

Rubin & Hays

2007-480

ATTORNEYS AT LAW

Kentucky Home Trust Building, 450 South Third Street, Louisville, Kentucky 40202-1410
Telephone (502) 569-7525 Telefax (502) 569-7555 www.rubinhays.com

CHARLES S. MUSSON
W. RANDALL JONES
CHRISTIAN L. JUCKETT

November 9, 2007

RECEIVED

NOV 13 2007

PUBLIC SERVICE
COMMISSION

Ms. Elizabeth O'Donnell
Executive Director
Kentucky Public Service Commission
P.O. Box 615
Frankfort, Kentucky 40602

Re: Letcher County Water and Sewer District - Kentucky Public Service Commission
Application for a CPCN and approval of financing for a Water System Improvements
Project

Dear Ms. O'Donnell:


Enclosed please find the original and ten (10) copies of the Application of the Letcher County Water and Sewer District for a Certificate of Public Convenience and Necessity to construct and finance a water system improvements project pursuant to KRS Chapter 278.

Also enclosed are eleven (11) copies of the exhibits required, with the exception of the Plans and Specifications, prepared by Bell Engineers, Inc., on the Project, two of which are being forwarded by said Engineers.

Please be advised that the Project has been bid and said bids expire on December 10, 2007. We would appreciate your expediting this matter so the favorable bids will not be lost.

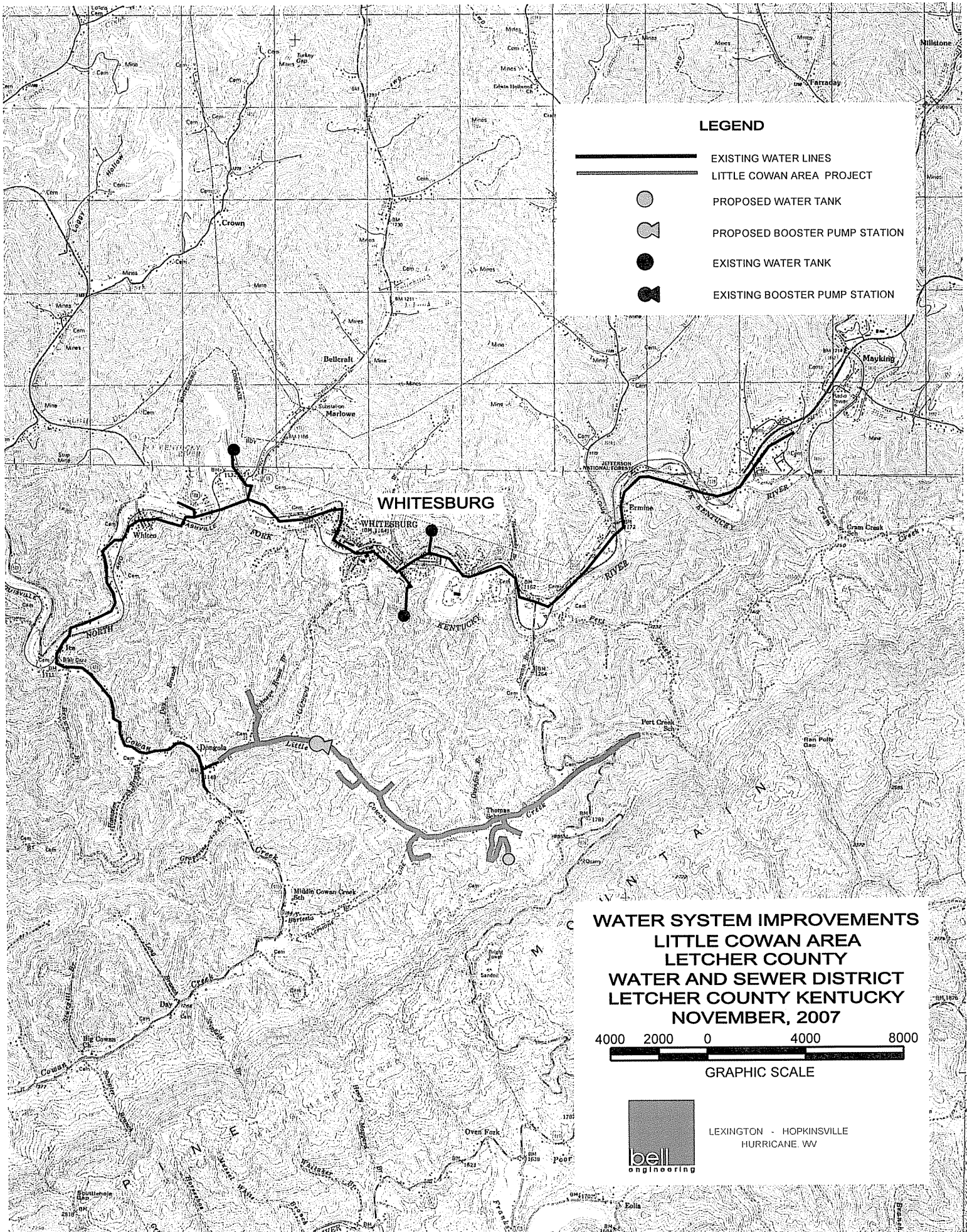
Sincerely,

Rubin & Hays







By 
W. Randall Jones

WRJ:jlm
Enclosures

cc: Mr. Greg Pridemore, LCWSD
Stephen Caudill, Bell Engineering



LEGEND

-  EXISTING WATER LINES
-  LITTLE COWAN AREA PROJECT
-  PROPOSED WATER TANK
-  PROPOSED BOOSTER PUMP STATION
-  EXISTING WATER TANK
-  EXISTING BOOSTER PUMP STATION

WHITESBURG

**WATER SYSTEM IMPROVEMENTS
LITTLE COWAN AREA
LETCHER COUNTY
WATER AND SEWER DISTRICT
LETCHER COUNTY KENTUCKY
NOVEMBER, 2007**



GRAPHIC SCALE



LEXINGTON - HOPKINSVILLE
HURRICANE, WV

RECEIVED

NOV 13 2007

PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of:

APPLICATION OF THE LETCHER COUNTY WATER)
AND SEWER DISTRICT FOR A CERTIFICATE)
OF PUBLIC CONVENIENCE AND NECESSITY TO)
CONSTRUCT AND FINANCE A WATERWORKS)
IMPROVEMENTS PROJECT PURSUANT TO)
KRS 278.020 AND 278.300)

Case No. 2007-480

APPLICATION

The Letcher County Water and Sewer District (the "District"), by counsel, pursuant to KRS 278.020, petitions the Commission for a certificate of public convenience and necessity to construct a waterworks improvement project and finance said project. The following information is filed in accordance with the Commission's regulations:

1. The District's office address is P.O. Box 827, Whitesburg, Kentucky 41858. Its principal officers are listed in its 2006 Annual Report, which is on file with the Commission;
2. The District is a non-profit water district organized under KRS Chapter 74 and has no separate articles of incorporation or by-laws;
3. A description of the District's water system and its property stated at original cost by accounts is contained in its 2006 Annual Report, which is incorporated by reference pursuant to 807 KAR 5:001 Section (5)(5). All required normal financial schedules and other data are in the Annual Report;
4. The water improvements project (the "Project") consists of the construction and installation of approximately 19,345 linear feet of 6 inch water line; 6,545 linear feet of 3 inch water

line; a 30,000 gallon water storage tank; and a booster pumping station to serve approximately 104 new customers in the Little Cowan area of Letcher County;

5. The Project is in the public interest and will improve the District's system and provide water to approximately 104 new users who currently rely on wells, cisterns and springs for potable water;

6. The total project cost is approximately \$1,193,000, as forth in the Final Project Budget attached hereto as **Exhibit "A"**;

7. The District has obtained all of the easements for the Project;

8. This service will not compete with any other utility in the area;

9. Based on these facts, the District believes that it is in the public interest that this certificate be granted and that the plan of financing be authorized;

10. Copies of the certified bid tabulations are attached hereto as **Exhibit "B"**;

11. The following information is provided in response to 807 KAR 5:001 Section (8)(3);

a. Articles of Incorporation - None, the District is a statutorily created water district under KRS Chapter 74;

12. The following information is supplied to 807 KAR 5:001 Section (9)(2);

a. Facts relied upon to show that the Project is in the public interest: The water project will provide water service to approximately 104 new users who currently rely on wells, cisterns and springs for potable water;

b. No new franchises are required. Copies of the permits are attached hereto as **Exhibit "C"**;

c. Diagrams of the proposed construction and construction specifications are contained in the Plans and Specifications on file with the Commission;

d. Three (3) maps of suitable scale showing location of the proposed facilities are attached hereto;

e. The construction costs will be funded from the proceeds of (i) a House Bill 267 Grant in the amount of \$300,000; (ii) an IDEF grant in the amount of \$112,000; and (iii) a loan in the approximate amount of \$781,000 from the Kentucky Infrastructure Authority ("KIA") through its Fund F Program (see Executive Summary and Project Review attached as **Exhibit "D"**);

f. The estimated cost of operation of the system after Project completion is attached hereto as **Exhibit "E"**;

13. The following information is provided as required by 807 KAR 5:001 Section (11)(1);

a. A general description of the property is contained in the 2006 Annual Report;

b. Financial information relating to the KIA Loan is contained in Exhibit "D" attached hereto;

c. All funds are to be used in accordance with the Final Project Budget, see Exhibit "A";

d. Two pieces of real property are being acquired in connection with this Project, see copies of the Deeds attached hereto as **Exhibit "F"**;

e. No proceeds of the KIA Loan will be used to refund outstanding obligations.

f. The KIA Loan will be secured by and paid out of the revenues of the District's system.

14. The following exhibits are provided pursuant to 807 KAR 5:001 section (11)(2);

a. The District hereby requests and moves for a deviation, pursuant to 807 KAR 5:001, Section 14, from the requirements of 807 KAR 5:001, Section 6, which requires that the financial data filed with the Application be for a twelve (12) month period ending within ninety (90) days of the filing of the application. The District states that there has been no change that is material in nature in the financial condition or operation of the District since December 31, 2006. The financial data filed herewith as **Exhibit "G"** is for the twelve (12) month period ending December 31, 2006. This is the most recent published financial data available. Because the Project has been bid and the District is under a bid-hold period by the Contractors, the District cannot run the risk of delaying the commencement of the Project and losing the favorable bids while more current financial data is compiled;

b. There are no trust deeds or mortgages applicable;

c. Maps and detailed plans are on file with the Commission. Detailed estimate of property acquired by USOA number is as follows: Account #311 (Pumping Equipment) - \$110,000; Account #330 (Distribution Reservoirs and Standpipes) - \$120,000; Account #331 (Transmission and Distribution Mains) - \$713,757.

15. District requests that it be granted a deviation under 807 KAR 5:001(14), if necessary to accommodate any situation where inflexible compliance with a regulation would be impracticable, onerous or which would hinder District's daily operations.

WHEREFORE, the Applicant, Letcher County Water and Sewer District requests that the Public Service Commission of Kentucky grant to the Applicant the following:

A. A certificate of public convenience and necessity permitting the Applicant to construct a water system improvement project;

B. An order approving the financing arrangements, including the loan from the Kentucky Infrastructure Authority in the approximate amount of \$781,000.

C. Applicant's motion for a deviation from the 90 day requirement for financial information as required by 807 KAR 5:001 Section (11)(2)(a).

Letcher County Water and Sewer District

By Phillip B. Bach
Chairman

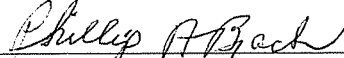
Rubin & Hays

By W. Randall Jones
W. Randall Jones
Kentucky Home Trust Building
450 South Third Street
Louisville, Kentucky 40202
(502) 569-7525

COMMONWEALTH OF KENTUCKY)
) SS
COUNTY OF LETCHER)

The undersigned, Phillip Back, being duly sworn, deposes and states that he is the Chairman of the Letcher County Water and Sewer District, Applicant, in the above proceedings; that he has read the foregoing Application and has noted the contents thereof; that the same is true of his own knowledge, except as to matters which are therein stated on information or belief, and as to those matters, he believes same to be true.

