decide to cancel the project prior to April 15, 2006 by providing written notice to the other party.
2. The DISTRICT agrees to add Flagg Springs Road and Ivor Road to the Project, as depicted on the attached Exhibit A. The DISTRICT further agrees that the water main extensions along these two streets, as depicted on the attached Exhibit A, will be the first to be constructed and the DISTRICT will use its best efforts to construct the improvements as soon as reasonably possible.
3. The DEVELOPER agrees and understands that there are numerous approvals and permits which may be outside the DISTRICT's control which may affect the project schedule and whether the project is actually constructed.
4. The DEVELOPER agrees to pay the appropriate connection fees and connect its water service line to the water meter to be installed by the DISTRICT. The

DEVELOPER also agrees to commence using water from the DISTRICT's water system on the date water service is available to the DEVELOPER.

5. The DEVELOPER agrees to comply with and be bound by the DISTRICT's Rates, Rules and Regulations contained in the DISTRICT's Tariff, as now in force or as hereafter duly and legally supplemented, amended or changed. The DEVELOPER agrees to pay such charges, penalties and water rates set forth in the DISTRICT's Tariff. The DEVELOPER further agrees to pay a monthly surcharge for Sub-District F Water Main Extension Project in Campbell County, which shall not exceed \$30.00 per month.
6. It is understood between the parties that in the event the DISTRICT does not commence construction of the Flagg Springs Road and Ivor Road portions of the Project by October 15, 2006 the initial contribution of \$27,500.00 paid by the DEVELOPER will be refunded to the DEVELOPER upon request.
7. The DEVELOPER acknowledges and agrees that the DISTRICT shall have sole and complete authority over the bidding process and all decisions relating to the Project. The DISTRICT agrees to facilitate the design, bidding, and inspection of the Project.
8. This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Kentucky. Any dispute arising out of this Agreement shall be resolved in courts located in Campbell County, Kentucky, and each party agrees and submits to the venue and jurisdiction of such courts.
9. This Agreement represents the entire agreement among the parties with respect to the subject matter hereof.
10. This Agreement may only be amended by a writing signed by both parties hereto.

IN WITNESS WHEREOF, the DISTRICT and the DEVELOPER have executed this agreement below.

NORTHERN KENTUCKY WATER DISTRICT

By: _____
Richard Harrison
Vice President of Engineering &
Distribution

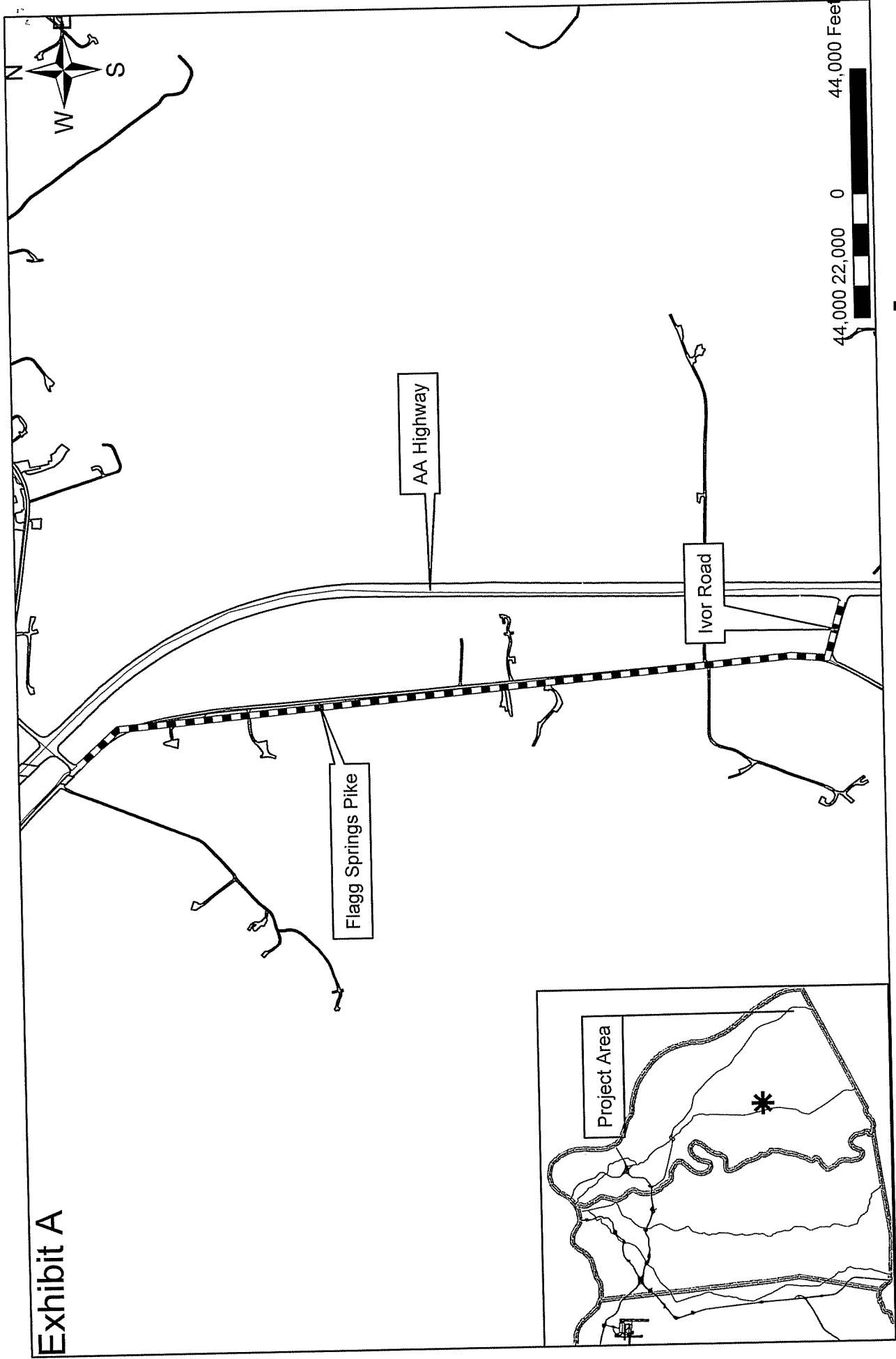
DEVELOPER

By: _____
(Please print or type name)

(Signature)

TITLE:

Exhibit A



Flagg Springs Pike Extension

Richard Harrison

From: "Debbie Kircher" <dkircher@nkywater.org>
To: "Richard Harrison" <rharr@nkywater.org>
Sent: Monday, January 16, 2006 3:24 PM
Attach: FlaggSpringAgr.doc
Subject: FlaggSpring Agr - How does this look?

Richard,

Just let me know whether or not this is what you want.

Thanks,
Debbie

Flagg Springs Water Main Extension Agreement

This agreement made and entered into this _____ day of _____, 2006, by and between DNS PROPERTIES, LLC, (hereinafter, the "DEVELOPER") and the NORTHERN KENTUCKY WATER DISTRICT (hereinafter, the "DISTRICT").

Deleted: RIVERSIDE SUPERVALUE DEVELOPMENT, INC

Deleted: designated

Deleted: designated

WHEREAS, the DISTRICT has plans to construct a Sub-District F Water Main Extension Project in Campbell County (hereinafter, the "Project"), and

WHEREAS, the DEVELOPER has plans to develop a piece of property located at Ivor Road and AA Highway in Campbell County, and

WHEREAS, the DEVELOPER desires to have access to a public water main along Ivor Road to provide water service to the DEVELOPER'S development, located at Ivor Road and AA Highway in Campbell County, Kentucky, and

WHEREAS, the DISTRICT is willing to add Flagg Springs Road and Ivor Road to the Project, and

Deleted: Sub-District F Water Main Extension

Deleted: in Campbell County

Deleted: Sub-District F Water Main Extension

Deleted: in Campbell County

WHEREAS, the DEVELOPER is willing to participate with the Project if Flagg Springs Road and Ivor Road are added to the Project, and

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WHEREAS, the parties desire to enter into an agreement to set forth the DISTRICT's and the DEVELOPER's participation and responsibilities with respect to the aforementioned water main extension;

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Deleted: Sub-District F Water Main Extension

Deleted: in Campbell County

NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

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1. The DEVELOPER agrees to contribute a total amount of \$55,000.00 towards the Project in order to add Flagg Springs Road and Ivor Road to the Project. The DEVELOPER shall pay the DISTRICT an initial contribution of \$27,500.00 by April 15, 2006. The DEVELOPER further agrees to pay the remaining contribution of \$27,500.00 to the DISTRICT within 60 days after the water main along Flagg Springs Road and Ivor Road is placed in-service by the DISTRICT. The DEVELOPER or the DISTRICT may decide to cancel the project prior to April 15, 2006 by providing written notice to the other party.

