2008-00390

# Transmittal

Attention: Ms. S	tephanie Stum	bo, Executive	Director Date: 9/20/08 Job No:					
To:KY Public Service CommissionPhone:502-564-3940211 Sower BoulevardFrankfort, Kentucky 40602-0615502-564-3940								
Regarding: Application for CPCN Meade County Water District								
We are sending you: 🛛 Attached 🔄 Under separate cover via the following items								
Shop drawings		nts ange Order	Plans     Samples     Specifications       Other					
Copies	Date	No.	Description					
10	9/10/08	set	1 Original and 9 Copies of Application and Attachments for Certificate of Public Convenience and Necessity – Phase VII Water Lines and Storage Tank, Meade County Water District					
3	6/2008	set	Bid Plans and Specifications					
			RECEIVED					
			SEP 1 9 2008					
			PUBLIC SERVICE COMMISSION					
These are transmitted as checked below:								
	For approval     Approved as submitted     Resubmit copies for approval							
For your use       Approved as noted       Submit copies for distribution         As requested       Returned for corrections       Return corrected prints								
As requested     Returned for corrections     Return     corrected prints       For review/comment     Other     Other								
For bids due     Prints returned after loan to us								
Remarks Bids will expire on 10/17/2008; Your prompt attention is requested.								
Copy to	Copy to Signed Kevin J. Brian, PE (502-558-5814)							
If enclosures are not as noted, please notify us at once								

ONE COMPANY Many Solutions™

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Application for Certificate of Public Convenience and Necessity To Construct and Financing

(ABE NO: 2008-00390

## RECEIVED

SEP 19 2008

PUBLIC SERVICE COMMISSION

## **Before the Public Service Commission of Kentucky**

# Phase VII – Water Lines and Storage Tank

**Meade County Water District** 

September 2008



### **BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

### **IN THE MATTER OF:**

CASE NO:

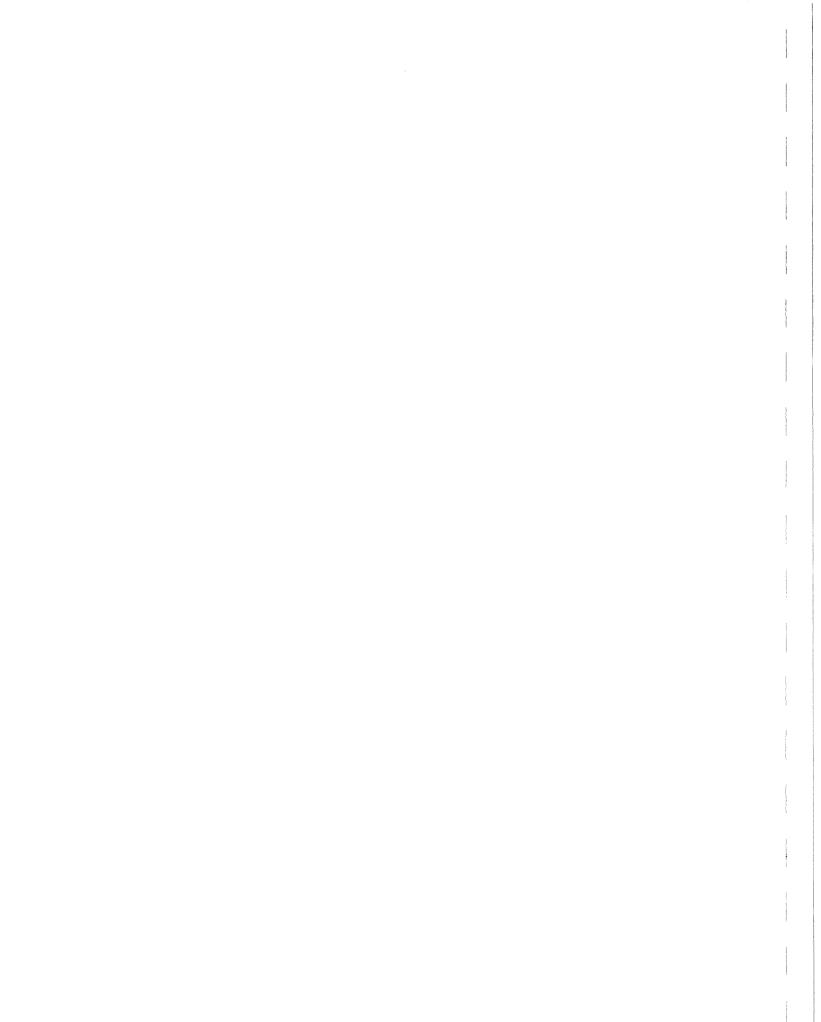
### APPLICATION OF THE MEADE COUNTY WATER DISTRICT FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A WATER STORAGE TANK AND WATER MAINS INTO UNSERVED AREAS OF MEADE COUNTY, KENTUCKY

# **APPLICATION**

\*\*\*\*\*\*

The Petition of the MEADE COUNTY WATER DISTRICT (the "District"), respectfully shows:

- 1. Applicant is a duly organized and water district organized and existing under the laws of the Commonwealth of Kentucky (KRS 74 et. seq.) and is engaged in the business of purchasing water wholesale and re-selling potable water and maintaining a water distribution system. The applicant now operates in an existing service area throughout Meade County, Kentucky outside the limits of the City of Brandenburg. The entire service area is within the boundaries of the Commonwealth of Kentucky.
- 2. The Post Office address of the applicant is Meade County Water District, 1003 Armory Place, Brandenburg, KY 40108.
- 3. Certified copies of the order of the Meade County Fiscal Court establishing the District and all amendments thereto are attached to this petition (Attachment #1).
- 4. That the Petitioner seeks a Certificate of Public Convenience and Necessity for Construction and Financing for said District to construct the Phase VII Water Lines and Storage Tank, the "Project", consisting of the installation of 72,455 lineal feet of 6-inch through 10-inch PVC/DI water mains and appurtenances, and the construction of a 500,000 gallon elevated water storage tank, crushed stone access road and parking area, altitude valve vault, electrical service, telemetry and related site work.
- 5. That the Petitioner proposes to finance the project with a \$500,000 grant appropriated by House Bill 380-2007; \$37,500 grant appropriated by House Bill 269-2003; a \$1,449,000 grant appropriated by House Bill 608-2008 and a \$896,284 KIA Fund "F" State Revolving Fund Loan. No rate increase will be required to fund this project. Income statements and balance sheets and other financial information of the District are provided in Attachment #2.
- 6. That Petitioner has observed the appropriate legal procedure in employing HDR|Quest Engineers, Louisville/Lexington Kentucky.