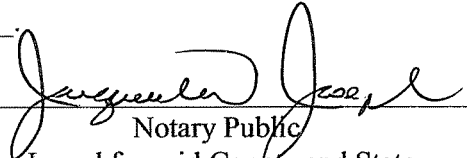
IN TESTIMONY WHEREOF, witness the signature of the undersigned on this November 5th, 2007.



Phillip Back, Chairman
Letcher County Water and Sewer District

Subscribed and sworn to before me by Phillip Back, Chairman of the Letcher County Water and Sewer District, on this November 5th, 2007.

My Commission expires March 30, 2011



Notary Public
In and for said County and State

KENTUCKY INFRASTRUCTURE AUTHORITY

PROJECT BUDGET

LITTLE COWAN WATER SYSTEM IMPROVEMENTS - PROJECT NO. WX21133005

Cost Classification	DWSRF KIA LOAN	KIA Grant	Funding Source 1	Funding Source 2	Funding Source 3	Funding Source 4	Local Funds	Unfunded Costs	Total
1 Administrative Expenses (1)			15,000.00						\$15,000.00
2 Legal Expenses			5,000.00						\$5,000.00
3 Land, Appraisals, Easements			10,000.00						\$10,000.00
4 Relocation Expense & Payments									\$0.00
5 Planning (2)			15,000.00						\$15,000.00
6 Engineering Fees - Design/Bidding	12,684.00		46,600.00	26,953.00					\$86,237.00
7 Engineering Fees - Construction	3,624.00		13,231.00						\$16,855.00
8 Engineering Fees - Inspection	14,743.00		39,146.00						\$53,889.00
9 Construction	702,687.00		156,023.00	85,047.00					\$943,757.00
10 Equipment									\$0.00
11 Contingency	47,262.00								\$47,262.00
12 Other - Interest									\$0.00
Total	781,000.00		300,000.00	112,000.00	0.00	\$0.00	\$0.00	\$0.00	\$1,193,000.00

Funding Sources	Amount	Date Committed
1 Coal Severance	\$300,000.00	
2 KIA Grant	\$112,000.00	
3 DWSRF KIA Loan	\$781,000.00	
Total	\$1,193,000.00	

Local Funding Sources	Amount	Date Committed
1		
2		
3		
Total		

Total Funding \$1,193,000.00

(1) Include Interim Financing

(2) Include in this category, all negotiated fees not

Signature

Title

Date

We certify that the following is a true and complete tabulation of all bids received by the Letcher County Water and Sewer District on September 12, 2007, for the titled project.

BELL ENGINEERING

Steph H. Campbell

Item No.	Item	Quantity		Akins Excavating Co., Inc. 182 Busy Lane Corbin, Kentucky 40701		Kenney, Inc. P.O. Box 1305 Mt. Sterling, Kentucky 40353		H2O Construction Co., Inc. 91 Hillcrest Drive Pikeville, Kentucky 41501		K. Cairrender Construction Co., Inc. 200 Ringgold Road Somerset, Kentucky 42503	
		Unit	Unit	Price	Total	Price	Total	Price	Total	Price	Total
DIVISION "A" - WATER LINE											
1.	6-Inch Class 250 (SDR 17) PVC pipe, Including Compact Ductile Iron m.j. Fittings, Furnishing, Trenching, Bedding, Laying and Backfilling, or Installed in Steel Cover Pipe, Detectable Tape, Concrete Blocking, Unclassified Excavation, Complete.	12,915	L.F.	\$15.65	\$202,119.75	\$13.50	\$174,352.50	\$18.00	\$232,470.00	\$20.90	\$269,923.50
2.	6-Inch Ductile Iron CL 350 pipe, Including Compact Ductile Iron m.j. Fittings, Furnishing, Trenching, Bedding, Laying and Backfilling, or Installed in Steel Cover Pipe, Detectable Tape, Concrete Blocking, Unclassified Excavation, Complete.	6,430	L.F.	\$20.70	\$133,101.00	\$23.50	\$151,105.00	\$30.00	\$192,900.00	\$28.90	\$185,827.00
3.	6-Inch Ductile Iron Restrained Joint pipe, Including Compact Ductile Iron m.j. Fittings, Furnishing, Trenching, Bedding, Laying and Backfilling, or Installed in Steel Cover Pipe, Detectable Tape, Concrete Blocking, Unclassified Excavation, Complete.	1,115	L.F.	\$25.05	\$27,930.75	\$28.50	\$31,777.50	\$32.00	\$35,680.00	\$42.35	\$47,220.25
4.	4-Inch Ductile Iron Restrained Joint pipe, Including Compact Ductile Iron m.j. Fittings, Furnishing, Trenching, Bedding, Laying and Backfilling, or Installed in Steel Cover Pipe, Detectable Tape, Concrete Blocking, Unclassified Excavation, Complete.	70	L.F.	\$28.65	\$2,005.50	\$33.50	\$2,345.00	\$33.00	\$2,310.00	\$43.60	\$3,052.00
5.	3-Inch Class 250 (SDR 17) PVC pipe, Including Compact Ductile Iron m.j. Fittings, Furnishing, Trenching, Bedding, Laying and Backfilling, or Installed in Steel Cover Pipe, Detectable Tape, Concrete Blocking, Unclassified Excavation, Complete.	5,145	Each	\$13.35	\$68,685.75	\$7.50	\$38,587.50	\$10.00	\$51,450.00	\$15.00	\$77,175.00
6.	3-Inch Ductile Iron CL 350 pipe, Including Compact Ductile Iron m.j. Fittings, Furnishing, Trenching, Bedding, Laying and Backfilling, or Installed in Steel Cover Pipe, Detectable Tape, Concrete Blocking, Unclassified Excavation, Complete.	1,400	Each	\$25.50	\$35,700.00	\$28.00	\$39,200.00	\$20.00	\$28,000.00	\$38.70	\$54,180.00
7.	6-Inch M.J. Resilient Seat Gate Valve, Box Including Concrete Valve Box Collar, Complete.	19	Each	\$689.00	\$13,091.00	\$950.00	\$18,050.00	\$800.00	\$15,200.00	\$650.00	\$12,350.00
8.	3-Inch M.J. Resilient Seat Gate Valve, Box Including Concrete Valve Box Collar, Complete.	9	Each	\$492.00	\$4,428.00	\$800.00	\$7,200.00	\$600.00	\$5,400.00	\$450.00	\$4,050.00

Item No.	Item	Quantity	Unit	Akins Excavating Co., Inc. 182 Busy Lane Corbin, Kentucky 40701		Kenney, Inc. P.O. Box 1305 Mt. Sterling, Kentucky 40353		H2O Construction Co., Inc. 91 Hillcrest Drive Pikeville, Kentucky 41501		K. Carrender Construction Co., Inc. 200 Ringgold Road Somerset, Kentucky 42503	
				Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
9.	5/8-inch x 3/4-inch Meter Setting, Including PRV Meter Box, Cover, Corporation Stop, Saddle, Tap and Touch Read Assembly, Furnish and Install, Complete.	103	Each	\$725.00	\$74,675.00	\$800.00	\$82,400.00	\$1,000.00	\$103,000.00	\$650.00	\$66,950.00
10.	3/4-inch Polyethylene Service Pipe, Furnishing, Trenching, Bedding, Laying and Backfilling, or by Jacking, Detectable Tape, Unclassified Excavation, Complete.	1,220	L.F.	\$9.00	\$10,980.00	\$6.00	\$7,320.00	\$9.00	\$10,980.00	\$14.30	\$17,446.00
11.	3/4-inch Copper Service Pipe, Furnishing, Trenching, Bedding, Laying and Backfilling, or by Jacking, Detectable Tape, Unclassified Excavation, Complete.	1,200	L.F.	\$15.00	\$18,000.00	\$12.00	\$14,400.00	\$13.00	\$15,600.00	\$17.55	\$21,060.00
12.	10-inch x 0.250-inch Steel Cover Pipe, Including Carrier Pipe, Casing Spacers and End Seals, Furnish and Install, Open Cut or Boring, Complete.	218	L.F.	\$44.00	\$9,592.00	\$75.00	\$16,350.00	\$65.00	\$14,170.00	\$35.00	\$7,630.00
13.	Boring or Jacking for 10-inch Steel Cover Pipe, Unclassified Excavation, Complete.	218	L.F.	\$78.00	\$17,004.00	\$125.00	\$27,250.00	\$100.00	\$21,800.00	\$95.00	\$20,710.00
14.	8-inch x 0.188-inch Steel Cover Pipe, Including Carrier Pipe, Casing Spacers and End Seals, Furnish and Install, Open Cut or Boring, Complete.	43	L.F.	\$30.00	\$1,290.00	\$40.00	\$1,720.00	\$60.00	\$2,580.00	\$30.00	\$1,290.00
15.	Boring or Jacking for 8-inch Steel Cover Pipe, Unclassified Excavation, Complete.	43	L.F.	\$78.00	\$3,354.00	\$125.00	\$5,375.00	\$100.00	\$4,300.00	\$90.00	\$3,870.00
16.	Fiberglass or Concrete Line Marker, Furnish and Install, Complete.	25	Each	\$55.00	\$1,375.00	\$200.00	\$5,000.00	\$25.00	\$625.00	\$50.00	\$1,250.00
17.	Flushing Hydrant Assembly, Furnish and Install, Complete.	6	Each	\$3,175.00	\$19,050.00	\$3,000.00	\$18,000.00	\$2,000.00	\$12,000.00	\$2,800.00	\$16,800.00
18.	Yard Hydrant Assembly, Furnish and Install, Complete.	1	Each	\$168.00	\$168.00	\$500.00	\$500.00	\$250.00	\$250.00	\$500.00	\$500.00
19.	Blow-Off Assembly, Per Detail, Furnish and Install, Complete.	9	Each	\$1,005.00	\$9,045.00	\$1,100.00	\$9,900.00	\$1,200.00	\$10,800.00	\$1,200.00	\$10,800.00
20.	1-inch Automatic Air Release Valve Assembly, Furnish and Install, Complete.	2	Each	\$802.00	\$1,604.00	\$1,100.00	\$2,200.00	\$1,000.00	\$2,000.00	\$1,500.00	\$3,000.00
21.	Crushed Rock on Trench Surface, In Place.	150	Ton	\$20.00	\$3,000.00	\$25.00	\$3,750.00	\$16.00	\$2,400.00	\$15.00	\$2,250.00
22.	Trench Width Bituminous Pavement Replacement, Complete.	475	L.F.	\$14.00	\$6,650.00	\$25.00	\$11,875.00	\$30.00	\$14,250.00	\$30.00	\$14,250.00
23.	Allowance for Telemetry	1	L.S.	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00
24.	Master Meter and Appurtenances, Complete	1	Each	\$29,458.00	\$29,458.00	\$24,000.00	\$24,000.00	\$35,000.00	\$35,000.00	\$25,000.00	\$25,000.00
25.	Extra for Mechanical Removal of Solid Rock, Only on Order of the Engineer.	5	C.Y.	\$50.00	\$250.00	\$20.00	\$100.00	\$1,000.00	\$5,000.00	\$100.00	\$500.00
26.	Extra for Mechanical Tamping of Trench Backfill, When Not Required by Plans or Specifications, Only on Order of the Engineer.	10	C.Y.	\$20.00	\$200.00	\$30.00	\$300.00	\$30.00	\$300.00	\$50.00	\$500.00