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Deleted: agrees to

Deleted: 50% of the

Deleted: _____

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2. The DISTRICT agrees to add Flagg Springs Road and Ivor Road to the Project, as depicted on the attached Exhibit A. The DISTRICT further agrees that the water main extensions along these two streets, as depicted on the attached Exhibit A, will be the first to be constructed, and the DISTRICT will use its best efforts to construct the improvements as reasonably possible.

Deleted: Sub-District F Water Main Extension

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Deleted: in Campbell County

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3. The DEVELOPER agrees and understands that there are numerous approvals and permits which may be outside the DISTRICT's control which may affect the project schedule and whether the project is actually constructed.

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4. The DEVELOPER agrees to pay the appropriate connection fees and connect its water service line to the water meter to be installed by the DISTRICT. The

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Deleted: that

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DEVELOPER also agrees to commence using water from the DISTRICT's water system on the date water service is available to the DEVELOPER.

Deleted: use

5. The DEVELOPER agrees to comply with and be bound by the DISTRICT's Rates, Rules and Regulations contained in the DISTRICT's Tariff, as now in force or as hereafter duly and legally supplemented, amended or changed. The DEVELOPER agrees to pay such charges, penalties and water rates set forth in the DISTRICT's Tariff. The DEVELOPER further agrees to pay a monthly surcharge for Sub-District F Water Main Extension Project in Campbell County, which shall not exceed \$30.00 per month.

6. It is understood between the parties that in the event the DISTRICT does not commence construction of the Flagg Springs Road and Ivor Road portions of the Project by October 15, 2006 the initial contribution of \$27,500.00 paid by the DEVELOPER will be refunded to the DEVELOPER upon request.

Deleted: is unable to move forward with this project

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Deleted: 50%

Deleted: amount

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7. The DEVELOPER acknowledges and agrees that the DISTRICT shall have sole and complete authority over the bidding process and all decisions relating to the Project. The DISTRICT agrees to facilitate the design, bidding, and inspection of the Project.

8. This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Kentucky. Any dispute arising out of this Agreement shall be resolved in courts located in Campbell County, Kentucky, and each party agrees and submits to the venue and jurisdiction of such courts.

Deleted: <#>The DISTRICT's Board will have to approve the bids. The DISTRICT agrees to initiate a Contract between the DISTRICT and the accepted bidder subject to the Initial Contribution being made by the DEVELOPER as stated in Item #1 above ¶

9. This Agreement represents the entire agreement among the parties with respect to the subject matter hereof.

10. This Agreement may only be amended by a writing signed by both parties hereto.

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IN WITNESS WHEREOF, the DISTRICT and the DEVELOPER have executed this agreement below

NORTHERN KENTUCKY WATER DISTRICT, BY

By: Richard Harrison
Vice President of Engineering & Distribution

(Please print or type name)

(Signature)

TITLE:

Deleted: ¶
¶
¶
¶

DEVELOPER:

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MESSAGE CONFIRMATION

01/16/2006 16:01
ID=NKWD - ENGINEERING

DATE	S,R-TIME	DISTANT STATION ID	MODE	PAGES	RESULT
01/16	01'06"	8593928033	TX	03	OK 0000

01/16/2006 16:00 NKWD - ENGINEERING → 3928033 NO.114 001

Northern Kentucky Water District

Engineering
3049 Dixie Highway
Erlanger, Kentucky 41018
Phone: 859-578-9898
Fax: 859-578-7893
Website: www.nkywater.org

To: Mr. Vic Dawn

Company Name: Riverside Superstore

Fax Number: 392-8033

From: Richard Harrison

Date: January 16, 2006

Regarding: Proposed Development

3

Northern Kentucky Water District

Engineering
3049 Dixie Highway
Erlanger, Kentucky 41018
Phone: 859-578-9898
Fax: 859-578-7893
Website: www.nkywater.org

To: Mr. Vic Dawn

Company Name: Riverside Supervalue

Fax Number: 392-8033

From: Richard Harrison

Date: January 16, 2006

Regarding: Proposed Development

Number of Pages (including cover): 3

Comments:

Mr. Dawn, please review and call me @
(859) 578-5458 with any concerns.

Thank You,
Richard Harrison

Flagg Springs Water Main Extension Agreement

This agreement made and entered into this _____ day of _____, 2006, by and between DNS PROPERTIES, LLC. (hereinafter, the "DEVELOPER") and the NORTHERN KENTUCKY WATER DISTRICT (hereinafter, the "DISTRICT").

WHEREAS, the DISTRICT has plans to construct a Sub-District F Water Main Extension Project in Campbell County (hereinafter, the "Project"), and

WHEREAS, the DEVELOPER has plans to develop a piece of property located at Ivor Road and AA Highway in Campbell County, and

WHEREAS, the DEVELOPER desires to have access to a public water main along Ivor Road to provide water service to the DEVELOPER'S development, located at Ivor Road and AA Highway in Campbell County, Kentucky, and

WHEREAS, the DISTRICT is willing to add Flagg Springs Road and Ivor Road to the Project, and

WHEREAS, the DEVELOPER is willing to participate with the Project if Flagg Springs Road and Ivor Road are added to the Project, and

WHEREAS, the parties desire to enter into an agreement to set forth the DISTRICT'S and the DEVELOPER'S participation and responsibilities with respect to the aforementioned water main extension;

NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. The DEVELOPER agrees to contribute a total amount of \$55,000.00 towards the Project in order to add Flagg Springs Road and Ivor Road to the Project. The DEVELOPER shall pay the DISTRICT an initial contribution of \$27,500.00 by April 15, 2006. The DEVELOPER further agrees to pay the remaining contribution of \$27,500.00 to the DISTRICT within 60 days after the water main along Flagg Springs Road and Ivor Road is placed in-service by the DISTRICT. The DEVELOPER or the DISTRICT may decide to cancel the project prior to April 15, 2006 by providing written notice to the other party.
2. The DISTRICT agrees to add Flagg Springs Road and Ivor Road to the Project, as depicted on the attached Exhibit A. The DISTRICT further agrees that the water main extensions along these two streets, as depicted on the attached Exhibit A, will be the first to be constructed and the DISTRICT will use its best efforts to construct the improvements as reasonably possible.
3. The DEVELOPER agrees and understands that there are numerous approvals and permits which may be outside the DISTRICT'S control which may affect the project schedule and whether the project is actually constructed.
4. The DEVELOPER agrees to pay the appropriate connection fees and connect its water service line to the water meter to be installed by the DISTRICT. The

DEVELOPER also agrees to commence using water from the DISTRICT's water system on the date water service is available to the DEVELOPER.

5. The DEVELOPER agrees to comply with and be bound by the DISTRICT's Rates, Rules and Regulations contained in the DISTRICT's Tariff, as now in force or as hereafter duly and legally supplemented, amended or changed. The DEVELOPER agrees to pay such charges, penalties and water rates set forth in the DISTRICT's Tariff. The DEVELOPER further agrees to pay a monthly surcharge for Sub-District F Water Main Extension Project in Campbell County, which shall not exceed \$30.00 per month.
6. It is understood between the parties that in the event the DISTRICT does not commence construction of the Flagg Springs Road and Ivor Road portions of the Project by October 15, 2006 the initial contribution of \$27,500.00 paid by the DEVELOPER will be refunded to the DEVELOPER upon request.
7. The DEVELOPER acknowledges and agrees that the DISTRICT shall have sole and complete authority over the bidding process and all decisions relating to the Project. The DISTRICT agrees to facilitate the design, bidding, and inspection of the Project.
8. This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Kentucky. Any dispute arising out of this Agreement shall be resolved in courts located in Campbell County, Kentucky, and each party agrees and submits to the venue and jurisdiction of such courts.
9. This Agreement represents the entire agreement among the parties with respect to the subject matter hereof.
10. This Agreement may only be amended by a writing signed by both parties hereto.

IN WITNESS WHEREOF, the DISTRICT and the DEVELOPER have executed this agreement below.