- 7. That the District will obtain its water supply from Hardin County Water District No. 1 in Hardin County and the City of Brandenburg in Meade County pursuant to a previous Water Purchase Contract.
- 8. That the facts relied upon to show that the Phase VII Water Lines and Storage Tank project is required by public convenience and necessity are:
  - a) Potentially 276 new customers will benefit from the proposed 6-inch through 10-inch water line extensions along KY 144 (Flaherty Road), KY 79, KY 428, KY 144 (Midway Road), KY 2727 (Haysville Road), and KY 710. In addition to providing water service to unserved areas, these extensions will improve system reliability and hydraulics by providing two grid-ties to the existing distribution system.
  - A 500,000 elevated water storage tank provides the District with total system storage to meet the minimum required storage of 24-hour average consumption required by 10 State Standards. The added storage will allow the District to grow and connect additional customers while providing the minimum storage required.
  - c) For final engineering report and other technical information see Attachment #3
  - d) Three (3) sets of certified plans and specifications have been sent via separate cover.
  - e) Franchises are not required for the proposed improvements.
  - f) Approvals and/or permits from Kentucky Division of Water, Kentucky Department of Highways and CSX Pipeline are included as Attachment #4.
  - g) The tank site off of KY 144 (Flaherty Road) for the proposed water storage tank was purchased in fee simple by the District from general funds. The property deed is included as Attachment #5.
  - h) The estimate annual cost of operation and maintenance after the project is completed is \$3,500.
  - The District received competitive bids on July 17, 2008. Certified bids in the amount of \$1,321,734.00 (Water Lines) and \$1,181,300 (Storage Tank) are included as Attachment #6. Bids will expire on October 17, 2008.
  - j) Summary of Project Costs are included as Attachment #7.
- 9. Whereas, the District's Board of Commissioners passed a resolution tentatively accepting the bids for the Project, contingent upon Kentucky Public Service Commission approval. See Attachment #8.
- 10. The District respectfully requests that in the event this Petition is not complete, if the reviewing personnel have questions or concerns regarding its content or if for any other reason questions arise, that the appropriate personnel contact directly and informally
  - a) Design Engineer- HDR|Quest Engineers, Inc., 401 West Main Street, Suite 500, Louisville, KY 40202: Attn: Mr. Kevin J. Brian, P.E., phone (502) 584-4118, fax (502) 589-30094, email, kevin.brian@hdrinc.com
  - b) District Council -Skeeters, Bennett & Wilson, 550 West Lincoln Trail Boulevard, P.O. Box 610, Radcliff, KY 40160, Attn: Mr. David T. Wilson, II, phone (270) 351-4404, fax (270)352-4626.

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c) Meade County Water District, 1003 Armory Place, Brandenburg, KY 40108, Attn: Mr. Joe Bartley, General Manager, phone (270) 422-5006, fax (270) 422-5068.

WHERETO, Meade County Water District request the Public Service Commission of the Commonwealth of Kentucky consider this application and issue a Certificate of Public Convenience and Necessity for Construction and Financing as described herein.

Dated at Radcliff, Kentucky, this 10 th day of September , 2008

**MEADE COUNTY WATER DISTRICT** 

SKEETERS, BENNETT AND WILSON 550 W. LINCOLN TRAIL BLVD., P.O. BOX 610 RADCLIFF, KENTUCKY 40160 (270) 351-4404

STATE OF KENTUCKY COUNTY OF HARDIN

I, Joe Bartley, General Manager of the Meade County Water District, state that I have read and understand the foregoing application; that the statements therein are true.

MEADE COUNTY WATER DISTRICT Bv JOE BAR/ILEY, GENERAL MANAGER

STATE OF KENTUCKY COUNTY OF MEADE

I, the undersigned, a Notary Public, do hereby certify that on this day of sector day of sworn, subscribed to and acknowledged that he is the General Manager of Meade County Water District and that he signed the foregoing document.

NOTARY PUBLIC, STATE OF KENTUCKY

My Commission Expires 2-22-12

## ATTACHMENT #1

ORDER ESTABLISHING MEADE COUNTY WATER DISTRICT

#### BEFORE THE COUNTY JUDGE/EXECUTIVE MEADE COUNTY, KENTUCKY

IN THE MATTER OF THE MEADE COUNTY WATER DISTRICT

### $\underline{O} \ \underline{R} \ \underline{D} \ \underline{E} \ \underline{R}$

The Meade County Water District having filed its Supplemental Petition herein requesting that this Court take the appropriate action to ratify the previous proceedings for the creation of said Water District and to correct the legal description of the present boundaries of said Water District, created by Order of the County Judge/Executive entered on May 10, 1983, and the County Judge/Executive being sufficiently advised,

NOW, THEREFORE, THE COUNTY JUDGE/EXECUTIVE OF MEADE COUNTY, KENTUCKY, DOES HEREBY ORDER AS FOLLOWS:

1. That this matter is hereby set for hearing at 10:00 A.M., C.D.T., on the 17th day of September , 1984, in the office of the County Judge/Executive in the Courthouse in Brandenburg, Kentucky, on all questions with respect to the matters contained in the Supplemental Petition filed by the Meade County Water District in this Court on July 25, , 1984.

2. That the County Clerk of Meade County, shall cause to be published in both the MEADE COUNTY MESSENGER and THE PIONEER, so as to comply with KRS Chapter 74 and KRS Chapter 424, a Notice of the filing of said Supplemental Petition setting out a description of what is alleged to be the correct boundaries of said District contained in the aforesaid Supplemental Petition, and notifying the residents of the area affected, and others, of the time and place of said Hearing and what action may be taken by them.

3. That all other questions raised in said Supplemental Petition are reserved for future ruling.

Dated	this	<u>25t</u> hday	of _J	ıly	, 1	984.	í
						6. nty Ji	Wall udge/Executive

#### CERTIFICATE OF COUNTY CLERK

The foregoing is a true copy of an Order entered by the Meade County Judge/Executive on July 25, \_\_\_\_\_, 1984.

Dated	this	27	day o	of	July	»	1984.		
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	· ·· · ·						Deputy	Clerk	

(Seal)

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#### BEFORE THE COUNTY JUDGE/EXECUTIVE MEADE COUNTY, KENTUCKY

IN THE MATTER OF THE MEADE COUNTY WATER DISTRICT

ORDER RECITING THE CREATION OF THE MEADE COUNTY WATER DISTRICT; REVISING THE DESCRIPTION OF THE BOUNDARIES OF SAID DISTRICT; AND APPROVING ALL PROCEEDINGS HAD BY THE COUNTY JUDGE/EXECUTIVE TO DATE IN CONNECTION WITH SAID DISTRICT.

The Meade County Water District, which was created by Order of the County Judge/Executive entered on May 10, 1983, having filed its Supplemental Petition herein requesting that the County Judge/Executive take the appropriate action to ratify and confirm the previous creation of said Water District, to revise the description of the boundaries of said District, and to approve all proceedings had by the County Judge/Executive to date in connection with said District,

THE COUNTY JUDGE/EXECUTIVE HEREBY MAKES THE FOLLOWING FINDINGS OF FACT:

1. That on February 25, 1983, a Petition was filed in the office of the County Judge/Executive of Meade County, Kentucky, containing the signatures of twenty-five (25) resident freeholders residing in the area described herein, requesting the County Judge/Executive to create a Water District pursuant to the provisions of Chapter 74 of the Kentucky Revised Statutes, the area of said proposed District being described in said Petition as being comprised of Meade County.

2. That thereafter there was published a "Public Notice" in THE PIONEER on March 2, 1983, and March 9, 1983, which published Notice stated that a Petition had been filed in the office of the Meade County Judge/Executive

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requesting the establishment of a Water District in accordance with the provisions of K3S Chapter 74. Said Notice further provided that any parties objecting to the creating of the District could file such objection within 30 days after the date of publication of the Notice. Said Notice did not describe the area to be embraced by the District.

3. That on May 10, 1983, the County Judge/Executive entered an Order, reciting the facts that (a) "a Petition for the establishment of a Water District was filed with the office of the Meade County Judge/Executive on the 25th day of February, 1983, said Petition requesting that a Water District be established with regards to the entire territory lying within Meade County," (b) "said Petition was duly filed and contained the signatures of 25 resident freeholders of the proposed county district," and (c) "a hearing was duly held on March 30, 1983, for the purpose of hearing an objection to the Petition filed by Ben Cox in the form of a letter," and then ordering that "there be and it is hereby established a water district which shall consist of all territory within Meade County, which shall be known as the Meade County Water District."

4. That on June 28, 1984, upon the recommendation of the County Judge/Executive, the Fiscal Court of Meade County entered an Order appointing three Commissioners of said Water District, as follows:

- A. George Thomas for a term of two years, from June 21, 1983, through June 20, 1985;
- B. Melvin Dowell for a term of three years, from June 21 1983, through June 20, 1986; and
- C. Ray Griffee for a term of four years, from June 21, 1983, through June 20, 1987.