Item No.	Item	Quantity	Unit	Akins Excavating Co., Inc. 182 Busy Lane Corbin, Kentucky 40701		Kenney, Inc. P.O. Box 1305 Mt. Sterling, Kentucky 40353		H2O Construction Co., Inc. 91 Hillcrest Drive Pikeville, Kentucky 41501		K. Carrender Construction Co., Inc. 200 Ringgold Road Somerset, Kentucky 42503	
				Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
27.	Extra for Crushed Rock for Pipe Bedding, Only on Order of the Engineer.	10	Ton	\$20.00	\$200.00	\$30.00	\$300.00	\$16.00	\$160.00	\$20.00	\$200.00
28.	Extra for Crushed Rock for Trench Stabilization, Only on Order of the Engineer.	10	Ton	\$20.00	\$200.00	\$30.00	\$300.00	\$16.00	\$160.00	\$20.00	\$200.00
29.	Extra for Furnishing and Installing DIMJ Compact Fittings, when not Required by Plans and /or Specifications, Only on Order of the Engineer. Complete with Accessories, and Concrete Blocking.	120	Lbs	\$5.00	\$600.00	\$3.00	\$360.00	\$75.00	\$9,000.00	\$5.00	\$600.00
	Subtotal - Division "A"				\$713,756.75		\$714,017.50		\$847,785.00		\$888,583.75
DIVISION "B" - BOOSTER PUMP STATION											
30.	For the furnishing and installation of a factory built, duplex, underground 53 gpm booster pump station, complete with all pumps, piping, valves, electrical components, excavation, regrade, security fencing and all other related work, as planned and specified, complete.	1	L.S.	\$110,000.00	\$110,000.00	\$114,500.00	\$114,500.00	\$120,000.00	\$120,000.00	\$165,000.00	\$165,000.00
	Subtotal -Division "B"				\$110,000.00		\$114,500.00		\$120,000.00		\$165,000.00
DIVISION "C" - 30,000 GALLON GROUND STORAGE TANK											
31.	For the construction of the foundation and accessories for a 30,000 gallon ground storage tank, furnishing laying connecting pipelines, construction of the access road and site work, new security fencing and for furnishing, erecting and sterilizing a 30,000 gallon ground storage tank with accessories as planned, complete.	1	L.S.	\$120,000.00	\$120,000.00	\$119,500.00	\$119,500.00	\$176,000.00	\$176,000.00	\$145,000.00	\$145,000.00
	Subtotal - Division "C"				\$120,000.00		\$119,500.00		\$176,000.00		\$145,000.00
TOTAL - CONTRACT 519-06-01					\$943,756.75		\$948,017.50		\$1,143,785.00		\$1,198,583.75



ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Ernie Fletcher
Governor

Frankfort Office Park
14 Reilly Road
Frankfort, Kentucky 40601
www.kentucky.gov

LaJuana S. Wilcher
Secretary

October 6, 2006

Don Proffitt, Chairman
Letcher County Water & Sewer District
PO Box 827
Whitesburg, KY 41858

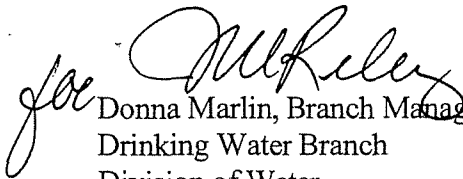
RE: Letcher County Water & Sewer District
AI: 8737
DW #0670652-06-001
Little Cowan Area (Hwy 2035)
Activity ID # APE20060001
Letcher County, KY

Dear Mr. Baker:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 13,015 feet of 6-inch PVC, 3,420 feet of 3-inch PVC, 6,330 feet of 6-inch DI, and 3,125 feet of 3-inch DI water lines as well as a 30,000 gallon ground storage tank and a 53 GPM booster pump station. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the enclosed waterline extension construction permit.

Please be advised of revisions pursuant to correspondence with Mr. Stephen Caudill to include a check valve at the tank site shown on revised pages 6 and 17 of the plan drawings. If you have any questions regarding this decision, please contact Robert Wade at 502/564-2225, extension 595.

Sincerely,


Donna Marlin, Branch Manager
Drinking Water Branch
Division of Water

DSM: RFW

C: Bell Engineering
Bath County Health Department
Public Service Commission

Distribution-Major Construction
 Lecher Co Water & Sewer District
 Subject Item Inventory

Activity ID No.: APE20060001

Subject Item Inventory:

ID	Designation	Description
AIOO8737		
PORT8	water lines	13,015 feet of 6-inch PVC, 3,420 feet of 3-inch PVC, 6,330 feet of 6-inch DI, 3,125 feet of 3-inch DI
PORT9	booster pump station	53 GPM, 373 feet TDH booster pump station
STOR3	ground storage tank	30,000 gallon ground storage tank

Subject Item Groups:

ID	Description	Components
GACT4	13,015 feet of 6-inch PVC, 3,420 feet of 3-inch PVC, 6,330 feet of 6-inch DI, 3,125 feet of 3-inch DI, 53 GPM, 373 feet TDH booster pump station, 30,000 gallon ground storage tank	PORT9 53 GPM, 373 feet TDH booster pump station
		STOR3 30,000 gallon ground storage tank
		PORT8 13,015 feet of 6-inch PVC, 3,420 feet of 3-inch PVC, 6,330 feet of 6-inch DI, 3,125 feet of 3-inch DI

KEY

- ACTV = Activity
- AREA = Area
- EQPT = Equipment
- PERS = Personnel
- STOR = Storage
- AIOO = Agency Interest
- COMB = Combustion
- MNPT = Monitoring Point
- PORT = Transport
- STRC = Structure

Distribution-Major Construction
Letcher Co Water & Sewer District
Subject Item Inventory

Activity ID No.: APE20060001

KEY

TRMT = Treatment

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 1 of 22

**GACT4 (Little Crown Area) 13,015 feet of 6-inch PVC, 3,420 feet of 3-inch PVC, 6,330 feet of 6-inch DI, 3,125 feet of 3-inch DI, 53 GPM, 373 feet TDH booster pump station. 30,000 gallon ground storage tank:
Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1	Coliform	The presence or absence of total Coliform monitored by sampling and analysis as needed shall be determined for the new or relocated water line(s). Take samples at connection points to existing lines, at 1 mile intervals, and at dead ends without omitting any branch of the new or relocated water line. Sample bottles shall be clearly identified as "special" construction tests. [401 KAR 8:100 Section 1(7), 401 KAR 8:150 Section 4, Recommended Standards for Water Works 8.5.6] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.
M-2	Coliform	The presence or absence of total Coliform monitored by sampling and analysis as needed shall be determined for the new storage structure(s). With at least 1 sample taken at least 24 hours after the first construction complete sample(s), take 2 or more samples from the yard hydrant, the outlet piping from the storage structure, or a sample tap directly connected to the storage structure. Sample bottles shall be clearly identified as "special" construction tests. [Recommended Standards for Water Works 7.0.18, 401 KAR 8:150 Section 4] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.
M-3	Coliform	The presence or absence of total Coliform monitored by sampling and analysis as needed shall be determined for the new pump(s). If the pump(s) are independent of (not directly connected to) the new or relocated lines, take at least 1 sample at the discharge side pitcock. Otherwise, no additional sampling beyond the sampling required for new or relocated lines shall be required in association with the pump(s). Sample bottles shall be clearly identified as "special" construction tests. [401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.

Submittal/Action Requirements:

Coliform:

Condition No.	Condition
S-1	Coliform For new construction projects, the distribution system, using the most expedient method, shall submit Coliform test results to the Cabinet: Due immediately following disinfection and flushing. [401 KAR 8:150 Section 4(2)]

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 2 of 22

GACT4 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-2	For proposed changes to the approved plan, submit information: Due prior to any modification to the Cabinet for approval. Changes to the approved plan shall not be implemented without the prior written approval of the Cabinet. [401 KAR 8:100 Section 1(8)]
S-3	The person who presented the plans shall submit the professional engineer's certification: Due when construction is complete to the Division of Water. The certification shall be signed by a registered professional engineer and state that the water project has been constructed and tested in accordance with the approved plans, specifications, and requirements. [401 KAR 8:100 Section 1(8)]

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-1	Additional Limitations: Chlorinated water resulting from disinfection of project components shall be disposed in a manner which will not violate 401 KAR 5:031. [401 KAR 8:020 Section 2(20)]

Condition No.	Condition
T-2	This project has been permitted under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the applicant from the responsibility of obtaining any other approvals, permits or licenses required by this Cabinet and other state, federal and local agencies. Further, this permit does not address the authority of the permittee to provide service to the area to be served. [401 KAR 8:100 Section 1(7)]
T-3	Unless construction of this project is begun within 1 year from the issuance date of this permit, the permit shall expire. If requested prior to the permit expiration, an official extension from the Division of Water may be granted. If this permit expires, the original plans and specifications may be resubmitted for a new comprehensive review. If you have any questions concerning this project, please contact the Drinking Water Branch at 502/564-3410. [401 KAR 8:100 Section 1(9)]

Distribution-Major Construction
Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

GACT4 (continued):

Narrative Requirements:

Condition No.	Condition
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T-4	During construction, a set of approved plans and specification shall be available at the job site at all times. All work shall be performed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 1(7)(a)]
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Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 4 of 22

PORT8 (water lines) 13,015 feet of 6-inch PVC, 3,420 feet of 3-inch PVC, 6,330 feet of 6-inch DI, 3,125 feet of 3-inch DI:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Depth	A continuous and uniform bedding shall be provided in the trench for all buried pipe. Backfill material shall be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe. Stones found in the trench shall be removed for a Depth ≥ 6 in below the bottom of the pipe. [Recommended Standards for Water Works 8.5.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-2	Depth	All water lines shall be covered to a Depth ≥ 30 in to prevent freezing. [Recommended Standards for Water Works 8.5.3, 401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-3	Diameter	All water lines shall have Diameter ≥ 3 in. [Recommended Standards for Water Works 8.1.4] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-4	Diameter	Water lines with Diameter < 6 in shall not have fire hydrants. [Recommended Standards for Water Works 8.1.5] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-5	Diameter	All new and existing water lines serving fire hydrants or where fire protection is provided shall have Diameter ≥ 6 in. [Recommended Standards for Water Works 8.1.2] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-6	Distance	Water lines shall have a sufficient quantity of valves so that inconvenience and sanitary hazards will be minimized during repairs. A valve spacing Distance ≤ 1.0 mi should be utilized. [Recommended Standards for Water Works 8.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-7	Distance	Hydrant drains shall not be connected to sanitary sewers or storm drains and shall be located a Distance > 10 ft from sanitary sewers and storm drains. [Recommended Standards for Water Works 8.3.4] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-8	Distance	Except when not practical, water lines shall be laid a horizontal Distance ≥ 10 ft from any existing or proposed sewer. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, water lines may be installed closer to a sewer provided that the water lines shall be laid in a separate trench or on an undisturbed shelf located on one side of the sewer at such an elevation that the bottom of the water line is at least 18 inches above the top of the sewer. [Recommended Standards for Water Works 8.6.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 5 of 22

PORT8 (continued):

Limitation Requirements:

Condition No.	Parameter	Condition
L-9	Distance	<p>When water lines and sewers cross,</p> <ol style="list-style-type: none">1) water lines shall be laid such that eithera) the top of the water line is a vertical Distance \geq 18 in below the bottom of the sewer line orb) the bottom of the water line is a vertical Distance \geq 18 in above the top of the sewer line,2) 1 full length of the water pipe shall be located so that both joints of the water pipe will be as far from the sewer as possible, and3) special structural support for the water and sewer pipes may be required. [Recommended Standards for Water Works 8.6.3] <p>This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.</p>
L-10	Distance	<p>The open end of an air relief pipe from automatic valves shall be extended a Distance \geq 1.0 ft above grade and provided with a screened, downward-facing elbow. The pipe from a manually operated valve shall be extended to the top of the pit. Use of manual air relief valves is recommended wherever possible. [Recommended Standards for Water Works 8.4.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.</p>
L-11	Pressure	<p>Pipes shall not be installed unless all points of the distribution system remain designed for ground level Pressure \geq 20 psi under all conditions of flow. [Recommended Standards for Water Works 8.1.1] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.</p>
L-12	Pressure	<p>Pressure \geq 30 psi must be available on the discharge side of all meters. [401 KAR 8:100 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.</p>
L-13	Residual Disinfection	<p>New or relocated water lines shall be thoroughly disinfected (in accordance with AWWA Standard C651) upon completion of construction and before being placed into service. To disinfect the new or relocated lines use chlorine or chlorine compounds in such amounts as to produce an initial disinfectant concentration of at least 50 ppm and a Residual Disinfection \geq 25 ppm at the end of 24 hours. Follow the line disinfection with thorough flushing and place the lines into service if, and only if, Coliform monitoring applicable to the line does not show the presence of Coliform.</p> <p>If Coliform is detected, repeat flushing of the line and Coliform monitoring. If Coliform is still detected, repeat disinfection and flushing as if the line has never been disinfected. Continue the described process until monitoring does not show the presence of Coliform. [401 KAR 8:150 Section 4(1), Recommended Standards for Water Works 8.5.6] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

PORT8 (continued):

Limitation Requirements:

Condition No.	Parameter	Condition
L-14	Velocity	Each blow-off, fire hydrant, or flush hydrant shall be sized so that Velocity \geq 2.5 ft/sec can be achieved in the water main served by the blow-off or hydrant during flushing. [Recommended Standards for Water Works 8.1.6.b, 401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	leaks	The presence or absence of leaks monitored by physical testing as needed shall be determined in all types of installed pipe. Pressure testing and leakage testing shall be in accordance with the latest edition of AWWA Standard C600. [Recommended Standards for Water Works 8.5.5] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.

