

DAWN R. WATTS

ATTORNEY AT LAW
14 HOWELL LANE
P.O. BOX 944
JACKSON, KENTUCKY 41339

606-666-7725
FAX 606-666-0044
E-MAIL: drs.law@outlook.com

July 7, 2017

Public Service Commission
Attn: Executive Director
P.O. Box 615
211 Sower Blvd.
Frankfort, KY 46062-0615

RECEIVED

JUL 10 2017

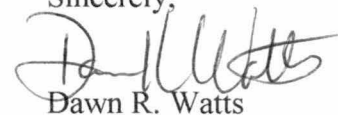
Public Service
Commission

Dear Commissioner,

Please find enclosed the Application of the Breathitt County Water District for the issuance of a certificate of public convenience and necessity to construct water system improvements, with attachments. Please let us know if any further documents are needed.

Thank you for your attention to this matter.

Sincerely,



Dawn R. Watts
Asst. County Attorney

Enc./

RECEIVED

JUL 10 2017

Public Service
Commission

COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

**THE APPLICATION OF THE BREATHITT COUNTY)
WATER DISTRICT FOR THE ISSUANCE OF A)
CERTIFICATE OF PUBLIC CONVENIENCE AND) Case No. 2017- 00270
NECESSITY TO CONSTRUCT A WATER SYSTEM)
IMPROVEMEMNTS PROJECT PURSUANT TO THE)
PROVISIONS OF KRS 278.020 AND 807 KAR 5:001)**

*** **

The Applicant, Breathitt County Water District (the "District"), files this Application pursuant to KRS 278.020(1) and KAR 5:001, and all other applicable laws and regulations, and requests the Kentucky Public Service Commission (the "Commission") granting the District a Certificate of Public Convenience and Necessity to construct a water system improvements project. In support of the Application, and in compliance with the rules and regulations of the Commission, the District states as follows:

1. The District was established in accordance with the provisions of Chapter 74 of the Kentucky Revised Statutes pursuant to an Order of the County Judge/Executive of Breathitt County, which Order is on file in the County Court Order Books in the office of the Clerk of Breathitt County, Kentucky. The District is now, and has been since its inception, regulated by the Commission, and all records and proceedings of the Commission with reference to the District are incorporated in this Application by reference. The District does not have any Articles of Incorporation due to the fact that it is a statutory entity.

2. The governing body of the District is its Board of Commissioners which is a public body corporate, with power to make contracts in furtherance of its lawful and proper purpose as provided for in KRS 74.070 and all applicable law and regulations.

3. The mailing address of the District is as follows:

Breathitt County Water District
c/o Mr. Estill McIntosh, Superintendent
1137 Main Street
Jackson, Kentucky 41339
Telephone: (606) 666-3800
Fax: (606) 666-2860
Email: breathittwater@yahoo.com

4. A general description of the District's water system property, together with a statement of the original cost, is contained in the District's Annual Report for 2016 which is on file with the Commission. The Annual Report is incorporated herein by reference.

5. Pursuant to 807 KAR 5:001, Section 15 – Applications for Certificates of Public Convenience and Necessity, the District hereby responds as follows:

- (i) Section 15(2)(a): Facts Relied Upon to Show Public Necessity: the proposed water improvements project (hereinafter the "Project") and the need for the Project is described in **Exhibit "A"** attached hereto.
- (ii) Section 15(2)(b): Copies of Permits: Required permits include a Kentucky Division of Water Construction Permit and Kentucky Transportation Cabinet Encroachment permit. Copies of both required permits are attached hereto as **Exhibit "B"**.
- (iii) Section 15(2)(c): Description of Proposed Location or Route. A description of the proposed location and routes of the construction are shown on the maps being filed herewith. The proposed Project will not

compete with any other public utilities and will not result in any wasteful duplication.

- (iv) Section 15(2)(d)(1) and (2): Maps to Suitable Scale and Plans and Specifications: two paper maps showing the location and route of the proposed Project are included with this Application. Also the Plans and Specifications in .pdf format on electronic storage medium are being filed with this Application.
 - (v) Section 15(2)(e) Financing: The District is financing the Project with the proceeds of an Appalachian Regional Commission grant in the amount of \$215,000.00, in addition the Breathitt Fiscal Court will provide matching funds of \$75,000.00 (as **Exhibit "C"**).
 - (vi) Section 15(2)(f) Statement of Estimated Annual Cost of Operation: the proposed annual production and operation costs after the Project is placed in service are attached hereto as **Exhibit "D"**.
- 6. Certified copies of the bid tabulations for the Project are attached hereto as **Exhibit "E"**.
 - 7. No rate adjustment will be necessary.

WHEREFORE, the District respectfully requests the Commission take the following actions:

- A. Grant the District a Certificate of Public Convenience and Necessity permitting the District to construct the Project; and

B. Grant the District any other relief to which said District is entitled.

By 

Bobby Thorpe, Jr., Chairman
1137 Main Street
Jackson, Kentucky 41339
Telephone: (606) 666-3800
Fax: (606) 666-2860
Email:breathittwater@yahoo.com


By 

Dawn R. Watts
14 Howell Lane
P.O. Box 944
Jackson, Kentucky 41339
Telephone: (606) 666-7725
Fax: (606) 666-0044
Counsel for Breathitt County Water District

STATE OF KENTUCKY)
) SS
COUNTY OF BREATHITT)

The affiant, Bobby Thorpe, Jr., being first duly sworn, states: That is the Chairman of the Breathitt County Water District, the Applicant in this case; that he has read the foregoing Application and has noted the contents thereof; that the same are true of his own knowledge and belief, except as to matter which are herein stated to be based on information or belief, and that these matters, believes to be true and correct.

IN TESTIMONY WHEREOF, witness the signature of the undersigned on the 20th
day of June, 2017.