5. That said Order further set the amount of Bond for each Commissioner at \$25,000.

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6. That said District has filed an application or applications with the United States Department of Housing and Urban Development and with the Farmers Home Administration (FmHA) of the United States Department of Agriculture requesting a grant and/or a loan from each to finance the construction of a new waterworks system to serve the District, and the District has been advised that it will receive approval of an FmHA Loan and of a HUD (CDBG) Grant in amounts sufficient to accomplish the foregoing purposes. However, before any such funds may be made available, it is necessary for the County Judge/Executive to revise the boundaries of the District as set out in paragraph 7 below and to clarify the appointments of the three Water Commissioners by the County Judge/Executive, with the approval of the Fiscal Court.

11.-

7. That the following is a description of the total area which was originally intended (according to said Supplemental Petition) and which the Commissioners of the District now desire to constitute the boundaries of the District:

All of Meade County, Kentucky, except the incorporated cities of Bradenburg, Muldraugh, and Ekron.

8. That said Supplemental Petition was filed in this Court on July 25, 1984, and the County Judge/Executive has set the matter for hearing on September 17, at 10:00 A.M., E.D.T. Notice of the filing of such Supplemental Petition, of the rights of the various parties to object thereto and of the setting of the matter for hearing on the aforesaid date and hour, was duly published in both the MEADE COUNTY MESSENGER and THE PIONEER on August 15, 1984, and on September 5, 1984, and Affidavits of Publication with reference to such publications have been duly filed in this Court and made a part hereof and are duly approved hereby.

- 3 -

9. That all of the original Petitioners who signed the Petition filed in this Court for the creation of said Water District were at the time of signing same both residents and freeholders of the area embraced by the boundaries of said District described in paragraph 7 above.

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10. That there is no recognized central water system serving the residents of the District, as originally or as now contemplated, and the only water available for use by said residents is water which may be pumped from wells or cisterns or carried from springs, which water supply is inadequate for the use of the residents of said District.

11. That it is desperately urgent and necessary that the appropriate Order be entered reciting and supplementing the previous creation of the District and revising the description of its boundaries, in order to enable the District to proceed without delay in an attempt to secure funds to finance the construction of a new waterworks system for the District, all as permitted and provided for in KRS Chapter 74.

12. That no other City, District, or other municipal corporation, or any part thereof, is located within the proposed boundaries of the District, as described herein.

13. That the Public Service Commission of Kentucky entered an Order on June 4, 1974, approving the creation of the District. A letter dated November 4, 1982, written by Mr. Richard D. Heman, Jr., Secretary of the Public Service Commission, stating that such Order was still in effect has been filed as an exhibit to the original Petition of the District.

14. That no written objections have heretofore been filed with the County Judge/Executive or with the County Clerk and no person was present in open Court on this date or prior to the stipulated deadline for the purpose of making objections to any of said proceedings or to the entry of this Order.

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15. That the County Judge/Executive has further considered all pleadings and all other matters relating to the creation of said Water District, including the membership of the Board of Water Commissioners of said District, their respective terms of office, and the surety bond previously executed by each of them.

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NOW, THEREFORE, IT IS HEREBY ORDERED AND ADJUDGED AND THE COUNTY JUDGE/EXECUTIVE HEREBY MAKES THE FOLLOWING CONCLUSIONS OF LAW:

A. That it is hereby acknowledged that the Meade County Water District was created by the proceedings set out above and was necessary for the public health, convenience, fire protection, and comfort of the residents of said District.

B. That the description of the area embraced by said District be and the same is hereby revised so that the boundaries of said District shall be those specified in paragraph 7 above.

C. That all Orders heretofore entered by the County Judge/Executive and/or by the Fiscal Court of Meade County, with respect to the appointment of the Commissioners of said Water District, be and the same are, hereby ratified, confirmed, and approved, and it is hereby determined that the present Commissioners of said Water District and their present terms of office are as follows:

	EXPIRATION DATES OF
NAMES	CURRENT TERMS OF OFFICE
George Thomas	June 20, 1985
Melvin Dowell	June 20, 1986
Ray Griffee	June 20, 1987

D. That it is hereby determined that the appropriate oaths of office have been administered to said three members of the Board of Water Commissioners, that the appropriate surety bonds have been duly executed by said members and by their sureties, the execution of which surety bonds have been approved by this County Judge/Executive, that said Water District is a duly incorporated Water District existing under the laws of the Commonwealth of Kentucky, including KRS Chapter 74, with boundaries as specified in paragraph 7 above, and that said three members are the duly qualified and acting members of the Board of Water Commissioners of said Water District, with terms of office expiring as set out above.

Entered this 17th day of September, 1984.

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County Judge/Executive

#### CERTIFICATE OF COUNTY CLERK

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It is hereby certified that the foregoing is a true and accurate copy of an Order of the County Judge/Executive duly entered on September 17, 1984, that the Affidavits of Publication referred to in paragraph 8 of said Order have been filed with and approved by the County Judge/Executive, said Affidavits being on file in my office in Brandenburg, Kentucky, and that said Order has been duly recorded in my office and is of record in County Judge/Executive Order Book 4, Page 222.

IN TESTIMONY WHEREOF, witness my signature and official seal this 20th day of September, 1984.

(Seal)

County Clerk

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MINUTES OF REGULAR MEETING OF BOARD OF COMMISSIONERS OF THE MEADE COUNTY WATER DISTRICT, HELD ON June 14, 1984.

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A regular meeting of the Board of Commissioners (the "Commission") of the Meade County Water District of Meade County, Kentucky, was held at <u>7:00 P.M., E.D.T., on</u> <u>Juny 19</u>, 1984, at the Meade County Courthouse in Brandenburg, Kentucky.

George W. Thomas, Chairman, presided and Melvin H. Dowell, Secretary, recorded the Minutes of the meeting. Stuart Ray Griffee was also present. Said three persons constituted all of the Water Commissioners of the District. No Commissioners were absent.

Thereupon, a motion was made by Stuart Ray Griffee, seconded by Melvin H. Dowell, and unanimously carried that the following Resolutions be adopted:

\*

RESOLVED that the Commission of the Meade County Water District hereby authorizes and directs the filing of a Supplemental Petition with the Meade County Judge/Executive, requesting the County Judge/Executive to enter an Order (1) amending the description of the boundaries of the Water District set out in the Order entered on May 10, 1983, to provide that the total area which was originally intended to, and shall, constitute the boundaries of the District shall be described as "all of Meade County, Kentucky, except the incorporated cities of Brandenburg, Muldraugh, and Ekron", and (2) authorizing, approving, ratifying, and confirming all Orders heretofore entered by the County Judge/Executive with respect to the establishment and creation of this Water District, subject to such amendment of the description of the boundaries of the District.

BE IT FURTHER RESOLVED that the form of Supplemental Petition presented to this Commission, to be filed with the Meade County Judge/Executive seeking such Order, having been read to this Commission, be and the same is hereby approved, to be executed by this Commission, and a copy of same is ordered to be filed in the proceedings of the Meade County Water District and attached to the Minutes of the meeting at which this Resolution is adopted and made a part hereof as if copied in full herein.

BE FURTHER RESOLVED that the Chairman and the members of the Commission of this Water District are authorized to take all necessary action to file the aforesaid Supplemental Petition with the County Judge/Executive and to accomplish the amendment and ratification set out therein.

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There being no further business to come before the meeting a motion was made, seconded, and unanimously carried that the meeting be adjourned. Whereupon the meeting was adjourned.