Narrative Requirements:

Asbestos (Friable):

Condition No.	Condition
T-1	Asbestos (Friable): If the existing water line to be tapped is asbestos concrete, then the contractor shall conform to OSHA regulations governing the handling of hazardous waste during the process of tapping the asbestos concrete line. Pieces of asbestos concrete resulting from the tap shall be double bagged, placed in a rigid container and disposed of in an approved landfill. [401 KAR 8:100 Section 1(7)]

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 7 of 22

PORT8 (continued):

Narrative Requirements: Additional Limitations:

Condition No.	Condition
T-2	<p>Additional Limitations: Water line installation shall be in accordance with AWWA standards or manufacturer recommendations. [Recommended Standards for Water Works 8.5.1]</p>
T-3	<p>Additional Limitations: Pipes, fittings, valves and fire hydrants shall conform to the latest standards issued by the AWWA or NSF (if such standards exist). PVC and PE piping used must be certified to ANSI/NSF Standard 61. [Recommended Standards for Water Works 8.0.1]</p>
T-4	<p>Additional Limitations: At high points in water lines, where air can accumulate, provisions shall be made to remove the air by means of hydrants or air relief valves. Automatic air relief valves shall not be used in situations where manhole or chamber flooding may occur. [Recommended Standards for Water Works 8.4.1]</p>
T-5	<p>Additional Limitations: All tees, bends, plugs and hydrants shall be provided with reaction blocking, tie rods or joints designed to prevent movement. [Recommended Standards for Water Works 8.5.4]</p>
T-6	<p>Additional Limitations: A fire hydrant or blow-off shall be required at the end of each dead end line. [Recommended Standards for Water Works 8.1.6]</p>
T-7	<p>Additional Limitations: For each fire or flush hydrant, auxiliary valves shall be installed in the hydrant lead pipe. [Recommended Standards for Water Works 8.3.3]</p>
T-8	<p>Additional Limitations: No flushing device, blow-off, or air relief valve shall be directly connected to any sewer. Chambers, pits or manholes containing valves, blow-offs, meters, or other such appurtenances shall not be directly connected to any storm drain or sanitary sewer. Such chambers, pits or manholes shall be drained to absorptions pits underground or to the surface of the ground where they are not subject to flooding by surface water. [Recommended Standards for Water Works 8.1.6, Recommended Standards for Water Works 8.4.3]</p>
T-9	<p>Additional Limitations: If water lines are installed or replaced in areas of organic contamination or in areas within 200 ft of underground or petroleum storage tanks, ductile iron or other nonpermeable materials shall be used in all portions of the water line installation or replacement. [401 KAR 8:100 Section 1(5)(d)6, Recommended Standards for Water Works 8.0.2]</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

PORT8 (continued):

Narrative Requirements: Additional Limitations:

Condition No.	Condition
T-10	<p>Additional Limitations: No water pipe shall pass through or come in contact with any part of a sewer manhole. [Recommended Standards for Water Works 8.6.6]</p>
T-11	<p>Additional Limitations: If a fire sprinkler system is to be installed, a double check detector assembly approved for backflow prevention shall be utilized. The double check detector assembly of the system shall be accessible for testing. [401 KAR 8:100 Section 1(7)]</p>
T-12	<p>Additional Limitations: If water lines cross a stream or wetland, the provisions in the attached Water Quality Certification shall apply. If you have any questions please contact the Water Quality Certification Supervisor of the Water Quality Branch at (502) 564-2225. [401 KAR 8:100 Section 1(7)]</p>

Subfluvial Pipe Crossings:

Condition No.	Condition
T-13	<p>Subfluvial Pipe Crossings: For subfluvial pipe crossings, a floodplain construction permit will not be required pursuant to KRS 151.250 if the following requirements of 401 KAR 4:050 Section 2 are met.</p> <ol style="list-style-type: none">1) No material may be placed in the stream or in the flood plain of the stream to form construction pads, coffer dams, access roads, etc. during construction of pipe crossings.2) Crossing trenches shall be backfilled as closely as possible to the original contour.3) All excess material resulting from construction displacement in a crossing trench shall be disposed of outside the flood plain.4) For erodible channels, there shall be at least 30 inches of backfill on top of all pipe or conduit points in the crossing.5) For nonerodible channels, pipes or conduits in the crossing shall be encased on all sides by at least 6 inches of concrete with all pipe or conduit points in the crossing at least 6 inches below the original contour of the channel. [401 KAR 8:100 Section 1(7)]

Distribution-Major Construction
Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

PORT8 (continued):

Narrative Requirements:
Subfluvial Pipe Crossings:

Condition No.	Condition
T-14	<p>Subfluvial Pipe Crossings: For subfluvial pipe crossings greater than 15 feet in width,</p> <ol style="list-style-type: none">1) the pipe shall be of special construction, having flexible, restrained, or welded watertight joints, and2) valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair. <p>Valves shall</p> <ol style="list-style-type: none">a) be easily accessible,b) not be subject to flooding, andc) if closest to the supply source, be in a manhole with permanent taps made on each side of the valve to allow insertion of a small meter to determine leakage and for sampling purposes. [Recommended Standards for Water Works 8.7.2]

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 10 of 22

PORT9 (booster pump station) 53 GPM, 373 feet TDH booster pump station:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Pressure	Pump stations shall be located or controlled so that intake Pressure ≥ 20 psi is maintained during normal pump operation. [Recommended Standards for Water Works 6.4.b] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-2	Pressure	Pump stations shall be located or controlled so that an automatic cutoff or a low pressure controller maintains a Pressure ≥ 10 psi in the suction line under all operating conditions. [Recommended Standards for Water Works 6.4.c] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-3	Residual Disinfection	New pumps shall be thoroughly disinfected (in accordance with AWWA Standard C651) upon completion of construction and before being placed into service. To disinfect new pumps use chlorine or chlorine compounds in such amounts as to produce an initial disinfectant concentration of at least 50 ppm and a Residual Disinfection ≥ 25 ppm at the end of 24 hours. Follow the disinfection with thorough flushing and place each pump into service if, and only if, Coliform monitoring applicable to the pump does not show the presence of Coliform. If Coliform is detected, repeat flushing of the pump and Coliform monitoring. If Coliform is still detected, repeat disinfection and flushing as if the pump has never been disinfected. Continue the described process until monitoring does not show the presence of Coliform. [401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-4	Slope	Pumping facilities shall be located and designed to maintain the sanitary quality of pumped water. As part of this, all pump station floors shall have Slope ≥ 3 in per 10 ft to a suitable drain. [Recommended Standards for Water Works 6.2.e, Recommended Standards for Water Works 6.0, Recommended Standards for Water Works 6.1] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-5	Air Change Rate	Ventilation shall conform to existing local and/or state codes. At a minimum forced ventilation shall produce an Air Change Rate ≥ 6 air change(s)/hr. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 6.2.5] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.

Distribution-Major Construction
 Letcher Co Water & Sewer District
 Facility Requirements

Activity ID No.: APE20060001

PORT9 (continued):

Limitation Requirements:

Condition No.	Parameter	Condition
L-6	Height	<p>Pumping stations shall not be subject to flooding. To this end,</p> <ol style="list-style-type: none"> 1) grading around stations shall lead surface drainage away and 2) stations shall be elevated or protected to a Height \geq 3 ft above the highest of the following: <ol style="list-style-type: none"> a) the 100-year flood elevation, or b) the highest recorded flood elevation. [Recommended Standards for Water Works 6.1.1, Recommended Standards for Water Works 6.0] This requirement is applicable during the following months: All Year. Statistical basis: Minimum. <p>When a pump station has pits or compartments which must be entered, stairways or ladders shall be provided between all floors. Stairs shall have risers with a Height \leq 9 in, handrails on both sides, and treads with non-slip material wide enough for safety. [Recommended Standards for Water Works 6.2.3] This requirement is applicable during the following months: All Year. Statistical basis: Maximum.</p>
L-7	Height	<p>When a pump station has pits or compartments which must be entered, stairways or ladders shall be provided between all floors. Stairs shall have risers with a Height \leq 9 in, handrails on both sides, and treads with non-slip material wide enough for safety. [Recommended Standards for Water Works 6.2.3] This requirement is applicable during the following months: All Year. Statistical basis: Maximum.</p>

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-1	<p>Additional Limitations: Pumping stations shall be so located that the proposed site will meet the requirements for hydraulics of the system. [Recommended Standards for Water Works 6.1]</p>
T-2	<p>Additional Limitations: Pumping stations shall be readily accessible at all times for servicing and repairs. [Recommended Standards for Water Works 6.1.1.b, Recommended Standards for Water Works 6.4.3]</p>
T-3	<p>Additional Limitations: Pumping stations shall be designed to prevent vandalism and protect against entrance of animals or unauthorized persons. [Recommended Standards for Water Works 6.1.1.d]</p>
T-4	<p>Additional Limitations: Pumping stations shall be of durable construction with outward-opening doors. [Recommended Standards for Water Works 6.2.b]</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 12 of 22

PORT9 (continued):

Narrative Requirements: Additional Limitations:

Condition No.	Condition
T-5	<p>Additional Limitations: Pumping stations shall be fire and weather resistant. [Recommended Standards for Water Works 6.2.b]</p>
T-6	<p>Additional Limitations: Pumping stations shall have suitable pump gland discharges so that drainage from the glands is not onto the floor. [Recommended Standards for Water Works 6.2.f]</p>
T-7	<p>Additional Limitations: If underground structures are present at pumping stations, they shall waterproofed. [Recommended Standards for Water Works 6.2.d]</p>
T-8	<p>Additional Limitations: Pumping stations shall have adequate space for the installation of additional pumps. [Recommended Standards for Water Works 6.2.a]</p>
T-9	<p>Additional Limitations: Pumping stations shall have adequate space for the safe servicing of all equipment. [Recommended Standards for Water Works 6.2.a]</p>
T-10	<p>Additional Limitations: Pump stations shall have crane-ways, hoist beams, eyebolts, or other adequate facilities for servicing or removal of pumps, motors or other heavy equipment. [Recommended Standards for Water Works 6.2.2.a]</p>
T-11	<p>Additional Limitations: Pump stations shall have openings as needed for removal of heavy or bulky equipment. [Recommended Standards for Water Works 6.2.2.b]</p>
T-12	<p>Additional Limitations: Pump stations shall have a convenient tool board, or other facilities as needed, for proper maintenance of equipment. [Recommended Standards for Water Works 6.2.2.c]</p>
T-13	<p>Additional Limitations: In areas where excess moisture could cause safety hazards or damage to equipment, dehumidification shall be provided. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 6.2.6]</p>
T-14	<p>Additional Limitations: Electrical controls shall be located above grade. [Recommended Standards for Water Works 6.6.5]</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 13 of 22