NORTHERN KENTUCKY WATER DISTRICT

DEVELOPER

By: _____

Richard Harrison
Vice President of Engineering &
Distribution

By: _____

(Please print or type name)

(Signature)

TITLE:

Northern Kentucky
Water District

1/20/06

Mr. Vic Dawn
Riverside Market
118 6th Street
Dayton, Ky 41074

Re: Flagg Springs Road Agreement for proposed water main improvement

Dear Mr. Dawn,

The Northern Kentucky Water District Board authorized the execution of the enclosed agreement at its January 19th, 2006 Board of Commissioner's meeting. Please execute the two enclosed original agreements and return to my attention. I will then execute the agreements and send you a fully executed original.

Sincerely,



Richard Harrison; P.E.
Vice President of Engineering
& Distribution

cc: Ron Lovan

Northern Kentucky
Water District

February 23, 2006

Mr. Vic Dawn
Riverside Market
118 6th Street
Dayton, KY 41074

Re: Flagg Springs Road Agreement for proposed water main improvement

Dear Mr. Dawn,

Sorry the NKWD did not receive your executed two original agreements.

The Northern Kentucky Water District Board authorized the execution of the enclosed agreement at its January 19th, 2006 Board of Commissioner's meeting. Please execute the two enclosed original agreements and return to my attention. I will then execute the agreements and send you a fully executed original.

Sincerely,



Debbie Kircher
Administrative Assistant
for
Richard Harrison, P.E.
Vice President of Engineering/Distribution

cc: Ron Lovan

Northern Kentucky
Water District

1/20/06


Mr. Vic Dawn
Riverside Market
118 6th Street
Dayton, Ky 41074

Re: Flagg Springs Road Agreement for proposed water main improvement

Dear Mr. Dawn,

The Northern Kentucky Water District Board authorized the execution of the enclosed agreement at its January 19th, 2006 Board of Commissioner's meeting. Please execute the two enclosed original agreements and return to my attention. I will then execute the agreements and send you a fully executed original.

Sincerely,



Richard Harrison; P.E.
Vice President of Engineering
& Distribution

cc: Ron Lovan

Flagg Springs Water Main Extension Agreement

This agreement made and entered into this _____ day of _____, 2006, by and between **DNS PROPERTIES, LLC.** (hereinafter, the "DEVELOPER") and the NORTHERN KENTUCKY WATER DISTRICT (hereinafter, the "DISTRICT").

WHEREAS, the DISTRICT has plans to construct a Sub-District F Water Main Extension Project in Campbell County (hereinafter, the "Project"), and

WHEREAS, the DEVELOPER has plans to develop a piece of property located at Ivor Road and AA Highway in Campbell County, and

WHEREAS, the DEVELOPER desires to have access to a public water main along Ivor Road to provide water service to the DEVELOPER'S development, located at Ivor Road and AA Highway in Campbell County, Kentucky, and

WHEREAS, the DISTRICT is willing to add Flagg Springs Road and Ivor Road to the Project, and

WHEREAS, the DEVELOPER is willing to participate with the Project if Flagg Springs Road and Ivor Road are added to the Project, and

WHEREAS, the parties desire to enter into an agreement to set forth the DISTRICT's and the DEVELOPER's participation and responsibilities with respect to the aforementioned water main extension;

NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. The DEVELOPER agrees to contribute a total amount of \$55,000.00 towards the Project in order to add Flagg Springs Road and Ivor Road to the Project. The DEVELOPER shall pay the DISTRICT an initial contribution of \$27,500.00 by April 15, 2006. The DEVELOPER further agrees to pay the remaining contribution of \$27,500.00 to the DISTRICT within 60 days after the water main along Flagg Springs Road and Ivor Road is placed in-service by the DISTRICT. The DEVELOPER or the DISTRICT may decide to cancel the project prior to April 15, 2006 by providing written notice to the other party.
2. The DISTRICT agrees to add Flagg Springs Road and Ivor Road to the Project, as depicted on the attached Exhibit A. The DISTRICT further agrees that the water main extensions along these two streets, as depicted on the attached Exhibit A, will be the first to be constructed and the DISTRICT will use its best efforts to construct the improvements as reasonably possible.
3. The DEVELOPER agrees and understands that there are numerous approvals and permits which may be outside the DISTRICT's control which may affect the project schedule and whether the project is actually constructed.
4. The DEVELOPER agrees to pay the appropriate connection fees and connect its water service line to the water meter to be installed by the DISTRICT. The

DEVELOPER also agrees to commence using water from the DISTRICT's water system on the date water service is available to the DEVELOPER.

5. The DEVELOPER agrees to comply with and be bound by the DISTRICT's Rates, Rules and Regulations contained in the DISTRICT's Tariff, as now in force or as hereafter duly and legally supplemented, amended or changed. The DEVELOPER agrees to pay such charges, penalties and water rates set forth in the DISTRICT's Tariff. The DEVELOPER further agrees to pay a monthly surcharge for Sub-District F Water Main Extension Project in Campbell County, which shall not exceed \$30.00 per month.
6. It is understood between the parties that in the event the DISTRICT does not commence construction of the Flagg Springs Road and Ivor Road portions of the Project by October 15, 2006 the initial contribution of \$27,500.00 paid by the DEVELOPER will be refunded to the DEVELOPER upon request.
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8. This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Kentucky. Any dispute arising out of this Agreement shall be resolved in courts located in Campbell County, Kentucky, and each party agrees and submits to the venue and jurisdiction of such courts.
9. This Agreement represents the entire agreement among the parties with respect to the subject matter hereof.
10. This Agreement may only be amended by a writing signed by both parties hereto.

IN WITNESS WHEREOF, the DISTRICT and the DEVELOPER have executed this agreement below

NORTHERN KENTUCKY WATER DISTRICT

By: _____
Richard Harrison
Vice President of Engineering &
Distribution

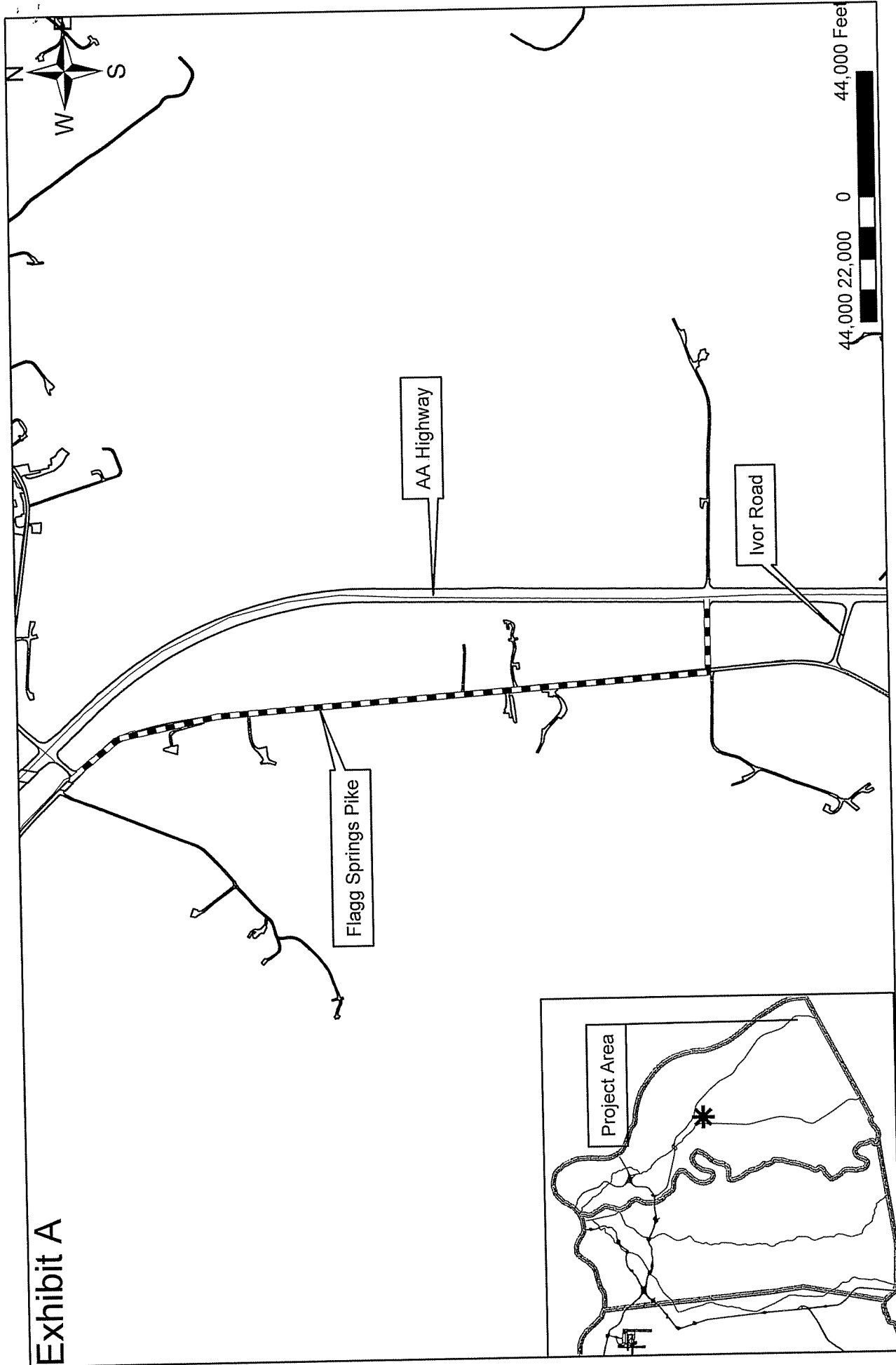
By: _____
(Please print or type name)