Bobby Thorpe, Jr., Chairman

SUBSCRIBED, SWORN TO AND ACKNOWLEDGED before me by Bobby Thorpe, Jr., Chairman of the Breathitt County Water District on this the 20th day of June, 2017.



NOTARY PUBLIC, STATE AT LARGE

My Commission Expires: 11-9-2020

Notary ID#: 568306

Breathitt County Water District

KY 2436 Airport Road Waterline Extension

Project Description

Work is to include installation of approximately 5,725 linear feet of PVC & Ductile Iron waterline and a hydro-pneumatic pump station and bladder tank. Service connections to the Julian Carroll Airport and the National Weather Service, National Oceanic and Atmospheric Administration.

The public necessity is to provide safe and reliable drinking water to the users in the project area. There are no other existing water utilities in this area, therefore this project will not cause duplication of service. All extensions are connections made to existing BCWD waterlines.

Funding

That Applicant proposes to finance the construction of the Project through a Grant per a Memorandum of Agreement between the Appalachian Regional Commission and Breathitt County Water District and administered by the Rural Development (RD). The funding grant is in the amount of \$215,000. In addition, the Breathitt Fiscal Court will provide matching funds of \$75,000.

Construction

Setting out the date of July 15, 2017, when it is anticipated that construction will begin and November 31, 2017 when it is anticipated to end.

Contact

Estill McIntosh, 1137 Main Street, Jackson, KY 41339
606-666-3800 ext 250, Breathittwater@yahoo.com
Bobby Thorpe, Jr, Chairperson

Steen, Matt

To: Steen, Matt
Subject: FW:

From: Thomas, Marvin J (KYTC-D10) [mailto:Marvin.Thomas@ky.gov]
Sent: Friday, February 24, 2017 2:57 PM
To: Steen, Matt <msteen@nei-ky.com>
Subject: RE:

Permit # T-10-2017-00010 is conditionally approved upon receiving an encroachment bond in the amount of \$25,000

From: Thomas, Marvin J (KYTC-D10) [mailto:Marvin.Thomas@ky.gov]
Sent: Friday, February 24, 2017 9:57 AM
To: Steen, Matt <msteen@nei-ky.com>
Subject:

The hwy dept. permit section is requesting an encroachment bond for permit # T-10-2017-00010 in the amount of \$25,000. This is for Breathitt Co Water District on hwy 2436



Kentucky Transportation Cabinet
 Department of Highways
 Permits Branch

TC 99-1 (A)
 1/2015
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APPLICATION FOR ENCROACHMENT PERMIT

Permittee Information		KYTC No. <u>T-10-2017-00010</u>	
Name	Breathitt County Water District	Permit Information	
Address	1137 Main St, suite 305	Address	
City	Jackson	City	Jackson
State	KY	State	KY
Zip	41339	Zip	41339
Phone#	606-666-3800 e	County	Breathitt
Contact	Estill McIntosh	Route No.	2436
Phone	606-666-3800 Cell	Mile-Point	"see below"
Email	breathittwater@yahoo.com	Longitude (X)	
Contact	Matt Steen	Latitude (Y)	
Phone	859-685-4523 Cell	<i>Information below to be filled out by KYTC</i>	
Email	msteen@nei-ky.com	<input type="checkbox"/> Air Right	<input type="checkbox"/> Entrance
		<input checked="" type="checkbox"/> Utilities	<input type="checkbox"/> Other: _____
		<input type="checkbox"/> Left	<input type="checkbox"/> Right
		<input type="checkbox"/> Full	<input type="checkbox"/> Partial
		<input type="checkbox"/> X-ing	
		<input type="checkbox"/> by Permit	

General Description of Work:

Install 4" waterline along KY 2436 from mile-point 0.21 to mile-point 0.30
 Install 3" waterline along KY 2436 from mile-point 0.30 to mile-point 1.32
 Install 10.75" steel casing, bore & jack under KY 2436 at mile-point 0.22
 Construct a pump station at KY 2436 mile-point 0.30; -83° 18' 55.0693" W 37° 34' 41.8143" N
 Construct a Tank Enclosure at KY 2436 mile-point 1.32

THE UNDERSIGNED PERMITTEE(S) (being duly authorized representative(s) or owner(s)) DO AGREE TO ALL TERMS AND CONDITIONS ON THE TC 99-1 (A).

[Handwritten Signature]

1/18/17

Signature

Date

This is not a permit unless and until the permittee(s) receives an approved TC 99-1(B) from KYTC. This application shall become void if not approved by the cancellation date. The cancellation date shall be one year from the date the permittee submits their application.