PORT9 (continued):

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-15	<p>Additional Limitations: All electrical equipment and work shall conform with the applicable state and local electrical codes and the National Electrical Code. [Recommended Standards for Water Works 6.5, Recommended Standards for Water Works 6.2.7]</p>
T-16	<p>Additional Limitations: Pump stations shall be adequately lighted throughout. [Recommended Standards for Water Works 6.2.7]</p>
T-17	<p>Additional Limitations: All automatic pump stations shall be provided with automatic signaling apparatus which will report when the station is out of service. All remote controlled stations shall be electrically operated and controlled and shall have signaling apparatus of proven performance. [Recommended Standards for Water Works 6.5]</p>
T-18	<p>Additional Limitations: Automatic or remote control pump stations shall be located or shall have control devices setup so that the range between start and cutoff pressure prevents excessive pump cycling. [Recommended Standards for Water Works 6.4.d]</p>
T-19	<p>Additional Limitations: Equipment shall be provided or other arrangements made to prevent surge pressures from activating controls which switch on pumps or activate other equipment outside the normal design cycle of operation. [Recommended Standards for Water Works 6.6.5]</p>
T-20	<p>Additional Limitations: Provisions shall be made to prevent energizing the motor in the event of a backspin cycle. [Recommended Standards for Water Works 6.6.5]</p>
T-21	<p>Additional Limitations: Pump stations shall be provided with enough heat to prevent freezing of equipment or treatment processes. [Recommended Standards for Water Works 6.2.4]</p>
T-22	<p>Additional Limitations: Pump stations shall have at least 2 pumps. Pumps shall be sized so that if any single pump is out of service, the remaining pump or pumps shall be capable of providing the peak demand on the station. [Recommended Standards for Water Works 6.3, Recommended Standards for Water Works 6.4.1]</p>
T-23	<p>Additional Limitations: Provisions shall be made for pump alternation. [Recommended Standards for Water Works 6.6.5]</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 14 of 22

PORT9 (continued):

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-24	<p>Additional Limitations: Pumps shall</p> <ol style="list-style-type: none">have ample capacity to supply the peak demand against the required distribution system pressure without dangerous overloading,be driven by prime movers able to meet the maximum horsepower condition of the pumps,be provided readily available spare parts and tools, andbe served by control equipment that is properly protected against temperatures to be encountered. [Recommended Standards for Water Works 6.3]
T-25	<p>Additional Limitations: Pumps, their prime movers and accessories shall be controlled in such a manner that they will operate at rated capacity without dangerous overload. [Recommended Standards for Water Works 6.6.5]</p>
T-26	<p>Additional Limitations: Pump stations shall be located or controlled so that a bypass is available. [Recommended Standards for Water Works 6.4.e]</p>
T-27	<p>Additional Limitations: Pump stations shall contain indicating and totalizing metering of the total water pumped. Each pump shall have</p> <ol style="list-style-type: none">a standard pressure gauge on its discharge line anda compound gauge on its suction line. <p>Each pump should have a means for measuring the instantaneous volume per time discharge. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 6.4.2, Recommended Standards for Water Works 6.6.3]</p>
T-28	<p>Additional Limitations: Pumps shall be adequately valved to permit satisfactory operation, maintenance and repair of the equipment. Each pump shall have a positive-acting check valve on the discharge side between the pump and the shut-off valve. [Recommended Standards for Water Works 6.6.1]</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

PORT9 (continued):

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-29	<p>Additional Limitations: Piping for pumps shall, in general,</p> <ol style="list-style-type: none">1) be designed so that the friction losses will be minimized,2) not be subject to contamination,3) have watertight joints,4) be protected against surge or water hammer,5) be provided with restraints where necessary, and6) a) be such that each pump has an individual suction line or b) be manifolded such that the lines insure similar hydraulic and operating conditions. [Recommended Standards for Water Works 6.6.2]
T-30	<p>Additional Limitations: To ensure continuous service when the primary power is interrupted, power supplied to pump stations shall be</p> <ol style="list-style-type: none">a) from at least 2 independent sources orb) from a primary source with a standby or auxiliary source provided. <p>If standby power is provided by onsite generators or engines, the fuel storage and fuel line must be designed to protect the water supply from contamination. [Recommended Standards for Water Works 6.6.6]</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 16 of 22

STOR3 (ground storage tank) 30,000 gallon ground storage tank:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Depth	High and low level Depth \geq 30 ft apart should not be allowed in storage structures providing pressure to a distribution system. [Recommended Standards for Water Works 7.3.2] This requirement is applicable during the following months: All Year. Statistical basis: Maximum.
L-2	Depth	Water Depth \geq 50 percent of the total water depth should be above grade. [Recommended Standards for Water Works 7.0.2.b] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-3	Distance	Sewers, drains, standing water and similar sources of possible contamination shall be a Distance \geq 50 ft from ground-level storage structures. The only exception allowed is for gravity sewers. Gravity sewers are allowed within 50 ft of ground-level storage structures only if they are a) greater than 20 ft from all ground-level storage structures and b) constructed of water main pipe pressure tested in place to 50 psi without leakage. [Recommended Standards for Water Works 7.0.2.b] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-4	Distance	To prevent excessive erosion of storage structure foundations, the overflow and main drain shall either a) discharge to concrete or other stable surfaces (splash pads) which extend a Distance \geq 10 ft away from the base of the storage structure or b) discharge directly into a crushed stone pit that is at least 2' x 2' x 2' which is a Distance \geq 10 ft away from the base of the storage structure. [401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-5	Height	Tanks shall have an overflow which is a) brought down to a Height \geq 12 and \leq 24 in above the ground surface, b) of sufficient diameter to permit waste of water in excess of the filling rate, c) open downward, d) screened with twenty-four mesh noncorrodible screen installed within the pipe at a location least susceptible to damage by vandalism, and e) located on the outside of the tank so that any discharge is visible. [Recommended Standards for Water Works 7.0.7] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

STOR3 (continued):

Limitation Requirements:

Condition No.	Parameter	Condition
L-6	Height	Tanks shall have manholes that are a) framed a Height ≥ 4 in above the surface of the roof at the opening and b) fitted with a solid watertight cover which overlaps the framed opening and extends down around the frame at least 2 inches. Manholes should be hinged at one side and shall have a locking device. [Recommended Standards for Water Works 7.0.8] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-1	Additional Limitations: The materials and designs used for storage structures shall provide stability and durability as well as protection for the quality of the stored water. Steel structures shall follow the AWWA standards wherever they are applicable. Other materials of construction are acceptable when properly designed to meet the requirements in this permit. [Recommended Standards for Water Works 7.0]
T-2	Additional Limitations: The safety of employees must be considered in the design of any storage structure. The design of storage structures shall a) meet or exceed the minimum requirements of pertinent safety laws and regulations in the areas where the structures are constructed, b) include ladders, ladder guards and balcony railings (where applicable), c) locate entrance hatches in safe places, and d) consider confined space entry requirements. [Recommended Standards for Water Works 7.0.12]
T-3	Additional Limitations: Storage structures shall be designed with reasonably convenient access to the interior for cleaning and maintenance. Where space permits, at least 2 manholes shall be provided above the waterline at each water compartment. [Recommended Standards for Water Works 7.0.8]
T-4	Additional Limitations: Fencing, locks on access manholes, and other necessary precautions shall be provided to prevent trespassing, vandalism, and sabotage. [Recommended Standards for Water Works 7.0.4]

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 18 of 22

STOR3 (continued):

Narrative Requirements: Additional Limitations:

Condition No.	Condition
T-5	<p>Additional Limitations: All storage structures and their appurtenances, especially the riser pipes, overflows, and vents, shall be designed to prevent freezing. [Recommended Standards for Water Works 7.0.13]</p>
T-6	<p>Additional Limitations: Tanks shall be constructed with no openings except properly constructed vents, manholes, overflows, risers, drains, pump mountings, control ports, and piping for inflow and outflow. For steel tanks, any pipes running through the roof or sidewall must be welded or properly gasketed. For concrete tanks, any pipes running through the roof or sidewall shall be connected to standard wall castings which were poured in place during the forming of the concrete and which should have seepage rings imbedded in the concrete. [Recommended Standards for Water Works 7.0.10]</p>
T-7	<p>Additional Limitations: All finished water storage structures shall have suitable watertight roofs and sidewalls which exclude birds, animals, insects, and excessive dust. [Recommended Standards for Water Works 7.0.3, Recommended Standards for Water Works 7.0.10]</p>
T-8	<p>Additional Limitations: The roof of each storage structure shall be well drained. Downspout pipes shall not enter or pass through storage structures. Parapets or similar structures which would tend to hold water and snow on a storage structure roof shall not be approved unless adequate waterproofing and drainage are provided. [Recommended Standards for Water Works 7.0.11]</p>
T-9	<p>Additional Limitations: Storage structures shall be designed so they can be isolated from the distribution system and drained for cleaning or maintenance without necessitating loss of pressure in the distribution system. [Recommended Standards for Water Works 7.3.2, Recommended Standards for Water Works 7.0.5]</p>
T-10	<p>Additional Limitations: Storage structure drains shall discharge to the ground surface at a drainage structure inlet or splash plate. [Recommended Standards for Water Works 7.3.2, Recommended Standards for Water Works 7.0.7]</p>
T-11	<p>Additional Limitations: No drain on a storage structure may have a direct connection to a sewer or storm drain. [Recommended Standards for Water Works 7.0.5, Recommended Standards for Water Works 7.0.7, Recommended Standards for Water Works 7.3.2]</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 19 of 22

STOR3 (continued):

Narrative Requirements: Additional Limitations:

Condition No.	Condition
T-12	<p>Additional Limitations: Main drains from storage structures shall have a twenty-four mesh noncorrodible screen installed within the drain pipe at a location least susceptible to damage by vandalism. [401 KAR 8:100 Section 1(7)]</p>
T-13	<p>Additional Limitations: Storage structures shall be designed to facilitate turn over of water. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 7.0.6]</p>
T-14	<p>Additional Limitations: Ground level storage tanks and standpipes shall be equipped with separate inlet/outlet pipes installed on opposite sides of the tank. A check valve shall be installed in the outlet pipe to insure turnover of the water. The inlet pipe</p> <ul style="list-style-type: none">a) shall be installed near the overflow elevation andb) shall not interfere with the overflow discharge. [401 KAR 8:100 Section 1(7)]
T-15	<p>Additional Limitations: Storage structures shall have sufficient capacity, as determined from engineering studies, to meet domestic demands. Additionally, if fire protection is provided, capacity shall also be sufficient to meet fire flow demands. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 7.0.1]</p>
T-16	<p>Additional Limitations: The bottom of the structure shall be above</p> <ul style="list-style-type: none">a) the maximum flood level andb) the groundwater level. [Recommended Standards for Water Works 7.0.2]
T-17	<p>Additional Limitations: Storage structure discharge pipes shall be located in a manner that will prevent the flow of sediment into the distribution system. Additionally, removable silt stops should be provided. [Recommended Standards for Water Works 7.0.15]</p>
T-18	<p>Additional Limitations: Appropriate sampling tap(s) shall be provided to facilitate collection of water samples for both bacteriologic and chemical analyses. [Recommended Standards for Water Works 7.0.19]</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

STOR3 (continued):