MEADE COUNTY WATER DISTRICT

By Alar

(Seal of Water District)

Attest:

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#### CERTIFICATE OF SECRETARY

I, MELVIN H. DOWELL, the duly elected, qualified, and acting Secretary of the Meade County Water District, of Meade County, Kentucky, hereby certify that the foregoing is a true copy of an excerpt of the Minutes of a meeting of the Board of Commissioners of said Water District, held on <u>June 19</u>, 1984, insofar as such Minutes pertain to the matters referred to in said excerpt, that said meeting was held in accordance with all applicable requirements of KRS 61.810, 61.815, 61.820, and 61.825, and that a quorum was present.

Dated this 19th day of June, 1984. Melvin H. Dawell

(Seal of Water District)

NOTICE AS TO FILING OF A SUPPLEMENTAL PETITION OF THE MEADE COUNTY WATER DISTRICT FOR APPROVAL AND RATIFICATION OF THE PREVIOUS CREATION OF SAID DISTRICT, FOR CORRECTION OF THE BOUNDARIES OF SAID DISTRICT; AND APPROVAL OF ALL PROCEEDINGS HAD BY THE MEADE COUNTY JUDGE/EXECUTIVE TO DATE IN CONNECTION WITH SAID DISTRICT.

Notice is hereby given that the Meade County Water District has filed a Supplemental Petition with the Meade County Judge/Executive, requesting said County Judge/Executive to enter an Order ratifying and confirming all Orders heretofore entered by the County Judge/Executive with respect to the establishment and creation of said District and correcting the boundaries of said District.

Said Supplemental Petition refers to the original Petition for the creation of the District filed with said County Judge/Executive on February 25, 1983, the Order of the County Judge/Executive creating the District on May 10, 1983, and the subsequent Order of the Fiscal Court of said County appointing members of the Board of Water Commissioners of said District, fixing their terms of office, and dealing with related matters. Said Supplemental Petition requests the Court to ratify and confirm the creation of the District and provides the following description as being the exact description of the area which the District now proposes to include within its boundaries:

All of Meade County, Kentucky, except the incorporated cities of Brandenburg, Muldraugh, and Ekron.

Within thirty days after the first publication of this Notice on August 1, , 1984, any resident of said area described above, may file with the County Clerk of Meade County, Kentucky, at his office in the County Courthouse in Brandenburg, Kentucky, objections to the action sought by said Meade County Water District and to the Orders requested by said District ratifying and approving the previous creation of the District, and/or may object to the effectiveness of the prior Orders creating said District, appointing its Commissioners, and any related proceedings pertaining to said District as previously entered by the County Judge/Executive and/or the Fiscal Court.

A Hearing has been set to be held on the matter on <u>September 17th</u> 1984, at 10:00 A.M., C.D.T., in the office of the County Judge/Executive, at the County Courthouse in Brandenburg, Kentucky at which time any resident of the area described above or any other interested party, may appear and be heard on any prior objection filed by him concerning the matter or with respect to any aspect of the matter.

Dated this \_\_\_\_\_, 1984. (Signed) Mike Jones, County Clerk.

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### BEFORE THE COUNTY JUDGE/EXECUTIVE MEADE COUNTY, KENTUCKY

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#### IN THE MATTER OF THE MEADE COUNTY WATER DISTRICT

#### SUPPLEMENTAL PETITION

The Meade County Water District, by its appointed Commission, for its Supplemental Petition herein, states as follows:

1. That on February 25, 1983, a Petition was filed in the office of the County Judge/Executive of Meade County, Kentucky, containing the signatures of twenty-five (25) resident freeholders residing in the area described herein, requesting the County Judge/Executive to create a Water District pursuant to the provisions of Chapter 74 of the Kentucky Revised Statutes, the area of said proposed District being described in said Petition as being comprised of Meade County.

2. That thereafter there was published a "Public Notice" in THE PIONEER on March 2, 1983, and March 9, 1983, which published Notice stated that a Petition had been filed in the office of the Meade County Judge/Executive requesting the establishment of a Water District in accordance with the provisions of KRS Chapter 74. Said Notice further provided that any parties objecting to the creating of the District could file such objection within 30 days after the date of publication of the Notice. Said Notice did not describe the area to be embraced by the District.

3. That on May 10, 1983, the County Judge/Executive entered an Order, reciting the facts that (a) "a Petition for the establishment of a Water District was filed with the office of the Meade County Judge/Executive on the

- 1 -

25th day of February, 1983, said Petition requesting that a Water District be established with regards to the entire territory lying within Meade County," (b) "said Petition was duly filed and contained the signatures of 25 resident freeholders of the proposed county district," and (c) "a hearing was duly held on March 30, 1983, for the purpose of hearing an objection to the Petition filed by Ben Cos in the form of a letter," and then ordering that "there be and it is hereby established a water district which shall consist of all territory within Meade County, which shall be known as the Meade County Water District."

4. That on June 28, 1984, upon the recommendation of the County Judge/Executive, the Fiscal Court of Meade County entered an Order appointing three Commissioners of said Water District, as follows:

- A. George Thomas for a term of two years, from June 21, 1983, through June 20, 1985;
- B. Melvin Dowell for a term of three years, from June 21 1983, through June 20, 1983; and
- C. Ray Griffee for a term of four years, from June 21, 1983, through June 20, 1987.

5. That said Order further set the amount of Bond for each Commissioner at \$25,000.

6. That said District has filed an application or applications with the United States Department of Housing and Urban Development and with the Farmers Home Administration (FmHA) of the United States Department of Agriculture requesting a grant and/or a loan from each to finance the construction of a new waterworks system to serve the District, and the District has been advised that it will receive approval of an FmHA Loan and of a HUD (CDBG) Grant in amounts sufficient to accomplish the foregoing purposes. However, before any such funds may be made available, it is necessary for the District to establish that it has been validly established, and questions have been raised as to the validly of the creation of the District, in the following particulars:

to and ?

- (a) The sufficiency of the original description of the boundaries of the District.
- (b) The adequacy of the publication of the Notice of the Filing of the Petition, without including in such published Notice the full description of the boundaries of said proposed District.
- (c) The appointments of the three Water Commissioners by the Fiscal Court,, instead of by the County Judge/Executive, with the approval of the Fiscal Court, and the failure of the recital of the administration of the Oath of Office to such Water Commissioners.

7. That the following is a description of the total area which was originally intended and which the Commissioners of the District now desire to constitute the boundaries of the District:

All of Meade County, Kentucky, except the incorporated cities of Brandenburg, Muldraugh, and Ekron.

8. That Petitioner files this Supplemental Petition with the intention of observing all of the legal steps and technical procedures required for the initial creation of a Water District, with the request that the County Judge/Executive now enter an Order confirming, ratifying, and approving the previous creation of this Water District. Petitioner further requests that said Order authorize and approve the amended description of the boundaries of the District as set forth in paragraph 7 above. Consistent wiht the requirements for the filing of a Petition for the initial creation of a water district, Petitioner further alleges as follows:

- 3 --



- (a) That all of the original Petitioners who signed the original Petition filed in this Court for the creation of said Water District are both residents and freeholders of the area embraced by the boundaries of said District described in paragraph 7 above.
- (b) That there is no recognized central water system serving the residents of the District, as originally or as now contemplated, and the only water available for use by said residents is water which may be pumped from wells or cisterns or carried from springs, which water supply is inadequate for the use of the residents of said District.
- (c) That it is desperately urgent and necessary that the appropriate Order be entered affirming, ratifying, and approving the creation of the District as now contemplated in order to enable the District to proceed without delay in its efforts to obtain financing for the construction of a new waterworks system for the District, all as permitted and provided for in KRS Chapter 74.

WHEREFORE, Petitioner respectfully requests:

A. That the County Judge/Executive enter an Order designating a date for a hearing on the matters contained herein and further directing that publication of a Notice be made informing the citizens and residents of the area described above, of the matters contained in this Supplemental Petition, of the date of hearing, and of their right to object to the entry of the Order requested, so as to comply with KRS 74.010(2) and 74.110, as amended, and KRS Chapter 424.