APPLICATION FOR ENCROACHMENT PERMIT

TERMS AND CONDITIONS

1. The permit, including this application and all related and accompanying documents and drawings making up the permit, remains in effect and is binding upon the Applicant/Permittee, its successors and assigns, as long as the encroachment(s) exists and also until the permittee is finally relieved by the Department of Highways from all its obligations.
2. Applicant shall meet all requirements of the Clean Water Act if the project will disturb one acre or more, the applicant shall obtain a KPDES KYR10 Permit from the Kentucky Division of Water. All disturbed areas shall meet the requirements of the Department of Highway's Standard Specifications, Sections 212 and 213, as amended.
3. **INDEMNITY:**
 - A. **PERFORMANCE BOND:** The permittee shall provide to the Department a performance bond according to the Permits Manual, Section PE-203 as a guarantee of conformance with the Department's Encroachment Permit requirements.
 - B. **PAYMENT BOND:** At the discretion of the department, a payment bond shall be required of the permittee to ensure payment of liquidated damages assessed to the permittee.
 - C. **LIABILITY INSURANCE:** Liability insurance shall be required of the permittee (in an amount approved by the department) to cover all liabilities associated with the encroachment.
 - D. It shall be the responsibility of the permittee, its successors and assigns, to maintain all indemnities in full force and effect until the permittee is authorized to release the indemnity by the Department.
4. A copy of this application and all related documents making up the approved permit shall be given to the applicant and shall be made readily available for review at the work site at all times.
5. Perpetual maintenance of the encroachment is the responsibility of the permittee, its successors and assigns, with the approval of the Department as required, unless otherwise stated.
6. Permittee, its successors and assigns, shall comply with and agree to be bound by the requirements and terms of (a) this application and all related documents making up the approved permit, (b) by the Department's Permits Manual, and (c) by the Manual on Uniform Traffic Control Devices, both manuals as revised to and in effect on the date of issuance of the permit, all of which documents are made a part thereof by this reference. Compliance by the permittee, its successors and assigns, with subsequent revisions to applicable provisions of either manual or other policy of the Department may be made a condition of allowing the encroachment to persist under the permit.
7. Permittee agrees that this and any encroachment may be ordered removed by the Department at any time, and for any reason, upon thirty days written notice to the last known address of the applicant or to the address at the location of the encroachment. The permittee agrees that the cost of removing and of restoring the associated right-of-way is the responsibility of the permittee, its successors and assigns.
8. Permittee, its successors and assigns, agree that if the Department determines that motor vehicular safety deficiencies develop as a result of the installation or use of the encroachment, the permittee, its successors and assigns, shall provide and bear the expenses to adjust, relocate, or reconstruct the facilities, add signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department within a reasonable time after receipt of a written notice of such deficiency. The period within which such adjustments, relocations, additions, modifications, or other corrective measures must be completed will be specified in the notice.
9. Where traffic signals are required as a condition of granting the requested permit or are thereafter required to correct motor vehicular safety deficiencies, as determined by the Department, the costs for signal equipment and



APPLICATION FOR ENCROACHMENT PERMIT

installation(s) shall be borne by the permittee, its successors and assigns and the Department in its reasonable discretion and only in accordance with the Department's current policy set forth in the Traffic Operations Manual and Permits Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, its successors and assigns, at no expense to the Department.

10. The requested encroachment shall not infringe on the frontage rights of an abutting owner without their written consent as hereinafter described. Each abutting owner shall express their consent, which shall be binding on their successors and assigns, by the submission of a notarized statement as follows, "I _____ (we),

_____ hereby consent to the granting of the permit requested by the applicant along Route _____, which permit does affect frontage rights along my (our) adjacent real property." By signature(s) _____ subscribed and sworn by _____ on this date _____.

11. The permit, if approved, is subject to the agreement that it shall not interfere with any similar rights or permit(s) previously granted to any other party, except as otherwise provided by law.

12. Permittee shall include documentation which describes the facilities to be constructed. Permittee, its successors and assigns, agree as a condition of the granting of the permit to construct and maintain any and all permitted facilities or other encroachments in strict accordance with the submitted and approved permit documentation and the policies and procedures of the Department. Permittee, its successors and assigns, shall not use facilities authorized herein in any manner contrary to that prescribed by the approved permit. Only normal usage as contemplated by the parties and by this application and routine maintenance are authorized by the permit.

13. Permittee, its successors and assigns, at all times from the date permitted work is commenced until such time as all permitted facilities or other encroachments are removed from the right-of-way and the right-of-way restored, shall defend, protect, indemnify and save harmless the Department from any and all liability claims and demands arising out of the work, encroachment, maintenance, or other undertaking by the permittee, its successors and assigns, related or undertaken pursuant to the granted permit, due to any claimed act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party nor operate to enlarge any liability of the Department beyond that existing at common law or otherwise if this right to indemnity did not exist.

14. Upon a violation of any provision of the permit, or otherwise in its reasonable discretion, the Department may require additional action by the permittee, its successors and assigns, up to and including the removal of the encroachment and restoration of the right-of-way. In the event additional actions required by the Department under the permit are not undertaken as ordered and within a reasonable time, the Department may in its discretion cause those or other additional corrective actions to be undertaken and the Department shall recover the reasonable costs of those corrective actions from the permittee, its successors and assigns.

15. Permittee, its successors and assigns, shall use the encroachment premises in compliance with all requirements of federal law and regulation, including those imposed pursuant to Title VI of the Civil Right Act of 1964 (42 U.S.C. § 2000d et seq.) and the related regulations of the U.S. Department of Transportation in Title 49 C.F.R. Part 21, all as amended.

16. Permittee, its successors and assigns, agree that if the Department determines it is necessary for the facilities or other encroachment authorized by the permit to be removed, relocated or reconstructed in connection with the reconstruction, relocation or improvement of a highway, the Department may revoke permission for the



Kentucky Transportation Cabinet
Department of Highways
Permits Branch

TC 99-1 (A)
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APPLICATION FOR ENCROACHMENT PERMIT

encroachment to remain under the permit and may order its removal, relocation or reconstruction by the permittee, its successors and assigns, at the expense of the permittee, except where the Department is required by law to pay any or all of those costs.

17. Permittee agrees that the authorized permit is personal to the permittee and shall remain in effect until such time as (a) the permittee's rights to the adjoining real property to have benefitted from the requested encroachment have been relinquished, (b) until all permit obligations have been assumed by appropriate successors and assigns, and (c) unless and until a written release from permit obligations has been granted by the Department. The permit and its requirements shall also bind the real property to have benefitted from the requested encroachment to the extent permitted by law. The permit and the related encroachment become the responsibility of the successors and assigns of the permittee and the successors and assigns of each property owner benefitting from the encroachment, or the encroachment may not otherwise permissibly continue to be maintained on the right-of-way. (Does not apply to utility encroachments serving the general public.)

18. If work authorized by the permit is within a highway construction project in the construction phase, it shall be the responsibility of the permittee to make personal contact with the Department's Engineer on the project in order to coordinate all permitted work with the Department's prime contractor on the project.