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-19	<p>Additional Limitations: Storage structures shall be vented. Overflows shall not be considered as vents. Open construction between the sidewall and roof is not permitted. Vents shall</p> <ul style="list-style-type: none">a) prevent the entrance of rainwater,b) exclude birds and animals, andc) exclude insects and dust (as much as compatible with effective venting). <p>Vents may use four-mesh noncorrodible screen. [Recommended Standards for Water Works 7.0.9]</p>
T-20	<p>Additional Limitations: Adequate controls shall be provided to maintain levels in storage structures. The level controls shall be acceptable to the Division of Water. Level indicating devices should be provided at a central location. Overflow and low-level warnings or alarms should be located at places in the community where they will be under responsible surveillance 24 hrs a day. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 7.3.3]</p>
T-21	<p>Additional Limitations: If storage structures have a catwalk over the water, the catwalk floor shall be solid with raised edges so that shoe scrapings and dirt will not fall into the water. [Recommended Standards for Water Works 7.0.14]</p>
T-22	<p>Additional Limitations: The area around the storage structure shall be graded in a manner that will prevent surface water from standing within 50 ft of the storage structure. [Recommended Standards for Water Works 7.0.16]</p>
T-23	<p>Additional Limitations: Proper protection shall be given to metal surfaces by</p> <ul style="list-style-type: none">a) paints or other protective coatings and/orb) cathodic protective devices. [Recommended Standards for Water Works 7.0.17]
T-24	<p>Additional Limitations: If cathodic protection is utilized,</p> <ul style="list-style-type: none">a) competent technical personnel should design and install the protection andb) a maintenance contract should be provided. [Recommended Standards for Water Works 7.0.17]

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

STOR3 (continued):

Narrative Requirements: Additional Limitations:

Condition No.	Condition
T-25	<p>Additional Limitations: If the interior of the storage structure is coated or lined, the coating or lining shall be of a type approved by the Division of Water for use in contact with potable water. [401 KAR 8:020 Section 2(19)]</p>
T-26	<p>Additional Limitations: Paints and coatings</p> <ol style="list-style-type: none">shall meet NSF standard 61,shall be acceptable to the Division of Water,shall be properly applied and cured, andshall not transfer any substance to the water which will be toxic or cause tastes or odors (following curing). <p>Wax coatings shall not be used in any storage structure and must be completely removed before using other paints or coatings in an existing storage structure. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 7.0.17]</p>
T-27	<p>Additional Limitations: New water storage structures shall be thoroughly disinfected (in accordance with AWWA Standard C652) upon completion of construction and before being placed into service. To disinfect new storage structures</p> <ol style="list-style-type: none">remove all scaffolding, planks, tools, rags, and other items that are not part of the structural or operational facilities of the storage structure,clean thoroughly by sweeping, scrubbing, using high-pressure water jets, or some equivalently effective means, anduse chlorine or chlorine compounds as subsequently described. <p>Finalize disinfection by</p> <ol style="list-style-type: none">chlorination method 1, described in detail at AWWA Standard C652 Section 4.3.1,chlorination method 2, described in detail at AWWA Standard C652 Section 4.3.2, orchlorination method 3, described in detail at AWWA Standard C652 Section 4.3.3. <p>See the following conditions for abbreviated descriptions of the methods. Following the finalization of disinfection, place storage structures into service if, and only if, Coliform monitoring applicable to the storage structure does not show the presence of Coliform. If Coliform is detected, flush the tank and repeat Coliform monitoring. If Coliform is still detected, repeat disinfection and flushing as if the tank has never been disinfected. Continue the described process until monitoring does not show the presence of Coliform. [Recommended Standards for Water Works 7.0.18]</p>

Distribution-Major Construction

Letcher Co Water & Sewer District
Facility Requirements

Activity ID No.: APE20060001

Page 22 of 22

STOR3 (continued):

Narrative Requirements:

Condition No.	Condition
T-28	<p>If applicable, chlorination method 1 generally requires</p> <ul style="list-style-type: none">a) filling a storage structure to the overflow level with water providing a free chlorine Residual Disinfection ≥ 10 ppm andb) i) completely draining the storage facility and refilling orb) ii) otherwise reducing (in accordance with method 1) the free chlorine residual to a level appropriate for distribution. [Recommended Standards for Water Works 7.0.18]
T-29	<p>If applicable, chlorination method 2 generally requires</p> <ul style="list-style-type: none">a) scrubbing or spraying the water-contact surfaces of a storage structure with a water solution having an available chlorine concentration = 200 ppm andb) purging of the strong chlorine solution and filling to the overflow level. [Recommended Standards for Water Works 7.0.18]
T-30	<p>If applicable, chlorination method 3 generally requires</p> <ul style="list-style-type: none">a) filling a storage structure to approximately 5% of the total storage volume with water having an available chlorine concentration of 50 ppm,b) continued filling of the storage structure to the overflow level with normal potable water, andc) purging the storage structure so that various disinfection by-products do not reach water consumers. [Recommended Standards for Water Works 7.0.18, 401 KAR 8:100 Section 1(7)]

EXECUTIVE SUMMARY		Reviewer: Sandy Williams			
KENTUCKY INFRASTRUCTURE AUTHORITY		Chris Whitaker			
FUND F, FEDERALLY ASSISTED DRINKING WATER		Date: October 4, 2007			
REVOLVING LOAN FUND		KIA Loan Number: F07-04			
		WRIS Number: WX21133005			
BORROWER:	LETCHER COUNTY WATER & SEWER DISTRICT				
	Letcher County				
BRIEF DESCRIPTION:	The Letcher Co. Water & Sewer District proposes to extend potable water service to the Little Cowan area of Letcher County. The project will include the construction of approximately 19,345 linear feet of 8-inch water main, 6,545 linear feet of 3-inch water main, a 30,000 gallon water storage tank and a booster pumping station. Residents in this area of Letcher County must currently rely on wells, cisterns and springs for potable water. These water sources are subject to contamination and are vulnerable to drought.				
PROJECT FINANCING:	PROJECT BUDGET				
Fund F Loan	\$	781,000	Administrative Expenses	\$	15,000
HB 267 Grant	\$	300,000	Legal Expenses		5,000
IEDF Grant	\$	112,000	Land & Easements		10,000
TOTAL		1,193,000	Engineering Fees		171,981
			Construction		943,757
			Contingency		47,262
			TOTAL		1,193,000
REPAYMENT			Est. Annual		
	Rate	1.00%	Payment		\$45,135
	Term	20 years	1st Payment		6 Mo. after first draw
PROFESSIONAL SERVICES	Engineer	Bell Engineering			
	Bond Counsel	Peck, Shafer, & Williams			
PROJECT SCHEDULE	Bid Opening:	August 2007			
	Construction Start:	September 2007			
	Construction Stop:	March 2008			
DEBT PER CUSTOMER	Existing:	\$	1,478.21		
	Proposed:	\$	2,120.90		
OTHER DEBT	See Attached				
OTHER STATE-FUNDED PROJECTS LAST 5 YRS	See Attached				
RESIDENTIAL RATES		<u>Users</u>	<u>Avg. Bill</u>		
	Current	872	\$	34.00	(for 4,000 gallons)
	Additional Proposed	104	\$	34.00	(for 4,000 gallons)
REGIONAL COORDINATION	This project is consistent with regional planning recommendations.				
CASHFLOW	Cash Available for	Income after Debt			
	Debt Service	Debt Service	Service	Coverage Ratio	
Audited 2004	-33,460	0	-33,460	N/A	
Audited 2005	17,493	7,972	9,521	2.19	
Audited 2006	16,953	65,290	-48,337	0.28	
Projected 2007	72,120	70,365	1,754	1.02	
Projected 2008	201,397	120,349	81,048	1.67	
Projected 2009	199,703	150,669	49,034	1.33	

Reviewer: Sandy Williams
 Chris Whitaker
 Date: October 4, 2007
 Loan Number: F07-03

**KENTUCKY INFRASTRUCTURE AUTHORITY
 DRINKING WATER REVOLVING LOAN FUND (FUND "F")
 CITY OF RICHMOND, MADISON COUNTY
 PROJECT REVIEW
 WX21151011**

I. PROJECT DESCRIPTION

The Letcher Co. Water & Sewer District is requesting a Fund F loan in the amount of \$781,000 to extend potable water service to the Little Cowan area of Letcher County. The project will include the construction of approximately 19,345 linear feet of 6-inch water main, 6,545 linear feet of 3-inch water main, a 30,000 gallon water storage tank and a booster pumping station. Residents in this area of Letcher County must currently rely on wells, cisterns and springs for potable water. These water sources are subject to contamination and are vulnerable to drought.

II. PROJECT BUDGET

Administrative Expenses	\$	15,000
Legal Expenses		5,000
Land & Easements		10,000
Engineering Fees		171,981
Construction		943,757
Contingency		47,262
TOTAL		1,193,000

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund F Loan	781,000	65%
HB 267 Grant	300,000	25%
IEDF Grant	112,000	9%
Total	1,193,000	100%

IV. KIA DEBT SERVICE

Construction Loan	\$	781,000
Interest Rate		1.00%
Loan Term (Years)		20
Estimated Annual Debt Service	\$	43,182
Administrative Fee (0.25%)		1,953
Total Estimated Annual Debt Service	\$	45,135

V. PROJECT SCHEDULE

Bid Opening:	August 2007
Construction Start:	September 2007
Construction Stop:	March 2008

VI. RATE STRUCTURE

	Current	Proposed	Total
Residential	872	104	976
Commercial	0	0	0
Industrial	0	0	0
	<u>872</u>	<u>104</u>	<u>976</u>

Rates

The monthly charge for water utility service is:

Effective Date	1/6/2006
First 2,000 gal (min. bill)	\$22.00
Each 1,000 gal. Thereafter	6.00
Residential Bill for 4,000 gallons	\$34.00

VII. DEMOGRAPHICS

The Letcher County Water and Sewer District serves areas of Letcher County and purchases wholesale water from the City of Whitesburg at a rate of \$2.90 per thousand gallons. Letcher County has a population of 25,277. In 2000, the City's Median Household Income (MHI) level was \$21,110. The median household income for the Commonwealth is \$33,672. Based on median household income, the project will qualify for the 1% interest rate.

VIII. FINANCIAL ANALYSIS (See Exhibit 1)

Financial information for the utility was obtained from Public Service Commission Reports for the years ended December 31, 2003, 2004, 2005 and 2006. Audited financial statements for the years ended December 2005 and 2006 were also consulted.

HISTORICAL

Revenues for the system increased significantly between 2005 and 2006 from \$69,705 to \$247,597 due to the purchase of the City of Blackey water system facilities and customers and the addition of customers from several water line extensions. Operating expenses also increased during the same time period due to the increased services. In 2005, the system also added debt to the balance sheet. Water line extensions accounted for \$830,000 additional debt while the Blackey purchase added another \$459,000. The water line extensions were financed through US Rural Development

and the District assumed the USRD debt from the Blackey purchase. In 2006, the District was approved through USRD for an additional \$1 million of debt to finance water line extensions. The debt coverage ratio for 2006 was less than one because interest payments were due on the loans but the extension projects were not yet fully completed so revenue was not yet available from the additional proposed customers.

PROJECTED

Projections are based on the following assumptions:

- Charges for services in 2007 are projected to increase by the additional revenue generated from the water line extension projects, approximately 228 customers.
- Charges for services in 2008 reflect the addition of 104 customers for a time period of 9 months.
- Charges for services in 2009 a full year of revenue from the additional 104 customers added as a result of this project.
- Expenses are based on estimates provided by the system.
- The replacement reserve is \$3,905 annually for this project.
- Debt service on the new KIA loan will be \$45,135 annually beginning in 2009.

Projected income and expenses for cashflow purposes was based on actual customer counts and 104 projected new customers as a result of this project. Based on the above assumptions, the Letcher County Water and Sewer District will meet the required cashflow through the projected years. A debt coverage ratio of 1.33 is projected by the sewer system in 2009 when debt service payments of \$45,135 will begin.