B. That the County Judge/Executive enter an Order amending and approving the description set out in paragraph 7 of this Supplemental Petition, which description sets forth the exact territory which the District proposes to serve.

C. That the County Judge/Executive enter an Order authorizing, approving, ratifying, and confirming all Orders heretofore entered by the County Judge/Executive with respect to the establishment and creation of said

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Water District subject to the more specific description of the boundaries thereof contained in paragraph 7 hereof, that the County Judge/Executive grant all other proper and appropriate relief and enter all other proper and appropriate Orders consistent with the provisions of Chapters 74 and 424 of the Kentucky Revised Statutes, for the benefit of the District and to accomplish the purposes set out above.

MEADE COUNTY WATER DISTRICT

STATE OF KENTUCKY ) ) SS COUNTY OF MEADE )

The Affiant, GEORGE W. THOMAS, states that he is the duly appointed and elected Chairman of the Meade County Water District and that the statements contained in the foregoing Supplemental Petition are true as he verily believes.

Subscribed and sworn to before me by GEORGE W. THOMAS, Chairman of the Meade County Water District, on this June 19, 1984.

My Commission expires: \_\_\_\_

ic, Meade County, Kentucky

(Seal of Notary)

(Seal)

#### CERTIFICATE OF COUNTY CLERK

The foregoing is a true copy of a Supplemental Petition filed in the office of the Meade County Judge/Executive on July 25, \_\_\_\_\_, 1984, which Supplemental Petition appears of record in Fiscal Court Order Book 13 \_\_\_\_\_, Page 391 \_\_\_\_\_, in my office.

Dated this	July 27,	, 1984.	-
			$A \cdot I \cap$
			/ like Janes
			' Meade County Clerk
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#### MEADE COUNTY WATER DISTRICT

#### SUPPLEMENTAL PETITION

#### HEARING

#### SEPTEMBER 17, 1984

THE HEARING WAS CALLED TO ORDER AT 10:00 a.m. WITH JUDGE EXECUTIVE BERT E. WATTS AS MODERATOR. ATTENDING THE HEARING WERE: JESSICA BASKETT, CARL BUCHLAR AND MARJORIE EMBRY.

JUDGE WATTS EXPLAINED THE PURPOSE OF THE HEARING WAS TO CONFIRM AND RATIFY CREATION OF THE WATER DISTRICT AND PROVIDE AN EXACT DESCRIPTION OF THE AREA INCLUDED IN ITS BOUNDARIES. NO QUESTIONS OR OBJECTIONS WERE É NTERTAINED.

HEARING WAS ADJOURNED AT 10:15 a.m.

#### MEADE COUNTY WATER DISTRICT Meade County, Kentucky

#### OPINION ON DUE INCORPORATION AND CONTINUED EXISTENCE OF WATER DISTRICT

The undersigned, RUBIN & HAYS, Suite 300, 209 South Fifth Street, Louisville, Kentucky 40202, and WADE & DARNALL, Rivertown Plaza, Brandenburg, Kentucky 40108, representing the Meade County Water District of Meade County, Kentucky (the "District"), hereby certify as follows:

1. That we have examined the organizational documents as to the creation of said District, including the Order of the Meade County Court creating the District, all records in said Court concerning the District, and all proceedings of the District in connection with its organization.

2. That we are of the opinion that the District was duly incorporated, pursuant to KRS Chapter 74, by Order of the Meade County Judge/Executive entered on May 10, 1983, and by Order of said County Judge/Executive ratifying and confirming the creation of said District and correcting the description of the boundaries thereof, entered on September 17, 1984, which latter Order is on file in Order Book 4, Page 222, in the office of the County Clerk of Meade County, Kentucky.

3. That said District is in continued existence at this time and that none of the terms of office of its Commissioners have expired.

Dated this August 26, 1986.

WADE & DARNALL

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Made Bv Wade

Ravertown Plaza Brandenburg, Kentucky 40108

RUBIN & HAYS

Wm. Carl

Suite 300 209 South Fifth Street Louisville, Kentucky 40202

#### BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

A meeting of the Public Service Commission was held this date. Present: Chairman William A. Logan, Vice Chairman Barkley J. Sturgill and Commissioners Charles W. Berger, Robert E. Spurlin and Joe S. Wheeler, Jr.

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In the Matter of

THE PETITION OF RESIDENTS OF MEADE ) COUNTY, KENTUCKY, FOR A PRELIMINARY ) HEARING TO DETERMINE THE NEED FOR ) THE FORMATION OF THE MEADE COUNTY ) WATER DISTRICT. )

CASE NO, 5964

- i.

#### PREFACE

On February 25, 1974, a letter was received by the Public Service Commission from Judge James E. Greer, as spokesman for a group of people desiring to form a water district in Meade County, Kentucky. A check list and maps were received on March 22, 1974, setting out the location where they desire to form a water district and the number of residents in this area.

This case was set for hearing May 22, 1974. All parties of interest were notified and no protests were entered.

#### OPINION AND ORDER

After a review of the record and being fully advised, the Commission is of the opinion and finds:

(1) That no other water system in the area is able and willing to serve this community.

(2) That it is desirable that this community in some manner be served with pure, potable water.

(3) That the Commission at this time makes no findings as to the feasibility of this project, and further reserves this finding until such time as the District has been created by the County Court Order and has progressed to a point where the engineering, plans and specifications are complete and financing assured.

At that time the District should file with this Commission its application for a certificate of convenience and necessity

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and approval of rates and financing. Then a date and time for a formal hearing will be set.

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IT IS THEREFORE ORDERED That the petitioners of this Meade County community are hereby granted approval of this Commission to petition the County Court for the establishment of a water district.

Done at Frankfort, Kentucky, this 4th day of June, 1974. By the Commission

ATTEST:

Secretary

# ATTACHMENT #2

# FINANCIAL STATEMENTS

# MEADE COUNTY WATER DISTRICT

# AUDITED FINANCIAL STATEMENTS

DECEMBER 31, 2007

# <u>C O N T E N T S</u>

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STATEMENT OF REVENUE, EXPENDITURES AND RETAINED EARNINGS7
STATEMENT OF CASH FLOWS
STATEMENT OF REVENUE, EXPENDITURES AND RETAINED EARNINGS - BUDGETED AND ACTUAL
NOTES TO FINANCIAL STATEMENTS
SUPPLEMENTAL INFORMATION
INDEPENDENT AUDITORS' REPORT ON COMPLIANCE AND ON THE INTERNAL CONTROL OVER FINANCIAL REPORTING BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH <u>GOVERNMENT AUDITING</u> <u>STANDARDS</u>

#### Richardson Pennington & Skinner, PSC

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Joseph E. Richardson William A. Talley Jon D. Chesser Bob E. Wientjes Ruth A. Payne Kentucky Offices: Louisville Brandenburg Hardinsburg Leitchfield

#### **INDEPENDENT AUDITORS' REPORT**

Commissioners Meade County Water District Brandenburg, Kentucky

We have audited the accompanying financial statements of the business-type activities of Meade County Water District of Brandenburg, Kentucky as of and for the year ended December 31, 2007, which collectively comprise the City's basic financial statements as listed in the table of contents. These financial statements are the responsibility of the Commission's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of Meade County Water District as of December 31, 2007 and the respective changes in financial position and cash flows thereof for the year then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued a report dated March 23, 2008 on our consideration of the Meade County Water District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

The Meade County Water District has not presented the management's discussion and analysis required by the Governmental Accounting Standards Board, that the accounting principles generally accepted in the United States of America has determined necessary to supplement, although not required to be part of, the basic financial statements. We have applied certain limited procedures to the budgetary comparison information, which consisted primarily of inquires of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Meade County Water District's basic financial statements. The accompanying schedules listed in the table of contents are presented for purposes of additional analysis and are not a required part of the financial statements of Meade County Water District. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the financial statements taken as a whole.