(Signature)

TITLE:

DEVELOPER:

Exhibit A



Flag Springs Pike Extension

Richard Harrison

From: "Drew Collins" <dcollins@bankofky.com>
To: "Richard Harrison" <rharr@nkywater.org>
Cc: "Ron Lovan" <rlovan@nkywater.org>
Sent: Wednesday, October 11, 2006 5:11 PM
Subject: RE: Subdistrict F (Riverside Super Value Market)

thanks guys! Nice work Richard!

Drew Collins, EVP Lending
The Bank of Kentucky
859-372-9772 Phone
859-578-9500 Fax
859-630-8770 Mobile

From: Richard Harrison [mailto:rharr@nkywater.org]
Sent: Wednesday, October 11, 2006 4:39 PM
To: Drew Collins
Cc: Ron Lovan
Subject: Subdistrict F (Riverside Super Value Market)

Hi Drew, Ron asked me to update you on the timeline for Sub F and my discussions with Mr. Victor Dawn.

- The extension agreement between Mr. Victor Dawn and the District was approved by the Board on January 19th, 2006.
- The bids were approved by the Board on May 18, 2006.
- The PSC application was filed on June 22, 2006.
- Bids technically expired on August 8th, 2006.
- The PSC issued the order approving the construction but denying the surcharge financing on September 22nd, 2006. Fortunately, the project contractor extended their bids to cover the significant approval time.

I have had several positive discussions with Victor Dawn updating him on the delays and informing him about the PSC's order approving the construction but denying the surcharge. I let him know we were trying to get the PSC to reconsider the surcharge but per our Tariff, he might have to pay approximately \$5,000 to tap the main. This is the estimated value of \$100 feet of main. This would be in addition to the tap in fee.

He contacted me yesterday to ask about construction. I told him it could take until mid-January based upon the 60 days that the contractor had per contract to construct the project. He was very concerned because he wanted to open in early to mid December. He asked me to contact the contractor to see if we could encourage him to expedite the project. We contacted Coomer Contractors and they said they anticipated the project taking six weeks but they have about 60 days per the contract. This would give them until early January plus any delay days. I relayed that to Mr. Dawn today and he seemed to understand the schedule. Several months ago, he had mentioned building a small cistern to bridge the time between his store construction being complete and the final construction of the project but I guess he decided to take a chance and not build the cistern.

Please call me if you have any questions. My cell number is 991-1614.

Thanks

Richard

Richard Harrison

From: "Ron Lovan" <rlovan@nkywater.org>
To: "Richard/Tammy Harrison" <rharr@nkywater.org>
Sent: Thursday, October 12, 2006 7:14 AM
Subject: RE: Subdistrict F (Riverside Super Value Market)

Notice to proceed date?? 60 days to do work....Jan??

-----Original Message-----

From: "Drew Collins" <dcollins@bankofky.com>
To: "Richard Harrison" <rharr@nkywater.org>
Cc: "Ron Lovan" <rlovan@nkywater.org>
Sent: 10/11/2006 5:11 PM
Subject: RE: Subdistrict F (Riverside Super Value Market)

thanks guys! Nice work Richard!

Drew Collins, EVP Lending
The Bank of Kentucky
859-372-9772 Phone
859-578-9500 Fax
859-630-8770 Mobile

From: Richard Harrison [mailto:rharr@nkywater.org]
Sent: Wednesday, October 11, 2006 4:39 PM
To: Drew Collins
Cc: Ron Lovan
Subject: Subdistrict F (Riverside Super Value Market)

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construction but denying the surcharge. I let him know we were trying to get the PSC to reconsider the surcharge but per our Tariff, he might have to pay approximately \$5,000 to tap the main. This is the estimated value of \$100 feet of main. This would be in addition to the tap in fee.

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Please call me if you have any questions. My cell number is 991-1614.

Thanks

Richard

* * * Transmission Result Report (MemoryTX) (Dec. 21, 2006 12:28PM) * * *

1}

e/Time: Dec. 21, 2006 12:26PM

File No.	Mode	Destination	Pg(s)	Result	Page Not Sent
3365	Memory TX	93928033	P. 3	OK	

Reason for error

- E. 1) Hang up or line fail
- E. 3) No answer

- E. 2) Busy
- E. 4) No facsimile connection

Northern Kentucky Water District

Engineering
2835 Crescent Springs Road
Erlanger, Kentucky 41018
Phone: 859-578-9898
Fax: 859-578-7893
Website: www.nkywater.org

To: Vic Dawn
 Company Name: DNS Properties, LLC
 Fax Number: 392-8033
 From: Richard Harrison
 Date: 12/21/06
 Regarding: Amendment
 Number of Pages (including cover): 3

Comments: To: Vic, Here is the amendment My Cell Phone # is 859 991-1614
RCH

Northern Kentucky Water District

Engineering
2835 Crescent Springs Road
Erlanger, Kentucky 41018
Phone: 859-578-9898
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To: Vic Dawn
Company Name: DNS PROPERTIES, LLC
Fax Number: 392-8033
From: Richard Harris
Date: 12/21/06
Regarding: Amendment
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Comments:

Hi Vic, Here is the amendment My
cell phone # is 859 991-1614

RCH

**AMENDMENT TO FLAGG SPRINGS
WATER MAIN EXTENSION AGREEMENT**

This Amendment to Flagg Springs Water Main Extension Agreement (hereinafter the "Amendment") is made and entered this ____ day of December, 2006 by and between **DNS PROPERTIES, LLC (hereinafter "DEVELOPER")** and the **NORTHERN KENTUCKY WATER DISTRICT (hereinafter "DISTRICT")**. Together, DEVELOPER and DISTRICT shall be referred to herein as the "Parties".

WHEREAS, DEVELOPER and DISTRICT previously made and entered the Flagg Springs Water Main Extension Agreement, dated March 3, 2006 (hereinafter the "Agreement"), relating to the Sub-District F Water Main Extension Project in Campbell County and the addition of Flagg Springs Road and Ivor Road to the project (hereinafter collectively the "Project"); and

WHEREAS, the Agreement contemplated the payment of a monthly surcharge for the Sub-District F Water Main Extension Project and the Kentucky Public Service Commission (hereinafter "PSC") as not yet approved such a surcharge; and

WHEREAS, the Parties desire to amend the Agreement to provide for DEVELOPER'S contribution of the cost equal to 100 feet of the proposed water line extension in accordance with the DISTRICT'S Rates, Rules and Regulations, in lieu of the payment of a surcharge until such time as a surcharge may be approved by the PSC;

NOW, THEREFORE, in consideration of the premises, the mutual promises and covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, DEVELOPER and DISTRICT hereby agree as follow:

1. The Agreement is amended by deleting the last full sentence in Section 5 in its entirety and substituting therefore the following language:

DEVELOPER agrees to participate in the cost of the extension to serve DEVELOPER, in accordance with Section XIV-C of DISTRICT'S Rates, Rules and Regulations, by paying to DISTRICT an amount equal to the cost of 100 feet of the proposed extension, which amount has been calculated as \$4,900.00. If and when the surcharge for the Sub-District F Water Main Extension Pproject is approved by the PSC, DISTRICT shall refund in full the \$4,900.00 payment made by DEVELOPER, and DEVELOPER shall immediately commence to pay the monthly surcharge for the Sub-District F Water Main Extension Project which shall not exceed the amount of \$30.00 per month.

2. All other terms and provisions of the Agreement shall remain the same.

IN WITNESS WHEREOF, DEVELOPER and DISTRICT have executed this Amendment as of the date first above written.