REPLACEMENT RESERVE

Based on the information provided in the application the annual replacement cost is \$3,905. This amount should be added to the replacement account each December 1 until the balance reaches \$39,050 and maintained for the life of the system.

IX. DEBT OBLIGATIONS

		Outstanding
USDA Rural Development Loan	\$	821,000.00
USDA Rural Development Loan	\$	468,000.00
USDA Rural Development Loan	\$	<u>1,000,000.00</u>
TOTAL	\$	2,289,000.00

X. OTHER STATE OF FEDERAL FUNDING IN PAST FIVE YEARS

<u>WRIS</u>	<u>Project Title</u>	<u>Type</u>	<u>Amount</u>
WX21133009	Water Line Extension - Sandlick	SCC	\$800,000
WX21133022	Whitesburg Water Line Extension to Dry Fork	CDF	\$400,000
WX21133200	Water Line Extension, Crafts Colly	SCC	\$800,000
WX21133014	Water Line Extension Route 7 and 317	CDF	\$2,000,000

XI. CONTACTS

Don Profitt, Chairman
Letcher County Water & Sewer District
PO Box 827
Whitesburg, Kentucky 41858

Jim Tolliver, Director
Letcher County Water & Sewer
PO Box 827
Whitesburg, Kentucky 41858

Stephen Caudill
Bell Engineering
354 Waller Avenue
Lexington, Kentucky
40504

XII. RECOMMENDATIONS

KIA staff recommends approval of the loan.

**EXHIBIT 1
LETCHER COUNTY WATER & SEWER DISTRICT
CASHFLOW ANALYSIS**

	Audited 2003	% Change	Audited 2004	% Change	Audited 2005	% Change	Audited 2006	Projected 2007	Projected 2008	Projected 2009
Operating Revenues										
Charges for Services	11,414	272%	42,491	64%	69,705	255%	247,597	340,621	480,624	491,232
Miscellaneous	0		0		0		0	0	0	0
Total Revenues	11,414	272%	42,491	64%	69,705	255%	247,597	340,621	480,624	491,232
Operating Expenses										
Salaries	0		0		0		64,610	66,548	68,545	70,601
Other Operating Expenses	26,936	189%	77,803	-26%	57,617	202%	173,863	205,182	211,337	217,678
Depreciation	18,691	114%	39,973	21%	48,497	183%	137,016	166,841	196,666	226,491
Replacement Reserve	45,627	158%	117,776	-10%	106,114	254%	375,509	443,191	483,742	525,869
Total Expenses	(34,213)	120%	(75,285)	-52%	(36,409)	251%	(127,912)	(102,570)	(3,118)	(34,637)
Net Operating Income										
Non-Operating Income and Expenses										
Interest on Investments	4,089	-55%	1,852	192%	5,405	45%	7,849	7,849	7,849	7,849
Other Income and Expenses	2,500		0		0		0	0	0	0
Total Non-Operating Income & Expenses	6,589	-72%	1,852	192%	5,405	45%	7,849	7,849	7,849	7,849
Add Non-Cash Expenses										
Depreciation and Amortization	18,691	114%	39,973	21%	48,487	183%	137,016	166,841	196,666	226,491
Cash Available for Debt Service	(8,933)	275%	(33,460)	-152%	17,493	-3%	16,953	72,120	201,397	199,703
Debt Service										
Existing Debt	0		0		7,972		65,290	70,365	112,539	105,536
Fund A KIA Loan	0		0		0		0	0	7,810	45,135
Total Debt Service	0		0		7,972		65,290	70,365	120,349	150,669
Income After Debt Service	(8,933)		(33,460)		9,521		(48,337)	1,754	81,048	49,034
Debt Coverage Ratio	N/A		N/A		2.19		0.26	1.02	1.67	1.33

**LETCHER COUNTY WATER & SEWER DISTRICT
BALANCE SHEETS**

ASSETS	2003	2004	2005	2006	Upon Project Completion
Current Assets					
Cash	357,583	222,287	179,684	607,535	607,535
Investments	0	0	0	0	0
Accounts Receivable	1,907	1,059	11,681	49,023	61,581
Inventories	0	0	0	0	0
Misc. Current & Accrued Assets	0	10,950	1,188	69,798	24,308
Total Current Assets	359,490	234,296	192,453	726,356	693,424
Fixed Assets					
Utility Plant	1,248,107	1,332,444	1,898,259	5,280,080	6,473,080
Construction in Progress	55,430	553,950	1,103,087	2,470,689	2,539,042
Total Fixed Assets	1,301,537	1,886,394	3,000,256	7,750,769	9,012,122
Less Accumulated Depreciation	(14,081)	(58,684)	(146,185)	(783,103)	(613,009)
Net Fixed Assets	1,282,848	1,827,730	2,854,091	6,967,565	8,199,113
Total Assets	1,642,336	2,062,026	3,046,544	7,693,941	8,892,537
LIABILITIES					
Current Liabilities					
Accounts Payable	0	0	9,845	51,924	54,520
Misc. Current And Accrued Liabilities	0	0	5,332	3,928	3,928
Customer Meter Deposits	0	360	6,310	0	0
Retirement Payable	0	0	0	0	3,000
Total Current Liabilities	0	360	21,487	55,852	61,448
Long Term Liabilities					
USDA Loan	0	0	830,000	1,289,000	1,289,000
New KIA Fund F Loan	0	0	0	0	781,000
Total Long Term Liabilities	0	0	830,000	1,289,000	2,070,000
Total Liabilities	0	360	851,487	1,344,852	2,131,448
Retained Earnings:					
Invested in Capital Assets	1,642,336	2,061,666	2,195,057	6,349,089	6,761,089
Total Equity and Other Credits	1,642,336	2,061,666	2,195,057	6,349,089	6,761,089
Total Liabilities and Equities	1,642,336	2,062,026	3,046,544	7,693,941	8,892,537
Balance Sheet Analysis					
Current Ratio	#DIV/0!	650.82	8.86	13.01	11.28
Debt to Equity	-	0.00	0.39	0.21	0.32
Working Capital	359,490	233,936	170,866	670,504	631,976
Percent of Total Assets in Working Capital	21.88%	11.34%	5.61%	8.71%	7.11%
Percent of Operating Revenue in Receivables	18.71%	2.49%	16.61%	19.80%	24.87%

**LECHER COUNTY WATER AND SEWER DISTRICT
LITTLE COWAN WATER IMPROVEMENTS PROJECT
PROJECTED O&M COST**

<u>DESCRIPTION</u>		<u>AVERAGE MONTHLY COST</u>	<u>AVERAGE YEARLY COST</u>
Electrical Cost @ Pump Stations	\$	500.00	\$ 6,000.00
Electrical Cost @ Tank	\$	20.42	\$ 245.00
Postage	\$	525.00	\$ 6,300.00
Labor	\$	9,685.00	\$ 116,220.00
Supplies	\$	500.00	<u>\$ 6,000.00</u>

Total **\$ 134,765.00**

Note 1: Assumes existing District employees will be utilized for project related activities.

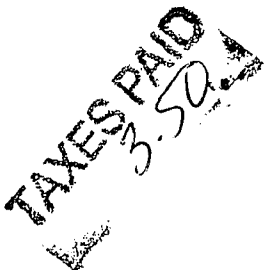
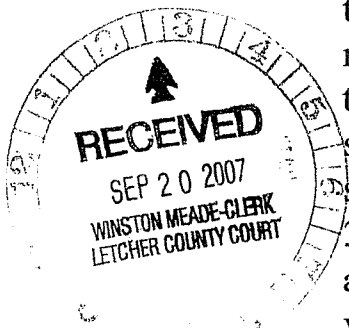
Note 2: Does not include purchase cost of water.

Note 3: Calculation of O&M Costs associated with first year of operation when the project is still under warranty.

THIS DEED OF CONVEYANCE made and entered into this 14th day of September, 2007, between BETTY COOK, single, of 84 Cookville Road, Whitesburg, Letcher County, Kentucky 41858, of the FIRST PART, and LETCHER COUNTY WATER AND SEWER DISTRICT of P. O. Box 827, Whitesburg, Letcher County, Kentucky 41858 of the SECOND PART:

WITNESSETH, that the party of the first part for and in consideration of the sum of Three thousand five hundred dollars (\$3,500.00) cash in hand paid, the receipt and sufficiency of which is hereby acknowledged, has bargained and sold, and by these presents does bargain, sell and convey unto the party of the second part, a certain tract or parcel of land, lying in Letcher County, Kentucky and described as follows:

Located on Little Cowan, Kentucky, and BEGINNING at a point in the Betty Cook property line, said point also being common between Betty Cook and the KY 2035 (Little Cowan Road) right-of-way line; thence across the property of Betty Cook in a northeasterly direction 75 feet, more or less, to a point; thence across the property of Betty Cook in a southeasterly direction 100 feet, more or less, to a point, said point also being common to Betty Cook and the KY 2035 (Little Cowan Road) right-of-way line; thence along the property line for Betty Cook and the right-of-way 2035 (Little Cowan Road) in a northwesterly direction 115 feet, more or less, to the point of Beginning, said parcel containing 3,508 square feet, more or less.



BEING A PART OF Tract II of that same property conveyed to Grantor herein, Betty Cook , by Deed of Conveyance from Michael K. Cook, dated January 25, 2001, and recorded in Deed Book 374, page 294, records of the Letcher County Court Clerk's Office.

TO HAVE AND TO HOLD said tract of land, with the appurtenances thereunto belonging unto the party of the second part, it successors and assigns forever, with covenants of **GENERAL WARRANTY**.

We, BETTY COOK, Grantor, and LETCHER COUNTY WATER AND SEWER DISTRICT, by and through its Chairman, Phillip Back, Grantee, do hereby certify, pursuant to KRS 382, that the above stated consideration in the amount of \$3,500.00, is the true, correct and full consideration paid for the property herein conveyed. We further certify our understanding that falsification of the stated consideration or sale price of the property is a Class D. Felony, subject to one to five years imprisonment and fines up to \$10,000.

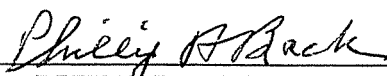
IN TESTIMONY WHEREOF the parties hereto have hereunto subscribed
their names on the day and date aforesaid;



BETTY COOK, SINGLE

(GRANTOR)

LETCHER COUNTY WATER
AND SEWER DISTRICT

BY 

PHILLIP BACK
CHAIRMAN

(GRANTEE)

STATE OF KENTUCKY

COUNTY OF LETCHER

I, Jaqueline Joseph, a Notary Public, in and for the County and State aforesaid, do certify that the foregoing Deed and Value Certificate from BETTY COOK single, to LETCHER COUNTY WATER AND SEWER DISTRICT, was this day produced to me, and duly acknowledged and sworn to before me in said county by BETTY COOK, single, party thereto to be her act and deed.

Given under my hand this 14th day of September, 2007.

My commission expires March 30, 2011.



NOTARY PUBLIC

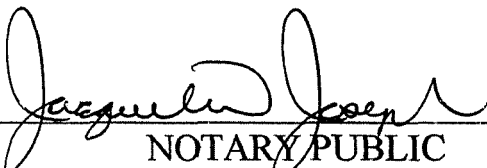
STATE OF KENTUCKY

COUNTY OF LETCHER

I, Jaqueline Joseph, Notary Public in and for the County and State aforesaid, do certify that the foregoing Deed and Value Certificate from Betty Cook, single, to Letcher County Water and Sewer District was this day produced to me, and duly acknowledged and sworn to before me in said county by The Letcher County Water and Sewer District, by PHILLIP BACK, its Chairman, to be the act and deed of said District and of himself as Chairman thereof, thereunto duly authorized.

Given under my hand this 20th day of September, 2007.

My commission expires March 30, 2011.