Richardson, Pennington 1 Spinner, PSi

Louisville, Kentucky March 23, 2008

Richardson, Pennington & Skinner, PSC

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# MEADE COUNTY WATER DISTRICT STATEMENT OF NET ASSETS DECEMBER 31, 2007

ASSETS	2007
Current Assets:	106 117
Cash	496,447
Restricted cash	352,856
Prepaid insurance	11,926
Accounts receivable	113,176
Inventory - water	4,465
Inventory - parts	69,203
Total Current Assets	1,048,073
Fixed Assets:	
Transmission and distribution facilities	6,611,184
Waterline extensions	3,817,428
Equipment	481,770
Trucks	190,552
Buildings	962,144
Improvements	13,538
*	12 076 616
	12,076,616
Less accumulated depreciation	(2,879,998)
Net Fixed Assets	9,196,618
Other Assets:	
Land	55,310
Bond issuance costs (less amortization of \$4,840)	14,495
Total Other Assets	69,805
TOTAL ASSETS	\$ 10,314,496

The notes to the financial statements are an integral part of this statement.

#### MEADE COUNTY WATER DISTRICT STATEMENT OF NET ASSETS (CONTINUED) DECEMBER 31, 2007

LIABILITIES AND RETAINED EARNINGS	2007
Current Liabilities:	
Accounts payable	36,777
Notes payable - current portion	122,035
Customer deposits	80,264
Accrued expenses	7,422
Accrued interest - deposits	338
Accrued retirement payable	6,016
Accrued vacation & sick leave	42,177
Total Current Liabilities	295,029
Long-Term Liabilities:	
Notes payable	2,049,611
Less: Current portion of long-term debt	(122,035)
Total Long-Term Liabilities	1,927,576
Total Liabilities	2,222,605
Contributed capital in aid of construction	1,709,311
Net Assets	
Invested In Capital Assets, Net of Related Debt	7,147,007
Unrestricted	(764,427)
Total Net Assets	6,382,580
TOTAL LIABILITIES AND RETAINED EARNINGS	\$ 10,314,496

The notes to the financial statements are an integral part of this statement.

Richardson, Pennington & Skinner, PSC

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#### MEADE COUNTY WATER DISTRICT STATEMENT OF REVENUE, EXPENSES, AND CHANGES IN FUND NET ASSETS FOR THE YEAR ENDED DECEMBER 31, 2007

	2007
Revenues:	
Water service	1,716,404
Total Revenues	1,716,404
Operating Expenses:	
Water test	5,387
Tools	7,182
Depreciation	317,822
Amortization	966
Payroll taxes	33,315
Utility tax	43,307
Other taxes and licenses	4,070
Salaries and wages	406,140
Commissioners pay	18,775
Employees pension and benefits	63,135
Water purchase	405,269
Purchased power	17,649
Repairs and maintenance	64,764
Billing expense	17,262
Materials and supplies	3,379
Professional fees	6,463
Contractual services	28,474
Transportation expense	30,097
Health insurance	58,944
Other insurance	26,717
Bad debts	9,948
Advertising	1,560
Public service assessment	2,773
Equipment rental	735
Office expenses	9,677
Uniforms	8,937
Communications	1,529
Telephone	10,656
Dues, fees and training	7,726
Gravel	1,761
Miscellaneous	2,668
Total Operating Expenses	1,617,087
Operating Income	99,317
Nonoperating revenue (expenses)	
KIA Grant	545,969
Interest Income	32,411
Debt service-interest	(127,332)
Total Nonoperating revenues (expenses)	451,048
Change in Fund Balance	550,365
Net Assets, January 1, 2007	5,832,215
Net Assets, December 31, 2007	\$ 6,382,580

The notes to the financial statements are an integral part of this statement.

Richardson, Pennington & Skinner, PSC

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# MEADE COUNTY WATER DISTRICT STATEMENT OF CASH FLOWS YEAR ENDED DECEMBER 31, 2007

	2007
Cash Flow From Operating Activities	
Change In Net Assets	\$ 550,365
Adjustments To Reconcile Change In Net Assets	. ,
To Net Cash Provided By Operations:	
Depreciation	317,822
Amortization	966
Increase In:	
Inventory	(15,283)
Customer deposits	3,036
Accrued liabilities	4,196
Decrease In:	
Accounts receivable	7,842
Prepaid expenses	169
Accounts payable	(11,868)
Net Cash Provided By	
Operating Activities	857,245
Cash Flows From Investing Activities	
Purchase of fixed assets	(1,173,128)
Net Cash Used By	
Investing Activities	(1,173,128)
Cash Flows From Financing Activities	
Contributed capital	90,706
Payment on long-term debt	(101,058)
Net Cash Used By	
Financing Activities	(10,352)
Net Decrease in Cash	(326,235)
Cash at January 1, 2007	1,175,538
Cash at December 31, 2007	\$ 849,303
Supplemental Disclosures: Cash paid for interest	\$ 127,332

The notes to the financial statements are an integral part of this statement.

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#### **NOTE 1 - ORGANIZATION AND ACCOUNTING POLICIES**

The Meade County Water District is a water distribution system organized under the laws of the State of Kentucky. The District is exempt from Federal, State and Local income taxes. It is controlled by a board of commissioners appointed by the County Judge-Executive. The District purchases its water from the Commission of Brandenburg and Hardin County #1 under a long-term contract and the sale of this water is the source of the district operating revenues.

The Meade County Water District's policy is to prepare its financial statements using the economic resources measurement focus and the accrual basis of accounting. Under this method, all assets and liabilities associated with operations are included on the balance sheet, and revenues recorded when earned and expenses are recorded at the time liabilities are incurred. The Department's reporting entity applies all relevant Governmental Accounting Standards Board (GASB) pronouncements. Proprietary funds and similar component units apply Financial Accounting Standards Board (FASB) pronouncements and Accounting Principles Board (APB) opinions issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements, in which case, GASB prevails.

Accounts receivable is stated at gross amount due. Bad debts are charged directly to expense when management determines an account to be uncollectible. Management believes that all accounts receivable are collectible and that all bad debts have been written off.

Depreciation is provided on the straight-line method over the estimated economic useful life of the depreciable property, ranging from five to forty years. Expenditures for repairs and maintenance are charged to expense as incurred. Depreciation expense in 2007 was \$317,822.

The debt issue expense is amortized by the debt outstanding method over the term of the issue. Amortization expense in 2007 was \$966.

GASB 34 requires reconciliation between the government-wide financial statements and the governmental financial statements. However, Meade County Water District only has one fund, a proprietary fund, and therefore does not require such reconciliation.

#### **NOTE 2 - CASH AND CASH EQUIVALENTS**

The District reporting entity considers highly liquid investments (including assets) with an original maturity of three months or less when purchased to be cash equivalents. The District considers cash in bank to be cash equivalents. At December 31, 2007, the District has a balance of \$849,303 in its checking accounts. Federal Deposit Insurance Corporation (FDIC) insurance is limited to \$100,000 and the District has \$1,300,000 in securities pledged from Meade County Bank. Accordingly, at December 31, 2007 \$-0- was unsecured.