19. This permit is not intended to, nor shall it, affect, alter or alleviate any requirement imposed upon the permittee, its successors and assigns, by any other agency.

20. Permittee, its successors and assigns, agree to contain and maintain all dirt, mud, and other debris emanating from the encroachment away from the surrounding right-of-way and the travel way of the highway hereafter and at all times that its obligations under the permit remain in effect.



**APPALACHIAN
REGIONAL
COMMISSION**

*A Proud Past,
A New Vision*

**Appalachian Regional Commission
1666 Connecticut Avenue NW, Suite 700
Washington, DC 20009**

Amendment to Contract: (Minor changes in time, budget, or scope of project.)

Amendment No: 1

Date: 12/12/2016

**ARC Project
Number/Title** KY-18546

KY 2436 Airport Road Waterline Extension

Grantee:
Breathitt County Water District
1137 Main Street
Jackson, KY 41339

ARC Project Coordinator:
Catherine Feerick
Phone: 202-884-7769
Fax: cbrazell@arc.gov
Email: cfeerick@arc.gov

Contact: Michael Matthew
Phone: 859-685-4523
Email: msteen@nei-ky.com

Change in Performance Period

The above referenced agreement is amended by extending the period of performance.

The new period of performance is 9/1/2016 to 12/31/2019.

Additional Amendment Comment:

Time extension executed via a certified Basic Agency Monitoring Report.

(ARC Project Coordinator)

1666 CONNECTICUT AVENUE, NW, SUITE 700 WASHINGTON, DC 20009-1068 (202) 884-7700 FAX (202) 884-7691 www.arc.gov

Alabama
Georgia

Kentucky
Maryland

Mississippi
New York

North Carolina
Ohio

Pennsylvania
South Carolina

Tennessee
Virginia

West Virginia

Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20170001

Page 1 of 7

PORT0000000047 (Water Line) 3,225 linear feet of 3 inch PVC, 2,000 linear feet of 3 inch DI, 500 linear feet of 4 inch PVC, 200 linear feet of HDPE water line:

Narrative Requirements:

Condition No.	Condition
T-1	Construction of this project shall not result in the water system's inability to supply consistent water service in compliance with 401 KAR 8:010 through 8:600. [401 KAR 8:100 Section 5]
T-2	The public water system shall not implement a change to the approved plans without the prior written approval of the cabinet. [401 KAR 8:100 Section 4(3)]
T-3	A proposed change to the approved plans affecting sanitary features of design shall be submitted to the cabinet for approval in accordance with Section 2 of this administrative regulation. [401 KAR 8:100 Section 4(2)]
T-4	During construction, a set of approved plans and specifications shall be available at the job site. Construction shall be performed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 3(1)]
T-5	Unless construction begins within two (2) years from the date of approval of the final plans and specifications, the approval shall expire. [401 KAR 8:100 Section 3(3)]
T-6	Upon completion of construction, a professional engineer shall certify in writing that the project has been completed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 4(1)]
T-7	The system shall be designed to maintain a minimum pressure of 20 psi at ground level at all points in the distribution system under all conditions of flow. [Recommended Standards for Water Works 8.2.1, Drinking Water General Design Criteria IV.1.a]
T-8	Water lines should be hydraulically capable of a flow velocity of 2.5 ft/s while maintaining a pressure of at least 20 psi. [Drinking Water General Design Criteria IV.1.b]
T-9	The normal working pressure in the distribution system at the service connection shall not be less than 30 psi under peak demand flow conditions. Peak demand is defined as the maximum customer water usage rate, expressed in gallons per minute (gpm), in the pressure zone of interest during a 24 hour (diurnal) time period. [Drinking Water General Design Criteria IV.1.d]
T-10	When static pressure exceeds 150 psi, pressure reducing devices shall be provided on mains or as part of the meter setting on individual service lines in the distribution system. [Drinking Water General Design Criteria IV.1.c]
T-11	The minimum size of water main in the distribution system where fire protection is not to be provided should be a minimum of three (3) inch diameter. Any departure from minimum requirements shall be justified by hydraulic analysis and future water use, and can be considered only in special circumstances. [Recommended Standards for Water Works 8.2.2, Drinking Water General Design Criteria IV.2.b]

Distribution-Major Construction

Breathitt Co Water District
Facility Requirements

Activity ID No.:APE20170001

Page 2 of 7

PORT0000000047 (Water Line) 3,225 linear feet of 3 inch PVC, 2,000 linear feet of 3 inch DI, 500 linear feet of 4 inch PVC, 200 linear feet of HDPE water line:

Narrative Requirements:

Condition No.	Condition
T-12	Water mains not designed to carry fire-flows shall not have fire hydrants connected to them. [Recommended Standards for Water Works 8.4.1.b]
T-13	Flushing devices should be sized to provide flows which will give a velocity of at least 2.5 feet per second in the water main being flushed. [Recommended Standards for Water Works 8.2.4.b, Recommended Standards for Water Works 8.4.1.b]
T-14	No flushing device shall be directly connected to any sewer. [Recommended Standards for Water Works 8.2.4.b, Recommended Standards for Water Works 8.4.1.b]
T-15	Pipe shall be constructed to a depth providing a minimum cover of 30 inches to top of pipe. [Drinking Water General Design Criteria IV.3.a]
T-16	Water mains shall be covered with sufficient earth or other insulation to prevent freezing. [Recommended Standards for Water Works 8.7]
T-17	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 of at least six inches below the bottom of the pipe. [Recommended Standards for Water Works 8.7]
T-18	Water line installation shall incorporate the provisions of the AWWA standards and/or manufacturer's recommended installation procedures. [Recommended Standards for Water Works 8.7]
T-19	All materials used for the rehabilitation of water mains shall meet ANSI/NSF standards. [Recommended Standards for Water Works 8.1]
T-20	Packing and jointing materials used in the joints of pipe shall meet the standards of AWWA and the reviewing authority. [Recommended Standards for Water Works 8.1]
T-21	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 8.7]
T-22	All materials including pipe, fittings, valves and fire hydrants shall conform to the latest standards issued by the ASTM, AWWA and ANSI/NSF, where such standards exist, and be acceptable to the Division of Water. [Recommended Standards for Water Works 8.1]
T-23	Water mains which have been used previously for conveying potable water may be reused provided they meet the above standards and have been restored practically to their original condition. [Recommended Standards for Water Works 8.1]