NOTARY PUBLIC

STATE OF KENTUCKY

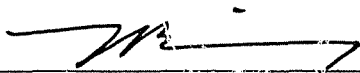
COUNTY OF LETCHER

I, WINSTON MEADE, Clerk of the County Court of the County aforesaid, do certify that the foregoing Deed from BETTY COOK, SINGLE, to THE LETCHER COUNTY WATER AND SEWER DISTRICT was on the 20 day of Sept, 2007, lodged in my office for records, and that it, the foregoing, and this certificate, have been duly recorded in my office in Deed Book 392, page 156.

WITNESS MY HAND this 20 day of Sept, 2007.

Winston Meade, CLERK
BY: Angie Back, D.C.

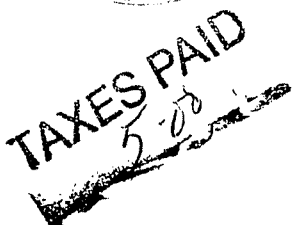
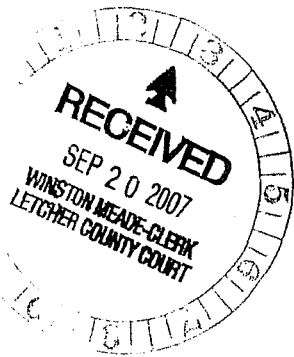
I hereby certify that this instrument was drafted without title examination by:


BOLLING & TACKETT LAW OFFICE
40 Main Street
Whitesburg, KY 41858

THIS DEED OF CONVEYANCE made and entered into this 13th day of September, 2007, between WILLIAM BURNS CONNELLY and SHELIA KAY CONNELLY, his wife, of P. O. Box 98, Ermine, Letcher County, Kentucky 41815, of the FIRST PART, and LETCHER COUNTY WATER AND SEWER DISTRICT of P. O. Box 827, Whitesburg, Letcher County, Kentucky 41858 of the SECOND PART:

WITNESSETH, that the parties of the first part for and in consideration of the sum of Five thousand dollars, (\$5,000.00) cash in hand paid, the receipt and sufficiency of which is hereby acknowledged, have bargained and sold, and by these presents do bargain, sell and convey unto the party of the second part, a certain tract or parcel of land, lying in Letcher County, Kentucky and described as follows:

Located on Little Cowan, Kentucky, and BEGINNING at a point in the William B. Connelly property, said point being 300 feet more or less southeast of the William B. Connelly residence; thence across the property of William B. Connelly in an easterly direction 140 feet, more or less, to a point; thence across the property of William B. Connelly in a southerly direction 155 feet, more or less, to a point; thence across the property of William B. Connelly in a westerly direction 140 feet, more or less to a point; thence across the property of William B. Connelly in a northerly direction 155 feet, more or less, to a point o Beginning; said parcel containing 21,700 square feet more or less.



BEING a part of that same property conveyed to Grantors herein, by Deed of Conveyance from Hubert Hall and Iona Hall, his wife, dated July 30, 1993, and recorded in Deed Book 310, page 322, records of the Letcher County Court Clerk's Office.

TO HAVE AND TO HOLD said tract of land, with the appurtenances thereunto belonging, unto the party of the second part, it successors and assigns forever, with covenants of **GENERAL WARRANTY**.

We, WILLIAM BURNS CONNELLY and SHELIA KAY CONNELLY, his wife, Grantors, and LETCHER COUNTY WATER AND SEWER DISTRICT, by and through its Chairman, Phillip Back, Grantee, do hereby certify, pursuant to KRS 382, that the above stated consideration in the amount of \$5,000.00, is the true, correct and full consideration paid for the property herein conveyed. We further certify our understanding that falsification of the stated consideration or sale price of the property is a Class D. Felony, subject to one to five years imprisonment and fines up to \$10,000.

IN TESTIMONY WHEREOF the parties hereto have hereunto subscribed
their names on the day and date aforesaid;

William Connelly
WILLIAM BURNS CONNELLY

Shelia Connelly
SHELIA KAY CONNELLY,
HIS WIFE

(GRANTORS)

LETCHER COUNTY WATER
AND SEWER DISTRICT

BY Phillip A. Back
PHILLIP BACK
CHAIRMAN

(GRANTEE)

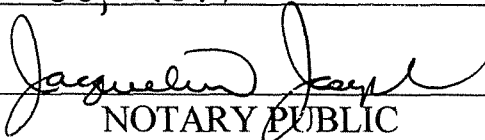
STATE OF KENTUCKY

COUNTY OF LETCHER

I, Jacqueline Joseph, a Notary Public, in and for the County and State aforesaid, do certify that the foregoing Deed and Value Certificate from WILLIAM BURNS CONNELLY and SHELIA KAY CONNELLY, his wife, to LETCHER COUNTY WATER AND SEWER DISTRICT, was this day produced to me, and duly acknowledged and sworn to before me in said county by WILLIAM BURNS CONNELLY and SHELIA KAY CONNELLY, his wife, parties thereto to be their act and deed.

Given under my hand this 13th day of September, 2007.

My commission expires March 30, 2011.


NOTARY PUBLIC

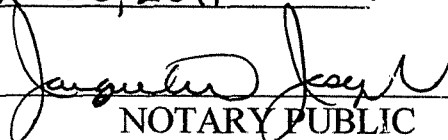
STATE OF KENTUCKY

COUNTY OF LETCHER

I, Jacqueline Joseph, Notary Public in and for the County and State aforesaid, do certify that the foregoing Deed and Value Certificate from WILLIAM BURNS CONNELLY and SHELIA KAY CONNELLY, his wife, to LETCHER COUNTY WATER AND SEWER DISTRICT was this day produced to me, and duly acknowledged and sworn to before me in said county by THE LETCHER COUNTY WATER AND SEWER DISTRICT, by PHILLIP BACK, its Chairman, to be the act and deed of said District and of himself as Chairman thereof, thereunto duly authorized.

Given under my hand this 20th day of September, 2007.

My commission expires March 30, 2011.


NOTARY PUBLIC

STATE OF KENTUCKY

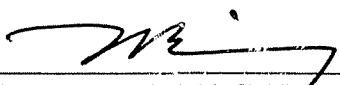
COUNTY OF LETCHER

I, WINSTON MEADE, Clerk of the County Court of the County aforesaid,
do certify that the foregoing Deed from WILLIAM BURNS CONNELLY and
SHELIA KAY CONNELLY, his wife, to THE LETCHER COUNTY WATER
AND SEWER DISTRICT was on the 20 day of Sept, 2007,
lodged in my office for records, and that it, the foregoing, and this certificate, have
been duly recorded in my office in Deed Book 392, page 151.

WITNESS MY HAND this 20 day of Sept, 2007.

Winston Meade, CLERK
BY: Angie Bacht, D.C.

I hereby certify that this instrument
was drafted without title examination
by:


BOLLING & TACKETT LAW OFFICE
40 Main Street
Whitesburg, KY 41858

LETCHER COUNTY WATER AND SEWER DISTRICTSTATEMENT OF NET ASSETSAt December 31, 2006ASSETS:

	<u>Totals</u>
- Current Assets -	
Cash in Banks - Unrestricted	82,373
Accounts Receivable (net of allowance for doubtful accounts)	49,879
Other Current Assets	<u>1,984</u>
<u>Total Current Assets</u>	<u>134,236</u>
- Fixed Assets -	
Land, Structure & Equipment, net of depreciation	4,946,728
Construction in Progress	<u>2,470,689</u>
Total Fixed Assets	<u>7,417,417</u>
- Other Assets -	
Cash - Restricted	<u>559,759</u>
Total Other Assets	<u>559,759</u>
<u>Total Assets</u>	<u>8,111,412</u>

LIABILITIES AND EQUITY:

- Current Liabilities -	
Accounts Payable	51,924
Accrued payroll	1,811
Sales Tax Payable	237
Utility Tax Payable	1,880
Current portion of long-term debt	<u>16,000</u>
<u>Total Current Liabilities</u>	<u>71,852</u>
- Long Term Liabilities -	
Bonds Payable	1,289,000
Less: Current portion	<u>(16,000)</u>
<u>Total Long-Term Liabilities</u>	<u>1,273,000</u>
<u>Total Liabilities</u>	<u>1,344,852</u>
- Equity -	
Retained Earnings	78,384
Restricted Assets	559,759
Invested in Fixed Assets, Net of Related Debt	<u>6,128,417</u>
<u>Total Equity</u>	<u>6,766,560</u>
<u>Total Liabilities and Equity</u>	<u>8,111,412</u>

The accompanying notes are an integral part of these financial statements.

LETCHER COUNTY WATER AND SEWER DISTRICTSTATEMENT OF REVENUES, EXPENSE
AND CHANGES IN NET ASSETSFor The Year Ended December 31, 2006

<u>Revenue</u>	
Water and Sewer Operations	<u>242,246</u>
<u>Operating Expense</u>	
Salaries	64,610
Fringe Benefits	16,215
Office Expense	3,574
Water Consumption	32,022
Electric	15,343
Telephone	1,452
Postage	1,979
Travel	397
Advertisement	595
Legal & Accounting	3,100
Contract Labor	28,948
Operator Expense	13,264
Water Quality Monitoring	19,186
Vehicle Expense	3,374
Miscellaneous Operating Expense	7,727
Bank Fees	528
Insurance and Bonds	10,944
Sewer Operating Expense	<u>62,469</u>
<u>Total Operating Expense</u>	<u>285,727</u>
Excess (Deficiency) of Operating Revenue <u>Over Operating Expense</u>	<u>(43,481)</u>
<u>Other Income (Expense)</u>	
Interest Income	8,827
Operations Grant (net)	2,654
Depreciation Expense	(145,242)
Amortization Expense	(7,955)
Interest Expense	<u>(56,290)</u>
<u>Total Other Income (Expense)</u>	<u>(198,006)</u>
Net Income (Loss)	(241,487)
Equity, Beginning of Year	2,677,654
Add: Capital contributions	<u>4,330,393</u>
Equity, End of Year	<u>6,766,560</u>

The accompanying notes are an integral part of these financial statements.

LETCHER COUNTY WATER AND SEWER DISTRICTSTATEMENT OF CASH FLOWSFor The Year Ended December 31, 2006

<u>Cash Flows from Operating Activities:</u>	
Receipts from customers and users	201,423
Payments to personnel	(79,014)
Payments to suppliers	(80,479)
Payments to contractors	<u>(83,066)</u>
<u>Net Cash Provided (Used) by Operating Activities</u>	<u>(41,136)</u>
<u>Cash Flows From Capital and Related Financing Activities:</u>	
Increase in Infrastructure Assets	(4,194,942)
Vehicle Purchased	(61,852)
Principal paid on bonds	(15,000)
Long term bonds issued	474,000
Interest paid on bonds and notes	(56,290)
Decrease in connection deposits	(6,310)
Operating grants and contributions received	80,714
Operating grants and contributions expended	(78,060)
Capital grants and contributions received	<u>4,330,393</u>
<u>Net Cash (Used) for Capital and Related Financing Activities</u>	<u>472,653</u>
<u>Cash Flows from Investing Activities</u>	
Interest revenue	<u>8,827</u>
Net Increase (Decrease) in Cash	440,344
Cash and restricted cash, July 1	<u>201,788</u>
Cash and restricted cash, June 30	<u>642,132</u>
<u>Reconciliation of Operating Income (Loss) to Net Cash Provided by Operating Activities:</u>	
Operating Loss	(196,678)
Adjustments to reconcile operating net cash provided by operating activities:	
Depreciation	145,242
Amortization	7,955
Changes in assets and liabilities	
(Increase) decrease in accounts receivable	(37,231)
(Increase) decrease in other current assets	(692)
Increase (decrease) in accounts payable	42,049
Increase (decrease) in accrued payroll	1,811
Increase (decrease) in sales tax payable	(1,094)
Increase (decrease) in utility tax payable	<u>(2,498)</u>
<u>Net Cash Used by Operations</u>	<u>(41,136)</u>

The accompanying notes are an integral part of these financial statements.