#### NOTE 3 - LONG-TERM DEBT

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Long-term debt at December 31, 2007 consisted of the following:

Bonds payable to Farmers Home Administration, payable in semi-annual principal and interest	<u>2007</u>
installments in June and December of each year with final payment in 2032. The interest rate is 5.0%.	\$ 364,000
Bonds payable to Kentucky Infrastructure Authority, payable in semi-annual principal and interest installments in June and December of each year with final payment in 2024. The interest rate is	
3.0%.	\$ 349,611
Bonds payable to Kentucky Rural Water Finance Corp. payable in monthly principal and interest installments final payment in December, 2024, collateralized by Water Revenue. The interest rate is 5.081%.	\$ 515,000
	\$ 515,000
Bonds payable to Kentucky Infrastructure Authority, principal payable on each June 1 and interest payable on each December 1 and June 1. The interest rate is	
4.68%	\$ 145,000
Note payable to Meade County Fiscal Court. Payable in monthly interest and yearly principal. Final payment in January, 2015. The interest rate is 5.28%	\$ 250,000
Note payable to Meade County Fiscal Court, 20 year note, final payment due in November 2015, effective interest rate is 6.174%, collateralized by all equipment, furniture, furnishings, vehicles and	
other personal property comprising the construction project.	\$ 426,000

#### NOTE 3 - LONG-TERM DEBT (CONTINUED)

Total Debt	2,049,611
Less: Current Portion	(122,035)
Long-Term Debt	<u>\$ 1,927,576</u>

#### **NOTE 4 - DEBT MATURITIES**

Debt Maturities are as follows:

Fiscal Year Ending <u>December 31</u>	2001A Revenue Bonds <u>Series A</u>	Kentucky Infrastructure <u>Authority</u>	1992 Revenue <u>Bond</u>	<u>KaCoLT</u>	Meade County <u>Fiscal</u> <u>Court</u>	Kentucky Infrastructure <u>Authority</u>	Total Proprietary <u>Debt</u>
2008	\$ 20.000	\$ 10.000	\$ 6.000	\$ 25,000	\$ 45,000	\$ 16,035	\$ 122,035
2008	21,000	10,000	6,000	25,000	47,000	16,520	125,520
2010	21,000	10,000	7,000	25,000	49,000	17,019	129,019
2010	22,000	10,000	7,000	25,000	52,000	17,533	133,533
2012	24,000	10,000	8,000	30,000	54,000	18,063	144,063
2012	108.000	50,000	34,000	130,000	247,000	85,170	654,170
Beyond 2011	407,000	<u> </u>	330,000	120,000	179,000	264,441	1,395,441
	<u>\$_515,000</u>	<u>\$ 145.000</u>	<u>\$ 364,000</u>	<u>\$_250,000</u>	<u>\$ 426,000</u>	<u>\$_349,611</u>	<u>\$_2,049,611</u>

#### **NOTE 5 - BUDGET**

The District follows these procedures in establishing the budgetary data reflected in the financial statements:

- 1. The office manager is responsible for preparing the proposed operating budget prior to each fiscal year commencing on January 1. The proposed operating budget is submitted to the Commissioners for approval.
- 2. Budgeted amounts are as originally adopted, or as amended by the Commissioners.

#### **NOTE 6 – EMPLOYEE RETIREMENT BENEFITS**

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Effective June, 1986 the Meade County Water District began providing benefits for regular full-time employees of each county and Meade County Water District. These benefits are provided under the County Employees Retirement System (CERS) of the state of Kentucky. Regular full-time employees are required to participate. The plan is included in the Annual Report of the Kentucky Retirement Systems. A copy may be obtained from the Kentucky Retirement Systems, Perimeter Park West, 1260 Louisville Road, Frankfort, Kentucky 40601.

<u>Plan Description for Non-Hazardous and Hazardous Employees</u> - CERS is a cost-sharing multipleemployer defined benefit pension plan that covers substantially all regular full-time members employed in non-hazardous duty positions of each county and school board, and any additional eligible local agencies electing to participate in the System. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under circumstances. Cost-of-living (COLA) adjustments are provided at the discretion of the State legislature.

<u>Contributions for Non-Hazardous</u> - Participating employers were required to contribute at an actuarially determined rate. Per Kentucky Revised Statue Section 61.565(3), normal contribution and past service contribution rates shall be determined by the Board on the basis of an annual valuation last preceding the July 1 of a new biennium. The Board may amend contribution rates as of the first day of July of the second year of a biennium, if it is determined on the basis of a subsequent actuarial valuation that amended contribution rates are necessary to satisfy requirements determined in accordance with actuarial bases adopted by the Board. For the year ended December 31, 2007 and 2006, participating employers contributed 16.17% and 13.19%, respectively, of each employee's creditable compensation. The actuarially determined rate set by the Board for the Year ended December 31, 2007 and 2006, was 16.17% and 13.19%, respectively, of creditable compensation. Administrative costs of Kentucky Retirement System are financed through employer contributions and investment earnings.

The Commission's current year payroll was \$424,915. The Commission made the required contributions for the fiscal year amounting to \$63,135.

SFAS 158 requires entities to recognize the overfunded or underfunded status of a defined benefit postretirement plan as an asset or liability in its statement of financial position and to recognize changes in the funded status in the year in which the changes occur through changes in unrestricted net assets. Also, entities are required to measure the funded status of a plan as of the date of its year-end statement of financial position. Meade County Water District will recognize these changes, as required and allowed, in their December 31, 2008 financial statements.

#### **NOTE 7 - RISK MANAGEMENT**

The Meade County Water District is exposed to various risks and losses related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Commission currently carries property and general liability insurance through the Kentucky Municipal Risk Management Association. Workman's Compensation insurance is carried through Bridgefield Casualty Insurance Company.

#### NOTE 8 – ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### **NOTE 9 – ADVERTISING COSTS**

Advertising costs, except for costs associated with direct-response advertising, are charged to operations when incurred. The costs of direct-response advertising are capitalized and amortized over the period during which future benefits are expected to be received. Total non-direct-response advertising amounted for 2007 was \$1,560.

#### NOTE 10 – CONTRIBUTED CAPITAL IN AID OF CONSTRUCTION

Meade County Water District requires that each new customer be charged a fee of \$500 for installation, which was approved by the Public Service Commission. This fee is deposited into the contributed capital in aid of construction account to cover the cost of any needed expansion to the system. For 2007, the Commission collected \$90,706.

### NOTE 11- RESTRICTED CASH

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Meade County Water District is required to maintain several cash accounts that are restricted. They are as follows:

	2007
Customer Deposits Account – The District is required to maintain this account for customer deposits, which are to	
be given back to the customer when they leave the district.	\$ 57,812
Reserves Account – The District is required to maintain a reserve account to be use to replace capital expenditures.	35,417
Debt Service Account – The District is required to maintain this account to pay off the debt from Farmers Home Administration.	170,287
Construction Accounts – The District is required to maintain these account to pay the debt occurred for extension projects.	89,340
Total Restricted Cash	<u>\$_352,856</u>

# SUPPLEMENTAL INFORMATION

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### MEADE COUNTY WATER DISTRICT SUPPLEMENTAL INFORMATION DECEMBER 31, 2007

1. Insurance Coverage

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POLICY NUMBER	INSURANCE <u>COMPANY AND</u> <u>ADDRESS</u>	EXPIRATION DATE OF POLICY
Insurance Policy # GWUFP0097700	Arch Insurance Co. Princeton, NJ 08543-5241	7/1/2008
<u>TYPE</u> General Liability		<u>COVERAGE</u> \$ 3,000,000
Auto Liability		1,000,000
Property - Buildings		1,000 Deductible
Government crime		100,000
Flood coverage		500,000

### 2. Water and/or Sewer Utility Borrowers Only

A. Water purchased	299,055,500
B. Water sold	258,091,303
C. Water in storage tanks & lines	12,171,628
D. Treated waste	N/A
E. Number of users – Water	3,502
F. Number of users – Sewer	N/A

#### MEADE COUNTY WATER DISTRICT SUPPLEMENTAL INFORMATION (CONTINUED) DECEMBER 31, 2007

#### 3. Distribution of All Cash and Investments

Appropriate bank accounts have been set up as required by grant and bond resolution agreements. All accounts are interest bearing checking accounts. Federal Deposit Insurance Corporation (FDIC) insurance is limited to \$100,000 and the District has \$1,300,000 in securities pledged from National City Bank. Accordingly, at December 31, 2007, \$-0- was unsecured.