Distribution-Major Construction

Breathitt Co Water District
Facility Requirements

Activity ID No.:APE20170001

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PORT0000000047 (Water Line) 3,225 linear feet of 3 inch PVC, 2,000 linear feet of 3 inch DI, 500 linear feet of 4 inch PVC, 200 linear feet of HDPE water line:

Narrative Requirements:

Condition No.	Condition
T-24	Manufacturer approved transition joints shall be used between dissimilar piping materials. [Recommended Standards for Water Works 8.1]
T-25	Pipes and pipe fittings containing more than 8% lead shall not be used. All products shall comply with ANSI/NSF standards. [Recommended Standards for Water Works 8.1]
T-26	The minimum size of water main which provides for fire protection and serving fire hydrants shall be six inch diameter. [Recommended Standards for Water Works 8.2, Drinking Water General Design Criteria IV.2.a]
T-27	Gaskets containing lead shall not be used. Repairs to lead joint pipe shall be made using alternative methods. [Recommended Standards for Water Works 8.1]
T-28	Pipe materials shall be selected to protect against both internal and external pipe corrosion. [Recommended Standards for Water Works 8.1]
T-29	Dead end mains shall be equipped with a means to provide adequate flushing. [Recommended Standards for Water Works 8.2]
T-30	The hydrant lead shall be a minimum of six inches in diameter. Auxiliary valves shall be installed on all hydrant leads. [Recommended Standards for Water Works 8.4.3]
T-31	A sufficient number of valves shall be provided on water mains to minimize inconvenience and sanitary hazards during repairs. [Recommended Standards for Water Works 8.3]
T-32	Wherever possible, chambers, pits or manholes containing valves, blowoffs, meters, or other such appurtenances to a distribution system, shall not be located in areas subject to flooding or in areas of high groundwater. Such chambers or pits should drain to the ground surface, or to absorption pits underground. The chambers, pits and manholes shall not connect directly to any storm drain or sanitary sewer. Blowoffs shall not connect directly to any storm drain or sanitary sewer. [Recommended Standards for Water Works 8.6]
T-33	At high points in water mains where air can accumulate provisions shall be made to remove the air by means of air relief valves. [Recommended Standards for Water Works 8.5.1]
T-34	Automatic air relief valves shall not be used in situations where flooding of the manhole or chamber may occur. [Recommended Standards for Water Works 8.5.1]

Distribution-Major Construction

Breathitt Co Water District
Facility Requirements

Activity ID No.:APE20170001

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PORT0000000047 (Water Line) 3,225 linear feet of 3 inch PVC, 2,000 linear feet of 3 inch DI, 500 linear feet of 4 inch PVC, 200 linear feet of HDPE water line:

Narrative Requirements:

Condition No.	Condition
T-35	The open end of an air relief pipe from automatic valves shall be extended to at least one foot above grade and provided with a screened, downward-facing elbow. [Recommended Standards for Water Works 8.5.2.c]
T-36	Discharge piping from air relief valves shall not connect directly to any storm drain, storm sewer, or sanitary sewer. [Recommended Standards for Water Works 8.5.2.d]
T-37	Water pipe shall be constructed with a lateral separation of 10 feet or more from any gravity sanitary or combined sewer measured edge to edge where practical. If not practical a variance may be requested to allow the water pipe to be installed closer to the gravity sanitary or combined sewer provided the water pipe is laid in a separate trench or undisturbed shelf located on one side of the sewer with the bottom of the pipe at least 18 inches above the top of the gravity sanitary or combined sewer pipe. [Drinking Water General Design Criteria IV.3.b]
T-38	Water lines crossing sanitary, combined or storm sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sanitary, combined or storm sewer with preference to the water main located above the sanitary, combined or storm sewer. [Drinking Water General Design Criteria IV.3.c]
T-39	At crossings, one full length of water pipe shall be located so both joints will be as far from the sewer as possible. [Recommended Standards for Water Works 8.8.3.b]
T-40	There shall be no connection between the distribution system and any pipes, pumps, hydrants, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into the system. [Recommended Standards for Water Works 8.10.1]
T-41	Water utilities shall have a cross connection program conforming to 401 KAR 8. [Recommended Standards for Water Works 8.10.1]
T-42	Installed pipe shall be pressure tested and leakage tested in accordance with the appropriate AWWA Standards. [Recommended Standards for Water Works 8.7.6]
T-43	New, cleaned and repaired water mains shall be disinfected in accordance with AWWA Standard C651. The specifications shall include detailed procedures for the adequate flushing, disinfection, and microbiological testing of all water mains. In an emergency or unusual situation, the disinfection procedure shall be discussed with the Division of Water. [Recommended Standards for Water Works 8.7.7]
T-44	A minimum cover of five feet shall be provided over pipe crossing underwater. [Recommended Standards for Water Works 8.9.2]

Distribution-Major Construction

Breathitt Co Water District

Facility Requirements

Activity ID No.:APE20170001

PORT0000000047 (Water Line) 3,225 linear feet of 3 inch PVC, 2,000 linear feet of 3 inch DI, 500 linear feet of 4 inch PVC, 200 linear feet of HDPE water line:

Narrative Requirements:

Condition No.	Condition
T-45	Valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves shall be easily accessible, and not subject to flooding for pipes crossing underwater. [Recommended Standards for Water Works 8.9.2.b]
T-46	Permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples on each side of the valve closest to the supply source for pipes crossing. [Recommended Standards for Water Works 8.9.2.c]

Distribution-Major Construction

Breathitt Co Water District
Facility Requirements

Activity ID No.:APE20170001

Page 6 of 7

PORT0000000048 (Hydropneumatic Pump Station) Hydro-Pneumatic VFD pump station with 2 pumps capable 30 gpm and 590 ft TDH each and 53 gallon bladder tank:

Narrative Requirements:

Condition No.	Condition
T-1	Construction of this project shall not result in the water system's inability to supply consistent water service in compliance with 401 KAR 8:010 through 8:600. [401 KAR 8:100 Section 5]
T-2	The public water system shall not implement a change to the approved plans without the prior written approval of the cabinet. [401 KAR 8:100 Section 4(3)]
T-3	A proposed change to the approved plans affecting sanitary features of design shall be submitted to the cabinet for approval in accordance with Section 2 of this administrative regulation. [401 KAR 8:100 Section 4(2)]
T-4	During construction, a set of approved plans and specifications shall be available at the job site. Construction shall be performed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 3(1)]
T-5	Unless construction begins within two (2) years from the date of approval of the final plans and specifications, the approval shall expire. [401 KAR 8:100 Section 3(3)]
T-6	Upon completion of construction, a professional engineer shall certify in writing that the project has been completed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 4(1)]
T-7	The system shall be designed to maintain a minimum pressure of 20 psi at ground level at all points in the distribution system under all conditions of flow. [Recommended Standards for Water Works 8.2.1, Drinking Water General Design Criteria IV.1.a]
T-8	Hydropneumatic (pressure) tanks, when provided as the only water storage are acceptable only for a maximum of 150 living units. [Recommended Standards for Water Works 7.2]
T-9	The tank shall be located above normal ground surface and be completely housed. [Recommended Standards for Water Works 7.2.1]
T-10	The capacity of the wells and pumps in a hydropneumatic system should be at least ten times the average daily consumption rate. [Recommended Standards for Water Works 7.2.2.a]
T-11	The gross volume of the hydropneumatic tank, in gallons, should be at least ten times the capacity of the largest pump, rated in gallons per minute. For example, a 250 gpm pump should have a 2,500 gallon pressure tank, unless other measures (e.g., variable speed drives in conjunction with the pump motors) are provided to meet the maximum demand. [Recommended Standards for Water Works 7.2.2.b]

Distribution-Major Construction

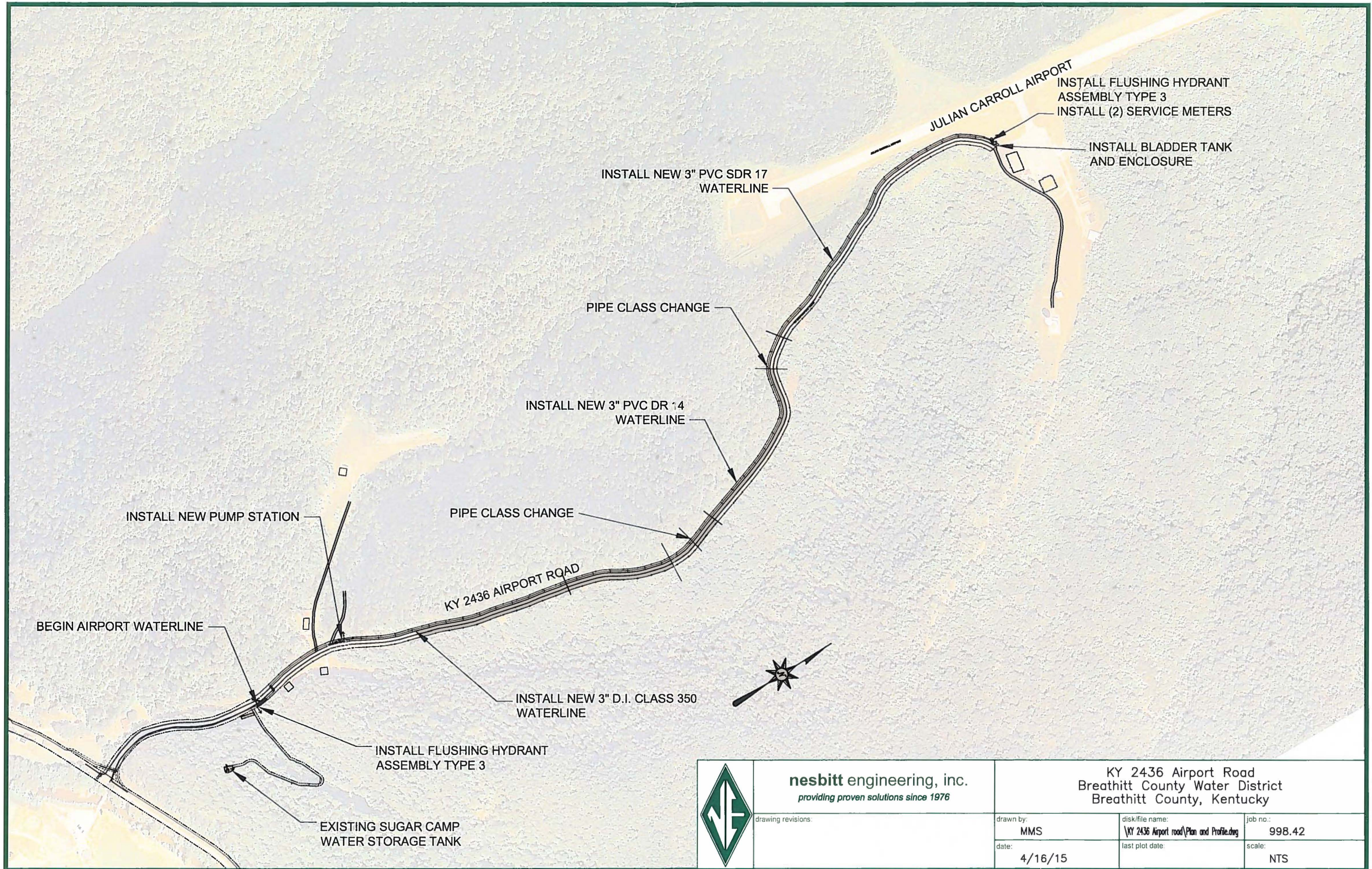
Breathitt Co Water District
Facility Requirements

