



June 23, 2008

**RECEIVED**

JUN 24 2008

**PUBLIC SERVICE  
COMMISSION**

Mr. James Rice  
Public Service Commission  
P.O. Box 615  
Frankfort, KY 40601

RE: Breathitt County Water District (BCWD) – “Certificate of Convenience and Necessity for Utility Construction” for the KY 1110 Waterline Extension Project Contract # 1  
PSC case # 2008 - 00225

Dear Mr. Rice:

As a result of our telephone conversation today, I am providing the following documents/information for your consideration; 1) one copy of the Project Plans and Specifications, 2) one copy of the KY Department of Transportation (DOT) Encroachment Permit correspondence, and 3) a calculation of the estimated additional operation and maintenance costs for the proposed project.

Contract # 1 of this project consists of approximately 91,600 feet of pipe with diameters ranging from 10 to 2-inch. This proposed project will be served by gravity from the Breathitt County Water District’s (BCWD) existing distribution system. This proposed Phase 1 system will be served by gravity from the Breathitt County Water District’s (BCWD) existing distribution system.

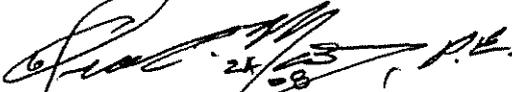
- 1) One copy each of the Contract # 1 Plans and Specifications.
- 2) The KY DOT Encroachment Permit approval letters (dated 5/14/08 and 6/24/08). A clarification letter from BCWD dated 5/27/08 related to the first DOT letter, conditions, is also included.
- 3) The estimated operation, maintenance & replacement (OM&R) cost of the proposed system is presented on an attached sheet. There will be 252 homes served by the proposed project. U.S. Census data indicates 2.61 people/household which results in 658 individuals to be served by this project. Using the conservative 100 gallons per person per day equals a total average day of 65,800 gallons. Based on this amount and a pump with a 151 gpm capacity, the pump would operate approximately 7.3 hours/day to supply this demand.

The power company serving the pump station for this project area is Licking Valley Rural Electric Coop. The resultant \$1.14/1000 gallons OM&R factor (as shown on the attached sheet) is considerably less than the variable cost factor of \$4.24/1000 gallons as established in the District’s existing rate structure. Therefore the existing rates should provide ample funds to meet the projected OM& R costs of the proposed project.

I have placed my professional engineer’s seal (signed and dated) on this letter and all attachments generated by Nesbitt Engineering, Inc. I hope this additional information permits you to approve this project and issue a “Certificate of Convenience and Necessity for Construction”. It is imperative to be able to move this project to the construction phase as soon as possible.

Thank you for all of your time, efforts and assistance on this project.

Sincerely,

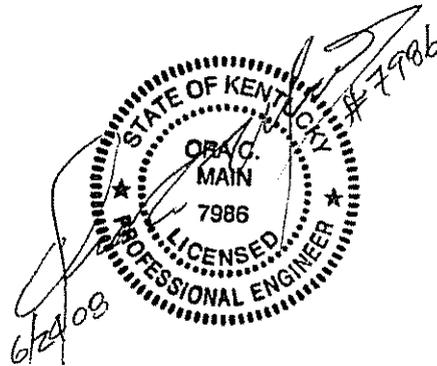


Ora C. Main, PE, MBA  
Vice President/Project Manager

Encls:

- c: Jason Richardson, Judge Executive, Breathitt County
- John L. Smith, Chairman BCWD
- Brendon Miller, Attorney for BCWD
- Bob Scott, AML
- Shannon Moore, BCWD
- Ken Reid, NEI
- Carlos Maggard, NEI

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## TRANSPORTATION CABINET

**Steven L. Beshear**  
Governor

Department of Highways District 10 Office  
473 Highway 15 South  
P.O. Box 621  
Jackson, KY 41339  
(606) 666-8841  
May 14, 2008

**Joseph W. Prather**  
Secretary

Breathitt Co. Water District  
Shannon Moore  
1137 Main Street  
Jackson Kentucky 41339

Dear Mr. Moore:

The Department of Highways has reviewed the encroachment permit you submitted to our office and the following changes needs to be made before we can approve the permit.

1. From Sta. 55+00-60+00, line must be at toe of slope.
2. Waterline shall be installed as far from roadway as possible and in no circumstances shall line be closer than 18" from pavement.
3. Due to geography and material along route, waterline must be installed with a trencher unless specific written permission is granted by authorized member of the Department of Highways.