DNS PROPERTIES, LLC

**NORTHERN KENTUCKY
WATER DISTRICT**

By: _____

By: _____

Printed Name: _____

Printed Name: _____

Title: _____

Title: _____

**AMENDMENT TO FLAGG SPRINGS
WATER MAIN EXTENSION AGREEMENT**

This Amendment to Flagg Springs Water Main Extension Agreement (hereinafter the "Amendment") is made and entered this 21st day of December, 2006 by and between **DNS PROPERTIES, LLC** (hereinafter "**DEVELOPER**") and the **NORTHERN KENTUCKY WATER DISTRICT** (hereinafter "**DISTRICT**"). Together, DEVELOPER and DISTRICT shall be referred to herein as the "Parties".

WHEREAS, DEVELOPER and DISTRICT previously made and entered the Flagg Springs Water Main Extension Agreement, dated March 3, 2006 (hereinafter the "Agreement"), relating to the Sub-District F Water Main Extension Project in Campbell County and the addition of Flagg Springs Road and Ivor Road to the project (hereinafter collectively the "Project"); and

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2. All other terms and provisions of the Agreement shall remain the same.

IN WITNESS WHEREOF, DEVELOPER and DISTRICT have executed this Amendment as of the date first above written.

DNS PROPERTIES, LLC

**NORTHERN KENTUCKY
WATER DISTRICT**

By: Victor Daws

By: Richard Harrison

Printed Name: Victor Daws

Printed Name: RICHARD HARRISON

Title: Member

Title: Vice President of Engineering & Distribution

Campbell County Unserved Street Listing

Sorted "Density"

Full Listing

Street	Comment:	Number of Unserved Households	Distance (Miles)	Estimated Project Cost	City	Feet of Main	Est \$ per Foot	Customers Per mile
Orlando	House #22 to D.E. (#15 has spiderline)	6	0.1	36,960	Alexandria	528	70	60.00
JoAnn Lane	Indian Trace to dead end	19	0.4	147,840	Unincorporated	2112	70	47.50
Lauren	Creek Trace (Rt. 536) to D.E.	18	0.4	147,840	Unincorporated	2112	70	45.00
Cory	Maddox to D.E.	12	0.3	108,523	Unincorporated/	1584	70	40.00
Country Lake	AA Highway to dead end	4	0.1	36,960	California/Uninc	528	70	40.00
Creektrace Rd. (Pond Creek)	From Indian Trace Rd. to Bridge	20	0.5	184,800	Unincorporated	2640	70	40.00
Rifle Range Rd.	From Licking Pike to bridge	26	0.8	295,680	Unincorporated	4224	70	32.50
Creektrace Rd. (Pond Creek)	From John Miller Rd. to Indian Trace Rd.	6	0.2	73,920	Unincorporated	1056	70	30.00
Blangey Rd.	Blangey Rd.	14	0.5	184,800	Brent	2640	70	28.00
Overlook	Fire hydrant to Licking Pike (#118 served)	4	0.15	55,440	Newport	792	70	26.67
Reis Lane (Decker Rd.)	Reis Ridge (Decker) to Dead end	8	0.3	110,880	Unincorporated	1584	70	26.67
Indian Trace Rd.	Indian Trace Rd. (From Creek Trace (Pond Cr.) to JoAnn)	15	0.6	221,760	Unincorporated	3168	70	25.00
Schababerle Hill	From Wesley Chapel Rd. to Daniels Rd	16	0.65	240,240	Unincorporated	3432	70	24.62
Bakerfield Rd.	Off of Boone Smith Rd.	22	0.9	332,640	Unincorporated	4752	70	24.44
Anderson Trace	Barrs Branch to D.E.	10	0.45	166,320	Alexandria	2376	70	22.22
Trapp-Murman	Johnson to D.E.	10	0.45	166,320	Unincorporated	2376	70	22.22
Upper Lick Branch Rd.	From Grandview to driveway past #2274	10	0.45	166,320	Unincorporated	2376	70	22.22
Hissem Rd.	From Nagel to Aulick	11	0.5	184,800	Unincorporated	2640	70	22.00
Enzweiler Road	From last fire hydrant to #124	13	0.6	88,900	Alexandria	1270	70	21.67
Muinn Rd.	Aulick to dead end	15	0.7	258,720	Unincorporated	3696	70	21.43
Harrisburg Hill	From Lees to Pleasant Rdg. Rd.	22	1.1	406,560	Unincorporated	5808	70	20.00
Harrisburg Hill	From Pleasant Ridge to dead end	10	0.5	184,800	Unincorporated	2640	70	20.00
Indian Trace Rd.	Indian Trace Rd. (From JoAnn to End of road)	18	0.9	332,640	Unincorporated	4752	70	20.00
John Miller	From Creek Trace to dead end	10	0.5	184,800	Unincorporated	2640	70	20.00
Kappas Drive	Lauren to Dead End	8	0.4	147,840	Unincorporated	2112	70	20.00
Kennedy	From Daniels to dead end	2	0.1	36,960	Unincorporated	528	70	20.00
Low Gap Rd	From #954 to #878	4	0.2	73,920	Unincorporated	1056	70	20.00
Mystic Rose (Gunkle Rd. #2)	Gunkle Rd. to dead end	8	0.4	147,840	Melbourne	2112	70	20.00
Picnic Road	from Wagner Rd. To end of road	2	0.1	36,960	Unincorporated	528	70	20.00
Pleasant Rdg. Rd.	From Visalia Rd to Lees Rd.	10	0.5	184,800	Unincorporated	2640	70	20.00
Reis Ridge	From Shaw Goetz to Reis Lane (Decker Rd)	10	0.5	184,800	Unincorporated	2640	70	20.00
Reis Ridge	From Reis Lane (Decker Rd) to end of road	10	0.5	184,800	Unincorporated	2640	70	20.00
Riley Road (old)	From 4 mile (upper end) to 2nd house	2	0.1	36,960	Unincorporated	528	70	20.00
Stonehouse Rd. (4&12 Mile)	Lower Grandview to A.A. Hwy	5	0.25	92,400	Unincorporated	1320	70	20.00
Dodsworth Ln.	Dodsworth Ln.	25	1.3	480,480	Unincorporated	6864	70	19.23

Wesley Chapel Rd.	33	1.8	665,280	Unincorporated	9504	70	18.33
Demossville Rd.	20	1.1	406,560	Unincorporated	5808	70	18.18
Shaw Goetz Rd.	20	1.1	406,560	Unincorporated	5808	70	18.18
Aulick Rd.	12	0.7	258,720	Unincorporated	3696	70	17.14
Boone Smith Rd.	12	0.7	258,720	Unincorporated	3696	70	17.14
Lees Road	12	0.7	258,720	Unincorporated	3696	70	17.14
Lower Grandview Rd.	5	0.3	110,880	Unincorporated	1584	70	16.67
Wesley Chapel Rd.	18	1.1	406,560	Unincorporated	5808	70	16.36
Burns Rd.	32	2	739,200	Unincorporated	10560	70	16.00
Daniels Rd.	16	1	369,600	Unincorporated	5280	70	16.00
Tower Hill Rd.	4	0.25	92,400	Ft. Thomas	1320	70	16.00
Baynum Hill Rd.	11	0.7	258,720	Unincorporated	3696	70	15.71
Maddox Rd	11	0.7	258,720	Claryville	3696	70	15.71
California Cross Rds.	7	0.45	166,320	California/Uninct	2376	70	15.56
Barrs Branch Rd.	17	1.1	406,560	Alexandria	5808	70	15.45
Pleasant Rdg. Rd.	17	1.1	406,560	Unincorporated	5808	70	15.45
Visalia Road	20	1.3	480,480	Unincorporated	6864	70	15.38
Bezold Rd.	15	1	369,600	Unincorporated	5280	70	15.00
Boone Smith Rd.	3	0.2	73,920	Unincorporated	1056	70	15.00
Clay Rdg. Rd.	9	0.6	221,760	Unincorporated	3168	70	15.00
Clay Rdg. Rd.	12	0.8	295,680	Unincorporated	4224	70	15.00
Haubner Rd.	12	0.8	295,680	Unincorporated	4224	70	15.00
Hidden Valley	15	1	369,600	Unincorporated	5280	70	15.00
Lees Road	9	0.6	221,760	Unincorporated	3168	70	15.00
Rt.8	15	1	369,600	Unincorporated	5280	70	15.00
Rt.8	6	0.4	221,760	Brent	3168	70	15.00
Truesdell Rd.	15	1	147,840	California/Uninct	2112	70	15.00
Wish Rd.	9	0.6	369,600	Melbourne	5280	70	15.00
Wolf Road	9	0.6	221,760	Unincorporated	3168	70	15.00
Poplar Thicket Rd.	15	1	221,760	Unincorporated -2	3168	70	15.00
Pleasant Rdg. Rd.	19	1.3	369,600	Unincorporated	5280	70	15.00
Nagle Rd.	10	0.7	258,720	Unincorporated	3696	70	14.62
Blue Sky Lane	2	0.15	55,440	Unincorporated	792	70	14.29
Burns Rd.	16	1.2	443,520	Unincorporated	6336	70	13.33
Gunkle Rd. (Gunkle #1)	8	0.6	221,760	Melbourne	3168	70	13.33
Shaw-Hess Rd	2	0.15	55,440	Unincorporated	792	70	13.33
Oneonta Rd.	10	0.8	295,680	California/Uninct	4224	70	12.50
Pond Creek Road	15	1.2	443,520	Unincorporated	6336	70	12.50
Pond Creek Road	25	2	739,200	Unincorporated	10560	70	12.50
Poplar Thicket Rd.	16	1.3	480,480	Unincorporated	6864	70	12.31
Stonehouse Rd. (4&12 Mile)	11	0.9	332,640	Unincorporated	4752	70	12.22
Wagoner (Dead Timber Rd. #2)	7	0.6	221,760	Alexandria	3168	70	11.67
3 Mile Road	8	0.7	258,720	Wilder	3696	70	11.43
Bob-White Lane	8	0.7	258,720	Unincorporated	3696	70	11.43
Tippenhauer Rd.	16	1.4	517,440	Cold Spring	7392	70	11.43