Activity ID No.:APE20170001

PORT000000048 (Hydropneumatic Pump Station) Hydro-Pneumatic VFD pump station with 2 pumps capable 30 gpm and 590 ft TDH each and 53 gallon bladder tank:

Narrative Requirements:

Condition No.	Condition
T-12	The hydropneumatic tank(s) shall have bypass piping to permit operation of the system while the tank is being repaired or painted. [Recommended Standards for Water Works 7.2.3]
T-13	Each tank shall have an access manhole, a drain, and control equipment consisting of a pressure gauge, water sight glass, automatic or manual air blow-off, means for adding air, and pressure operated start/stop controls for the pumps. [Recommended Standards for Water Works 7.2.4]
T-14	A pressure relief valve shall be installed and be capable of handling the full pumpage rate of flow at the pressure vessel design limit. [Recommended Standards for Water Works 7.2.4]
T-15	Sizing of hydropneumatic storage tanks must consider the need for disinfectant contact time. [Recommended Standards for Water Works 7.2.2.c]



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KY 2436 Airport Road
 Breathitt County Water District
 Breathitt County, Kentucky

drawing revisions:

drawn by:
MMS

disk/file name:
 \KY 2436 Airport road\Plan and Profile.dwg

job no.:
998.42

date:
4/16/15

last plot date:

scale:
NTS

Breathitt County Water District

Opinion of Probable Project Cost 5/26/2017

KY 2436 Airport Road Waterline Extension

	As-Bid Construction Cost =	\$ 212,224.92
Other Project Related Costs		
Legal		\$1,838.00
Engineering		
PER		\$3,000.00
Design		\$20,515.98
Contract Admin.		\$5,128.99
Resident Observation		\$21,656.28
Permits (DOW, KTC, etc.)		\$5,000.00
Other Engineering (Easements, Survey, Reports, Hydraulics, etc.)		\$2,000.00
Project Contingencies		\$18,635.83
	Total Opinion of Probable Project and Construction Costs =	\$ 290,000.00

Possible Funding Sources		
Appalachian Regional Commission (Grant)	\$	215,000
Local Funds	\$	75,000
	Total Project Funds	\$ 290,000



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227 North Upper Street
Lexington, KY 40507-1016



Breathitt County
Water District

Making Breathitt County

A Better Place One Drop at a Time.

June 15, 2016

Peggy Satterly
Appalachian Regional Commission
Department for Local Government
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

RE: KY 2436 Airport Road Waterline Extension

Dear Ms. Satterly:

Matching funds have been provided by the Breathitt County Fiscal Court. The Breathitt County Water District commits to using these funds to provide the \$75,000.00 to match the ARC Grant for the Airport Road Waterline project.

Sincerely,



Bobby Thorpe Jr.
Chairman

MATTHEW G. BEVIN
GOVERNOR



CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

AARON B. KEATLEY
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

February 27, 2017

Bobby Thorpe
Breathitt Co Water District
1137 Main St Ste 305
Jackson (Breathitt), KY 41339

RE: KY 2436 Airport Road WLE
Breathitt County, KY
Breathitt Co Water District
AI #: 45303, APE20170001
PWSID #: 0131012-17-001

Dear Mr. Thorpe:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of a Hydro-Pneumatic VFD pump station with 2 pumps capable 30 gpm and 590 ft TDH each and a 53 gallon bladder tank. Also the construction of approximately 3,225 linear feet of 3 inch PVC, 2,000 linear feet of 3 inch DI, 500 linear feet of 4 inch PVC, 200 linear feet of 6-inch HDPE water line. 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 attached construction permit.

If you have any questions concerning this project, please contact Daniel Kulik at 502-782-6998.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Humphries".

Terry Humphries, P.E.
Supervisor, Engineering Section
Water Infrastructure Branch
Division of Water

TH:DK
Enclosures

c: Nesbitt Engineering Inc
Breathitt County Health Department
Division of Plumbing



Breathitt County Water District

KY 2436 Airport Road Waterline Extension

998-42

Electrical Rates - AEP (Tariff 215-Medium General Service)

Monthly Basic Fee	\$ 17.50
Usage Rate	\$ 0.10198 per KWH for first 200 KWH
	\$ 0.08736 per KWH after first 200 KWH
Demand Charge	\$ 1.91 per KW

Pump Data

Average Flow Rate	30	gpm
Horsepower	7.5	
Efficiency	0.75	
Hours of Operation	1.00	hours/day

Demand of Customers

Estimated Customers	2	Homes
New - Total Estimate Flow	350	gallons/day

Opinion of Probable Cost of Operation

Proposed Operating Conditions

New Production Cost

Purchase Price per 1,000 gallons (Purchased from the City of Jackson)	\$ 3.52
Total - Proposed Annual Cost of Purchased Water	\$ 449.68

Operation Costs

Pumping Costs								
Booster Station Electric Consumption	7.460	KW	7	KWH per Day	2,723	KWH per year		
Total Project Electric Consumption	7.460	KW	7	KWH per Day	2,723	KWH per year		
	Monthly Basic Fee (x 12 months)						\$ 210.00	
	Usage Rate (x 12 months)						\$ 272.96	
	Demand Charge (x 12 months)						\$ 170.98	
Total - Proposed Annual Pumping Cost								\$ 653.94
Total - Proposed Annual Production & Operation Costs								\$ 1,103.62