Please make these changes to proposal and resubmit so the application process can proceed.

If you have any questions concerning this permit, please contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Blackburn".

Jason Blackburn P.E.  
Permits Supervisor

Cc: Nesbitt Engineering (Ken Reed)





# Breathitt County

## Water District

Making Breathitt County

A Better Place One Drop at a Time.

May 27, 2008

Mr. Jason Blackburn, P.E., Permits Supervisor  
Department of Highways, District 10  
473 Highway 15 South  
Jackson, Kentucky 41339

RE: Breathitt County Water District – KY 1110 Waterline Extension

Dear Mr. Blackburn:

Breathitt County Water District acknowledges your conditions for approval, and agrees to the following construction conditions:

1. From Sta. 55+00 – 60+00, waterline will be installed at the toe of slope.
2. Waterline shall be installed as far from roadway as possible and in no circumstances be closer than 18-inches from pavement.
3. A trencher shall be used when within the KTC right-of-way, unless written permission is granted by an authorized member of the Department of Highways.

Sincerely,

Shannon Moore, Superintendent  
Breathitt County Water District

Enclosures

c: Bob Scott, Division of Abandoned Mine Lands  
Ora Main, PE, Project Manager, NEI

# Breathitt County Water District KY 1110 Waterline Project

Additional KY 30 West Pump Station - Operation, Maintenance and Replacement Costs  
For Water to serve the KY 1110 Phase 1 Project

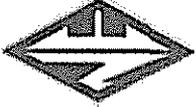
Given  
Electric rates

Monthly Flat fee \$ -  
Cost per Kwh \$ 0.122316 per Kwh  
Demand Factor \$ 6.66979 per Kwh

Average flow rate of pump = 151 gpm  
Estimated flow = (252 homes x 2.61p/hh x 100 gpcd) =  
Pumping hours/day = (Est flow)/(pump rate x 60) =  
2 ~ 15 HP pumps, 151 gpm, 279' head, 73 % efficiency

65,772 Gals/day  
7.26 hours/day

**nesbitt engineering, inc.**  
Providing proven solutions since 1976  
227 North Upper Street  
Lexington, KY 40507-1016



Estimated Operation and Maintenance Costs			
<b>Pumping Costs</b>			
(2 pumps x 15 HP x one pump operating at a time x 0.73 x pump hrs/day)/motor efficiency =	Kwh/day	Kwh/day	
(2 pumps x 15 HP x 1/2 x 0.75 x 7.26 hrs/day)/0.8 efficiency =	99	99	
	x 365 days/yr =	=	
	365	36,269	Kwh/yr
12 months at Flat fee x \$ 00.00 =			\$ -
12 months usage Kwh =	36,269	x \$ 0.122316 =	\$ 4,436.23
Demand Charge - estimated = \$100/mo			\$ 1,200.00
<b>Total Pumping Costs =</b>			<b>\$ 5,636.23</b>
<b>Equipment Repair</b>			
Parts and repair			\$ 1,000.00
Oil and lubrication			\$ 1,000.00
<b>Total Equipment and Repair Costs =</b>			<b>\$ 2,000.00</b>
<b>Labor</b>			
one operator @ \$ 40/hr x 7 hrs/week (1 hr/day) x 52 weeks = Total Labor Costs =			\$ 14,560.00
<b>Total Estimated Operation and Maintenance Costs</b>			<b>\$ 22,196.23</b>
<b>Estimated Replacement Costs</b>			
Replacement Costs	Costs to replace in 12 years	Costs to replace in 18 years	Percent = RS(i-n), i = 8.0 %
Pumps	\$ 15,000.00	\$ 791	
Electrical	\$ 8,000.00	\$ 214	
Tank surface prep & painting	\$ 22,000.00	\$ 1,159	
<b>Total Replacement Costs</b>			<b>\$ 2,617</b>
<b>Total Estimated Operation, Maintenance and Replacement Costs for 10, 8, 6, 4 and 2-inch line - est avg at \$ 0.071/feet/yr x 91,600 ft =</b>			
			<b>6500</b>
<b>Total Estimated Operation, Maintenance and Replacement Costs</b>			
			<b>\$ 27,431.03</b>
<b>Cost per thousand gallons</b>			
Gallons per day	65,772	=	24,006,780
Gallons per year	65,772 x 365 days/yr		
Thousand gallons per year	24,007		
<b>Total Estimated Operation, Maintenance and Replacement Costs/1000 gallons</b>			<b>\$ 1.14</b>