Fisher Rd	From Wish Rd. to Haubner Rd.	11	1	369,600	Unincorporated	5280	70	11.00
Vineyard (Gunkle Rd. #3)	From Ten Mile (#6752) to #6566	7	0.65	240,240	Melbourne	3432	70	10.77
Decker Rd.	from Bezold Rd. to dead end	2	0.2	73,920	Unincorporated	1056	70	10.00
Kennedy	From Flaig Springs to dead end	2	0.2	73,920	Unincorporated	1056	70	10.00
Kenton Station Rd.	From Lees to Pleasant Rdg. Rd.	9	0.9	332,640	Unincorporated	4752	70	10.00
Koehler Rd	From Calif. Cr. Rds. to Flagg Springs (Route 10)	9	0.9	332,640	California/Uninc	4752	70	10.00
Ky. State Route 154	From Burns to PCWD Service area.	10	1	369,600	Unincorporated	5280	70	10.00
Lick Hill	AA Highway to dead end	1	0.1	36,960	California/Uninc	528	70	10.00
Losey Rd.	Licking Pike to #901	3	0.3	110,880	Unincorporated	1584	70	10.00
Neises	From Rt.8 to dead end	2	0.2	73,920	Unincorporated	1056	70	10.00
Newkirk Road	From Fischer to Peach Grove Road (KY 154)	3	0.3	110,880	Unincorporated	1584	70	10.00
Oneonta Rd.	From Truesdale to Washington Tr. Rd.	7	0.7	258,720	Unincorporated	3696	70	10.00
Washington Tr.Rd.South End	End of 3" line to A.A. Hwy.	8	0.8	295,680	California/Uninc	4224	70	10.00
Siny Road	From Flatwoods Rd. to End of PCWD Line at #1204	19	2	739,200	Unincorporated	10560	70	9.50
Painter Rd	From #3735 to Route 8	8	0.85	314,160	California/Uninc	4488	70	9.41
Fisher Rd	From Haubner Rd. to #13634	13	1.4	517,440	Unincorporated	7392	70	9.29
Fisher Rd.	Fender Rd.	8	0.9	332,640	Melbourne	4752	70	8.89
Hissem Rd.	From Fairlane to Nagel	8	0.9	332,640	Unincorporated	4752	70	8.89
Rifle Range Rd.	From bridge to end of road	17	2	739,200	Unincorporated	10560	70	8.50
Morningview Rd.	Clay Ridge to dead end.	15	1.8	665,280	Unincorporated	9504	70	8.33
Pleasant Rdg. Rd.	From Kenton Station Rd. to Boone Smith Road	5	0.6	221,760	Unincorporated	3168	70	8.33
Fisher Rd	From Bezold Rd to Wish Rd.	2	0.25	92,400	Unincorporated	1320	70	8.00
Licking Pike	Aspen to North	4	0.5	184,800	Wilder	2640	70	8.00
Aulick Rd.	From Muinn Rd. to Demosville Rd.	3	0.4	147,840	Unincorporated	2112	70	7.50
Lees Road	From Harrisburg Hill Rd. to Kenton Station	3	0.4	147,840	Unincorporated	2112	70	7.50
Clay Rdg. Rd.	From Morningview Rd. Griffen Fords Rd.	5	0.7	258,720	Unincorporated	3696	70	7.14
Rt.8	Oneonta to Painter Rd.	11	1.6	591,360	California/Uninc	8448	70	6.88
Enzweiler Road	From #124 to dead end - East of AA hwy	4	0.6	132,860	Alexandria	1898	70	6.67
Burger Road	Gunkle Rd. to dead end	4	0.6	221,760	Unincorporated	3168	70	6.67
California Cross Rds.	From Washington Tr.Rd. to #3765	4	0.6	221,760	Calif.(Residents	3168	70	6.67
Flagg Springs (Route 10)	From Daniels Road to Pendelton Co. Line	4	0.6	221,760	Unincorporated	3168	70	6.67
Branch Lick (Lower Lick Branch)	from Stone House to dead end	5	0.8	295,680	Unincorporated	4224	70	6.25
Creektrace Rd. (Pond Creek)	From Licking Pike to John Miller Rd.	10	1.6	591,360	Unincorporated	8448	70	6.25
Shaw Goetz Rd.	From Reis Ridge Rd. to California Cross Rds.	11	1.8	665,280	Unincorporated	9504	70	6.11
Rt.8	End of existing line (#11927) to county line	6	1	369,600	Mentor	5280	70	6.00
Wagoner (Dead Timber Rd. #2)	From Newberry Road (Dead Timber Rd.) to Picnic	10	1.7	628,320	California/Uninc	8976	70	5.88
Stonehouse Rd. (4&12 Mile)	Oneonta Rd. to Lower Grandview	2	0.35	129,360	Unincorporated	1848	70	5.71
Upper Lick Branch Rd.	From driveway past #2274 to AA Hwy	2	0.35	129,360	Unincorporated	1848	70	5.71
Daniels Rd.	From #3185 to Flagg Springs Pike (Route 10)	6	1.1	406,560	Unincorporated	5808	70	5.45
California Cross Rds.	From Shaw Goetz Rd. to #2038	3	0.6	221,760	California/Uninc	3168	70	5.00
Hissem Rd.	From Fairlane to County Line	2	0.4	147,840	Unincorporated	2112	70	5.00
Newberry (Dead Timber Rd. #2)	from Wagner Rd. To end of road	3	0.6	221,760	California/Uninc	3168	70	5.00
Owl Creek Rd.	Owl Creek Rd.	6	1.2	443,520	Silver Grove	6336	70	5.00
Pond Creek Road	From #11707 to Kenton station Rd.	6	1.2	443,520	Unincorporated	6336	70	5.00
Wolf Road	From Kenton Station Rd. to Clay Rdg. Rd.	7	1.4	517,440	Unincorporated	7392	70	5.00

Kenton County Unserved Street Listing

Sorted by "CUSTOMERS PER MILE"