**Breathitt County Water District
KY 2436 Airport Road Waterline Extension
Certified Bid Tab**

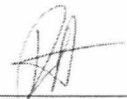


Item #	Item	Unit	Quantity	G & W Construction Co, Inc Morehead, KY		J & L Contractors, LLC Salersville, KY		Clay Pipeline, Inc. Manchester, KY		L & L Excavation Salersville, KY		Flo-Line Contracting Monticello, KY	
				Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
1	4" PVC SDR 17 Waterline	LF	600	\$ 13.00	\$ 7,800.00	\$ 6.00	\$ 3,600.00	\$ 16.30	\$ 9,780.00	\$ 6.50	\$ 3,900.00	\$ 27.00	\$ 16,200.00
2	3" Ductile Iron CL 350 Waterline	LF	1350	\$ 35.00	\$ 47,250.00	\$ 50.00	\$ 67,500.00	\$ 47.00	\$ 63,450.00	\$ 50.00	\$ 67,500.00	\$ 45.00	\$ 60,750.00
3	3" PVC C900 DR 14 Waterline Cell 12454 (305psi)	LF	975	\$ 12.00	\$ 11,700.00	\$ 8.50	\$ 8,287.50	\$ 17.00	\$ 16,575.00	\$ 50.00	\$ 48,750.00	\$ 23.00	\$ 22,425.00
4	3" PVC C900 DR 18 Waterline Cell 12454 (235psi)	LF	1200	\$ 12.00	\$ 14,400.00	\$ 8.00	\$ 9,600.00	\$ 17.45	\$ 20,940.00	\$ 20.00	\$ 24,000.00	\$ 30.00	\$ 36,000.00
5	3" PVC SDR 17 Waterline	LF	1800	\$ 12.00	\$ 21,600.00	\$ 5.00	\$ 9,000.00	\$ 15.25	\$ 27,450.00	\$ 5.50	\$ 9,900.00	\$ 19.00	\$ 34,200.00
6	4" D.I.M.J. Gate Valve & Box	EA	1	\$ 752.00	\$ 752.00	\$ 750.00	\$ 750.00	\$ 810.00	\$ 810.00	\$ 950.00	\$ 950.00	\$ 1,000.00	\$ 1,000.00
7	3" D.I.M.J. Gate Valve & Box	EA	2	\$ 722.00	\$ 1,444.00	\$ 700.00	\$ 1,400.00	\$ 767.75	\$ 1,535.50	\$ 850.00	\$ 1,700.00	\$ 900.00	\$ 1,800.00
8	6" HDPE DR11 Waterline- Directional Drill	LF	150	\$ 90.00	\$ 13,500.00	\$ 70.00	\$ 10,500.00	\$ 87.00	\$ 13,050.00	\$ 70.00	\$ 10,500.00	\$ 140.00	\$ 21,000.00
9	10.75" Steel Casing - Bore & Jack	LF	40	\$ 90.00	\$ 3,600.00	\$ 120.00	\$ 4,800.00	\$ 90.40	\$ 3,616.00	\$ 100.00	\$ 4,000.00	\$ 100.00	\$ 4,000.00
10	Combination Air Release Valve Assembly	EA	1	\$ 650.00	\$ 650.00	\$ 600.00	\$ 600.00	\$ 775.00	\$ 775.00	\$ 800.00	\$ 800.00	\$ 700.00	\$ 700.00
11	Flushing Hydrant Assembly Type 3	EA	2	\$ 2,000.00	\$ 4,000.00	\$ 2,500.00	\$ 5,000.00	\$ 1,801.00	\$ 3,602.00	\$ 2,500.00	\$ 5,000.00	\$ 2,800.00	\$ 5,600.00
12	5/8 x 3/4 Single Setter & Meter	EA	2	\$ 932.86	\$ 1,865.72	\$ 650.00	\$ 1,300.00	\$ 860.25	\$ 1,720.50	\$ 1,150.00	\$ 2,300.00	\$ 800.00	\$ 1,600.00
13	3/4" CI 200 service line (HDPE)	LF	80	\$ 5.29	\$ 423.20	\$ 3.50	\$ 280.00	\$ 12.00	\$ 960.00	\$ 3.50	\$ 280.00	\$ 10.00	\$ 800.00
14	Waterline Marker (Rhino #70453 w/decal)	EA	3	\$ 80.00	\$ 240.00	\$ 55.00	\$ 165.00	\$ 42.00	\$ 126.00	\$ 50.00	\$ 150.00	\$ 70.00	\$ 210.00
15	Hydro-pneumatic Pump Station	LS	1	\$ 50,000.00	\$ 50,000.00	\$ 55,000.00	\$ 55,000.00	\$ 52,276.00	\$ 52,276.00	\$ 60,000.00	\$ 60,000.00	\$ 53,000.00	\$ 53,000.00
16	Bladder Tank & Enclosure	LS	1	\$ 33,000.00	\$ 33,000.00	\$ 35,000.00	\$ 35,000.00	\$ 28,903.00	\$ 28,903.00	\$ 30,000.00	\$ 30,000.00	\$ 25,400.00	\$ 25,400.00
Total Base Bid					\$212,224.92		\$212,782.50		\$245,569.00		\$269,730.00		\$284,685.00

Note: Highlighted numbers represent a mathematical error that has been corrected based on proposed unit cost pricing. (No errors found)

I hereby certify that the above tabulation accurately represents bids, received, opened and read for Breathitt Co Water District, KY 2436 Airport Road Waterline Extension on May 26, 2017 @ 1pm.




 Project Engineer - Paul D. Nesbitt, PE Date 5/30/17