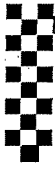
Full Listing

<u>Street</u>	<u>Comment:</u>	<u>House Count</u>	<u>Distance (Miles)</u>	<u>Est. Cost</u>	<u>City</u>	<u>Footage</u>	<u>\$/Foot</u>	<u>Customers Per Mile</u>
Cherry	Off KY 17, North of Apple	6	0.2	73,920.00	Independence	1056	70	30.00
Oak Island	Moffett to #14056	3	0.1	36,960.00	SKC	528	70	30.00
Stafford Heights Lane	Off Harris Pike	6	0.2	73,920.00	Independence	1056	70	30.00
Marshall Road	KY 177 to #9325	12	0.4	147,840.00	Covington	2112	70	30.00
Wright Road	Graven to D.E.	4	0.14	51,744.00	SKC	739	70	28.57
Fontanna	KY 177	16	0.6	221,760.00	SKC	3168	70	26.67
KY 177	KY 14 to #15168	16	0.6	221,760.00	SKC	3168	70	26.67
Webster Road	Richardson Road to D.E.	18	0.7	258,720.00	Independence	3696	70	25.71
Jones Road	American Legion to D.E.	36	1.4	517,440.00	SKC	7392	70	25.71
Kenton Station Road	KY 177 to D.E. (Thornhill)	5	0.2	73,920.00	SKC	1056	70	25.00
Carlisle Road	KY 14 to Parker Grove	45	1.9	205,385.00	SKC	10032	20.47	23.68
White Villa Estates	Lakeshore, Maple, North Lake Rd	26	1.1	406,560.00	SKC	5808	70	23.64
Hempfling Road	Navaho Road to slide area	18	0.8	295,680.00	SKC	4224	70	22.50
Courtney Road	Eads Road to Boone County Line	27	1.25	131,690.00	SKC	6600	19.95	21.60
Lunsford Road	Off KY 14 (Bullock Pen)	14	0.7	82,185.00	SKC	3696	22.24	20.00
Lakeview Drive	Off Taylor Mill Road, South of Harris	2	0.1	36,960.00	SKC	528	70	20.00
Far Hills Drive	From end of 16" to D.E.	1	0.05	18,480.00	Independence	264	70	20.00
Conley Road	KY 177 to #3953	6	0.3	110,880.00	SKC	1584	70	20.00
Goshorn Road	Fiskburg to D.E.	16	0.8	295,680.00	SKC	4224	70	20.00
Northcut Road	Jones Road to D.E.	8	0.4	147,840.00	SKC	2112	70	20.00
Sawgrass Road	Off Green Road	2	0.1	36,960.00	SKC	528	70	20.00
Bird Road	D.E. near Wynewood to end of road	6	0.3	110,880.00	SKC	1584	70	20.00
Marshall Road	Klette to #9440	2	0.1	36,960.00	Covington	528	70	20.00
Dixon Drive	Rich Road to #14038	18	1	369,600.00	SKC	5280	70	18.00
Ernst Bridge Road	From RR bridge to #4425 (Ryland CC)	7	0.4	147,840.00	SKC	2112	70	17.50
Scenic Ridge Drive	Off Pelly Road	5	0.3	110,880.00	Independence	1584	70	16.67
Hempfling Road	Navaho to Oak Island	10	0.6	221,760.00	SKC	3168	70	16.67
Gene Street	Off Walton Nicholson Road	4	0.25	92,400.00	SKC	1320	70	16.00
Bagby Road	US 25 to Parker Grove	38	2.4	245,770.00	SKC	12672	19.39	15.83
Mason Road	hydrant at #460 to Decoursey	3	0.2	73,920.00	Taylor Mill	1056	70	15.00
Holdsbranch	End of existing pipe to D.E. of street	6	0.4	147,840.00	Taylor Mill	2112	70	15.00

James Road	3	0.2	73,920.00	SKC	1056	70	15.00
Old Fowler Creek Road	3	0.2	73,920.00	Covington	1056	70	15.00
Peoples Cemetary	3	0.2	19,105.00	SKC	1056	18.09	15.00
Rich Road	9	0.6	221,760.00	SKC	3168	70	15.00
Rouse	3	0.2	73,920.00	SKC	1056	70	15.00
Taylor Mill Road	6	0.4	147,840.00	Taylor Mill	2112	70	15.00
Worthington Drive	3	0.2	73,920.00	Covington	1056	70	15.00
Rich Road	15	1	369,600.00	SKC	5280	70	15.00
Stephenson Road	16	1.1	106,240.00	SKC	5808	18.29	14.55
Steep Creek	14	1	369,600.00	SKC	5280	70	14.00
Trace Run Road	11	0.8	295,680.00	SKC	4224	70	13.75
Bethel Grove Road	3	0.22	81,312.00	Visalia	1162	70	13.64
Parker Grove	30	2.2	230,550.00	SKC	11616	19.85	13.64
Gleason Road	4	0.3	110,880.00	SKC	1584	70	13.33
Steep Creek	8	0.6	221,760.00	SKC	3168	70	13.33
Case Road	4	0.3	110,880.00	SKC	1584	70	13.33
James Road	4	0.3	110,880.00	SKC	1584	70	13.33
Locust Lane	2	0.15	55,440.00	SKC	792	70	13.33
KY 177	17	1.3	480,480.00	Kenton	6864	70	13.08
Mann Road	9	0.7	258,720.00	SKC	3696	70	12.86
Little Cruises Creek Rd	33	2.6	960,960.00	SKC	13728	70	12.69
Webster Road	5	0.4	147,840.00	Independence	2112	70	12.50
Pruett	5	0.4	147,840.00	SKC	2112	70	12.50
Fowler Creek Road	15	1.2	443,520.00	Independence	6336	70	12.50
Harrisburg Road	5	0.4	147,840.00	SKC	2112	70	12.50
Grassy Creek Road	15	1.2	126,720.00	SKC	6336	20	12.50
Paxton Road	10	0.8	75,310.00	SKC	4224	17.83	12.50
River Road (Route 8)	11	0.9	332,640.00	Villa Hills	4752	70	12.22
Elliott Road	18	1.5	554,400.00	SKC	7920	70	12.00
Fiskburg Road	6	0.5	184,800.00	SKC	2640	70	12.00
Graven Road	3	0.25	92,400.00	SKC	1320	70	12.00
Cody Road	7	0.6	221,760.00	Independence	3168	70	11.67
Wright Road	14	1.2	443,520.00	SKC	6336	70	11.67
Mann Road	9	0.8	295,680.00	SKC	4224	70	11.25
Anderson Road	10	0.9	95,040.00	SKC	4752	20	11.11
Alexander Road	34	3.1	1,145,760.00	SKC	16368	70	10.97
Forest View Lane	3	0.3	110,880.00	Taylor Mill	1584	70	10.00
Ishmael	1	0.1	36,960.00	SKC	528	70	10.00
Justice Lane	3	0.3	110,880.00	Independence	1584	70	10.00
Webster Road	2	0.2	73,920.00	Independence	1056	70	10.00
Fiskburg Road	1	0.1	36,960.00	SKC	528	70	10.00

Fuchs Road	Garvey Avenue to D.E.	1	0.1	36,960.00	Elsmere	528	70	10.00
Hempfling Road	Sub C D.E. to slide area #2713	7	0.7	258,720.00	SKC	3696	70	10.00
Independence Station Rd	Justice to RR Tracks	3	0.3	110,880.00	Independence	1584	70	10.00
KY 177	End of Sub E, past Conley to 13361	15	1.5	554,400.00	Visalia	7920	70	10.00
Moffett Road	Armstrong to #3630	3	0.3	110,880.00	SKC	1584	70	10.00
Nelson Road	Narrows to Deer Chase	1	0.1	36,960.00	Erlanger	528	70	10.00
Rosanna Lane	Off of Callant	4	0.4	147,840.00	SKC	2112	70	10.00
Spruce View Drive	Walton Nicholson to D.E.	2	0.2	73,920.00	SKC	1056	70	10.00
Steep Creek	#3382 at bridge to #3709 at bridge	10	1	369,600.00	SKC	5280	70	10.00
Washboard Road	KY 177 to D.E.	4	0.4	147,840.00	SKC	2112	70	10.00
Wayman Branch	Between old T.M. system and NKWD s	5	0.5	184,800.00	Taylor Mill	2640	70	10.00
Kensington Road	Off Green Road	2	0.2	73,920.00	SKC	1056	70	10.00
Kenton Station Road	Martin to Rector	17	1.8	665,280.00	SKC	9504	70	9.44
Hempfling Road	Oak Island to Rich	12	1.3	480,480.00	SKC	6864	70	9.23
Conley Road	Kenton Station to #3953	9	1	369,600.00	SKC	5280	70	9.00
Saint Marys Road	Alexander to KY 177	7	0.8	295,680.00	SKC	4224	70	8.75
Eads Road	US 25 to I-71/75	6	0.7	258,720.00	SKC	3696	70	8.57
Pfanstiehl Road	Fiskburg to D.E.	12	1.4	517,440.00	SKC	7392	70	8.57
Locust Pike/Lawnmower Road	Feiser Road to # 9684	21	2.5	924,000.00	Ryland Heights	13200	70	8.40
Tamarita Lane	Harris to KY 16	1	0.12	44,352.00	Independence	634	70	8.33
Rich Road	End of Sub C to #3493	4	0.5	184,800.00	SKC	2640	70	8.00
Alexander Road	KY 177 to D.E.	8	1	369,600.00	SKC	5280	70	8.00
Vises's Trail	From KY177 go North 0.77 miles(south	6	0.77	284,592.00	SKC	4066	70	7.79
KY 177	St. Mary Rd to Alexander Road	10	1.3	480,480.00	SKC	6864	70	7.69
Armstrong Road	Off Moffett to D.E.	3	0.4	147,840.00	SKC	2112	70	7.50
Porter Road	Hydrant at #8924 to hydrant at #9028	2	0.28	103,488.00	Ryland Heights	1478	70	7.14
Erlanger Road	Turfway to dead end	2	0.3	110,880.00	Erlanger	1584	70	6.67
Fiskburg Road	Alexander to Rich Road	4	0.6	221,760.00	SKC	3168	70	6.67
Hergott Drive	Off KY 17, Norther of Callant	4	0.6	221,760.00	SKC	3168	70	6.67
McHugh Lane	Off Independence Station Road	2	0.3	110,880.00	Independence	1584	70	6.67
Montague Road	Fire Hydrant to #1760	2	0.33	121,968.00	Covington	1742	70	6.06
River Road (Route 8)	Amsterdam to Chevron	11	1.9	702,240.00	Villa Hills	10032	70	5.79
Decoursey	I-275 to hydrant at #7900	4	0.7	258,720.00	Fairview	3696	70	5.71
Lamb's Ferry Road	Whites Road to Whites Road	10	1.8	665,280.00	Ryland Heights	9504	70	5.56
Eubanks Road	Erlanger-Crs.Spgs. Road to D.E.	2	0.4	147,840.00	Crescent Spgs	2112	70	5.00
Key West Road	US 25 to D.E. (Bullock Pen)	1	0.2	21,120.00	SKC	1056	20	5.00
KY 177	#14443 south of Kenton Station to bridg	3	0.6	221,760.00	Kenton	3168	70	5.00
Lipscomb	Lieberman to D.E.	2	0.4	147,840.00	Covington	2112	70	5.00
Narrows Road	Thornfree to Nelson (served by spiderflin	1	0.2	73,920.00	Erlanger	1056	70	5.00
Navaho Road	Hempfling to D.E.	1	0.2	73,920.00	SKC	1056	70	5.00
Rich Road	#3493 to Hempfling	1	0.2	73,920.00	SKC	1056	70	5.00

Gardnersville Road	End of Sub C to Anderson Road	3	0.6	63,360.00	SKC	3168	20	5.00
Eads Road	I-71/75 to #504	6	1.35	142,560.00	SKC	7128	20	4.44
Campbell Drive	US 25 to D.E.	3	0.7	258,720.00	SKC	3696	70	4.29
Decoursey	Marshall to end of Sub-R	3	0.7	258,720.00	Ryland Heights	3696	70	4.29
Madison Pike	Old Richardson Road to Far Hills	3	0.7	258,720.00	Independence	3696	70	4.29
Fowler Creek Road	Cox to Stephens	2	0.5	184,800.00	Independence	2640	70	4.00
KY 177	Ryland Lakes C.C. to #11282	5	1.4	517,440.00	SKC	7392	70	3.57
Menefee Road	Shady Lane to county line	1	0.3	31,680.00	SKC	1584	20	3.33
Wehrman Road	KY 16 to D.E.	1	0.3	110,880.00	Independence	1584	70	3.33
Rich Road	Hempfling to Little Cruises	1	0.4	147,840.00	SKC	2112	70	2.50
Stephens Drive	Don Victor to Oliver	1	0.4	147,840.00	Independence	2112	70	2.50
Pin Oak Lane	Erlanger showcase cinema drive to D.E.	1	0.5	184,800.00	Erlanger	2640	70	2.00
Fowler Creek Road	New Madison connector road to Pelly	1	0.6	221,760.00	Covington	3168	70	1.67
Gripshover	County line to D.E.	1	0.6	63,360.00	SKC	3168	20	1.67
Moffett Road	Kenton Station to #3630	1	0.6	221,760.00	SKC	3168	70	1.67
Marshall Road	Coleman to Stewart	1	0.8	295,680.00	Ryland Heights	4224	70	1.25
Independence Road	#1068 to End of Sub C	0	0.27	99,792.00	SKC	1426	70	0.00
Locust Pike	#9684 To end of Sub R near Whites	0	0.5	184,800.00	Ryland Heights	2640	70	0.00
Amsterdam Road	12" CC to Sanitation Plant Entrance	0	0.65	240,240.00	Villa Hills	3432	70	0.00
Decoursey	Grand to I-275	0	0.6	221,760.00	Covington	3168	70	0.00
Horsebranch	#760 Horsebranch to Thomas More Part	0	1.06	391,776.00	Crestview Hills	5597	70	0.00
Independence Station Rd	Canberra to R.R. Tracks	0	0.4	147,840.00	Independence	2112	70	0.00
KY 177	#15168 to St. Marys Road	0	0.6	221,760.00	SKC	3168	70	0.00
KY 177	Alexander Road to Pendleton County Lit	0	0.3	110,880.00	SKC	1584	70	0.00
Narrows Road	Richardson to Thorntree	0	0.2	73,920.00	Erlanger	1056	70	0.00
Narrows Road	Nelson to D.E. at Erlanger Fire	0	0.2	73,920.00	Erlanger	1056	70	0.00
Oak Island	#14056 to Hempfling	0	0.7	258,720.00	SKC	3696	70	0.00
Rice Road #1	Off Mills Road	0	0.25	92,400.00	Independence	1320	70	0.00
Shady Lane	Bagby Rd to county line	0	0.5	52,800.00	SKC	2640	20	0.00
Sleepy Hollow Road	Existing D.E. near Diamond Ct. to Ludlow	0	1	369,600.00	Covington	5280	70	0.00
	Total	1022	93.69	30,333,179.00		494683		



*Richard
FYI
John*

Attn: John Schaben, Jr.



COMMONWEALTH OF KENTUCKY
OFFICE OF THE ATTORNEY GENERAL

GREGORY D STUMBO
ATTORNEY GENERAL

1024 CAPITAL CENTER DRIVE
SUITE 200
FRANKFORT, KY 40601-8204

9 February 2007

Mr. & Mrs. Jim F. Baird
2313 Grandview Road
Alexandria, Kentucky 41001

RE: Kentucky Public Service Commission Case No. 2006-00315
Northern Kentucky Water District Sub-District F

Dear Mr. & Mrs. Baird:

I am in receipt of your 19 January 2007 letter concerning Northern Kentucky Water District and its proposal for a construction sub-district. In sum, in its efforts to extend water service, NKWD, on a project-by-project basis, aggregates customers together in order to make an expansion project financially feasible. Under NKWD's proposal for Sub-District F, customers of the sub-district would pay a \$30.00 per month surcharge associated with the project.

On 20 February 2007, the Public Service Commission entered an Order denying Northern's proposed Sub-District F. The Commission's pertinent conclusion of law states that "no rational basis exists to support the proposed creation of Subdistrict F as currently drawn." Northern sought and was able to obtain a rehearing of the Order. The District's request is currently under review

obtain a rehearing of the Order. The District's request is currently under review by the Public Service Commission. I do not know when the Commission will enter an order on rehearing addressing the matter.

[2]

It is the District's responsibility to advance its plan and convince the Commission that the surcharge option is the better option for extending service to the area covered by the Sub-District F proposal. The District has filed testimony supporting its position, and it is actively and aggressively working to demonstrate a rational basis for the Sub-District and that the surcharge is in the best interests of the utility and potential customers like you.

AN EQUAL OPPORTUNITY EMPLOYER M/F/D



This Office has reviewed the plan, and the Attorney General has no objection to the project or the surcharge. The District has done a thorough job of presenting its argument regarding the surcharge, and it is now up to the Commission to determine the issue. Again, I do not know when the Commission will render a decision. Thus, at this stage, we just have to wait.

I hope that you find this information of assistance. We appreciate you taking time to convey your concerns to this Office.

Regards,

David Edward Spenard
David Edward Spenard
Assistant Attorney General

*P.S. - Mr. Spenard called me today (Feb 19)
& said it was a "typo" - The Feb-20, '07 date
was Sept, 20, 06!*

*He thought you were doing a good job
with your case to the P.S.C. He has been
following it. His opinion was that they
would go with the surcharge.*

Tab 14