#### 4. Aged Accounts Receivable at December 31, 2007 were as follows

	DAYS					
-	<u>0-30</u>	<u>31-60</u>	<u>61-90</u>	<u>OVER 90</u>	TO	<u>FAL</u>
Dollar Values	<u>\$ 80,409</u>	<u>\$ 6,747</u>	<u>\$ 3,502</u>	<u>\$ 22,518</u>	<u>\$ 11</u>	<u>3,176</u>
5. List of commissioners						
						TERM
NAME	2	<u> </u>	ADDRESS		YEARS	EXPIRATION <u>DATE</u>
Doug Cornett, C	hairman	125 Cornett Lane Guston, KY 40142		3	July 1, 2009	
			filan Road lenburg, KY 4	0108	3	June 20, 2010
Rebecca Richardson, Secretary			2539 Old Ekron Road Brandenburg, KY 40108		3	July 1, 2009
Norman Boothe,	Norman Boothe, Commissioner 58 St. Martins Road Vine Grove, KY 40175		3	June 20, 2011		
Wesley Prather, Commissioner 905 Whelan Road Vine Grove, KY 40175		3	July 1, 2009			

#### MEADE COUNTY WATER DISTRICT STATEMENT OF REVENUE, EXPENSES, AND RETAINED EARNINGS -BUDGETED AND ACTUAL FOR THE YEAR ENDED DECEMBER 31, 2007

FOR THE TEAR EN	DED DECENIDER 31,	2007	Variance
			Over
D	Budgeted	Actual	(Under)
Revenues:	<b>0</b> 1 0 CO 000	<b>•</b> 1 71 < 404	<b>A</b> (0.42 50()
Water Service	\$ 1,960,000	\$ 1,716,404	\$ (243,596)
Operating Expenses:	40.000	6.0.05	(4.540)
Water test	10,000	5,387	(4,613)
Tools	6,000	7,182	1,182
Depreciation expense	150,000	317,822	167,822
Amortization	-0-	966	966
Payroll taxes	36,000	33,315	(2,685)
Utility tax	1,200	43,307	42,107
Other taxes and licenses	1,000	4,070	3,070
Salaries and wages	361,300	406,140	44,840
Commissioners pay	20,000	18,775	(1,225)
Employees pension and benefits	40,000	63,135	23,135
Water purchase	409,000	405,269	(3,731)
Purchased power	17,000	17,649	649
Repairs and maintenance	67,500	64,764	(2,736)
Billing expense	3,000	17,262	14,262
Materials and supplies	12,800	3,379	(9,421)
Professional fees	10,000	6,463	(3,537)
Contractual services	20,300	28,474	8,174
Transportation expense	32,100	30,097	(2,003)
Health insurance	50,000	58,944	8,944
Other insurance	28,000	26,717	(1,283)
Bad debts	10,000	9,948	(52)
Advertising	1,500	1,560	60
Public service assessment	2,700	2,773	73
Equipment rental	5,000	735	(4,265)
Office expenses	8,700	9,677	977
Uniforms	10,000	8,937	(1,063)
Communications	2,000	1,529	(471)
Telephone	10,000	10,656	656
Dues, fees and training	6,000	7,726	1,726
Gravel	3,000	1,761	(1,239)
Miscellaneous	10,000	2,668	(7,332)
Total Operating Expenses	1,344,100	1,617,087	272,987
Derating Income	615,900	99,317	(516,583)
Vonoperating revenue (expenses)	015,900	<i>99</i> ,517	(110,363)
KIA Grant	500 000	515 040	15 060
Interest Income	500,000	545,969	45,969
	25,000	32,411	7,411
Debt service-interest	(156,335)	(127,332)	29,003
Total Nonoperating revenues (expenses)	368,665	451,048	36,414
Net Income	984,565	550,365	(434,200)
Net Assets, January 1, 2007	5,832,215	5,832,215	-0-
Vet Assets, December 31, 2007	\$ 6,816,780	\$ 6,382,580	\$ (434,200)

The notes to the financial statements are an integral part of this statement. Richardson, Pennington & Skinner, PSC

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CERTIFIED PUBLIC ACCOUNTANTS

# MEADE COUNTY WATER DISTRICT SUPPLEMENTAL SCHEDULE KENTUCKY RURAL WATER FINANCE BONDS SERIES 2001A DECEMBER 31, 2007

YEAR	Principal Installments, <u>Series A Bonds</u>
2008	20,000
2009	21,000
2010	21,000
2011	22,000
2012	24,000
2013	26,000
2014	28,000
2015	30,000
2016	32,000
2017	33,000
2018	35,000
2019	38,000
2020	41,000
2021	44,000
2022	47,000
2023	49,000
2024	4,000
	\$ 515,000

See Note 3 in the financial statements.

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# MEADE COUNTY WATER DISTRICT SUPPLEMENTAL SCHEDULE WATER WORKS REVENUE BONDS OF 1992 DECEMBER 31, 2007

	Principal Installments,
YEAR	Series A Bonds
TLAR	<u>Bonio 1220110</u>
2008	6,000
2009	6,000
2010	7,000
2011	7,000
2012	8,000
2013	8,000
2014	9,000
2015	9,000
2016	10,000
2017	11,000
2018	11,000
2019	13,000
2020	13,000
2021	14,000
2022	15,000
2023	16,000
2024	17,000
2025	18,000
2026	20,000
2027	20,000
2028	22,000
2029	23,000
2030	25,000
2031	27,000
2032	29,000
	\$ 364,000

See Note 3 in the financial statements.

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## MEADE COUNTY WATER DISTRICT SUPPLEMENTAL SCHEDULE NOTE PAYABLE TO MEADE COUNTY FISCAL COURT DECEMBER 31, 2007

						$\mathbf{P}_{1}$	rojected
	I	Principal		Int	erest and		Annual
YEAR	Ē	ayments			Fees	Tota	<u>l Payments</u>
2008		45,000			25,143		70,143
2009		47,000			22,313		69,313
2010		49,000			19,360		68,360
2011		52,000			16,258		68,258
2012		54,000			12,996		66,996
2013		57,000			9,585		66,585
2014		60,000			5,989		65,989
2015		62,000			2,233		64,233
			•				
	\$	426,000		\$	113,877	 \$	539,877

See Note 3 in the financial statements.

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# MEADE COUNTY WATER DISTRICT SUPPLEMENTAL INFORMATION (CONTINUED) BONDS PAYABLE TO KENTUCKY INFRASTRUCTURE AUTHORITY DECEMBER 31, 2007

YEAR	Principal <u>Payments</u>
2008	10,000
2009	10,000
2010	10,000
2011	10,000
2012	10,000
2013	10,000
2014	10,000
2015	10,000
2016	10,000
2017	10,000
2018	10,000
2019	10,000
2020	10,000
2021	10,000
2022	5,000

\$ 145,000

See Note 3 in the financial statements.

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## MEADE COUNTY WATER DISTRICT SUPPLEMENTAL INFORMATION (CONTINUED) BONDS PAYABLE TO KENTUCKY ASSOCIATION OF COUNTIES LEASING TRUST DECEMBER 31, 2007

YEAR	Principal <u>Payments</u>
2008	25,000
2009	25,000
2010	25,000
2011	25,000
2012	30,000
2013	30,000
2014	30,000
2015	30,000
2016	30,000
	<u></u>
	\$ 250,000

See Note 3 in the financial statements.

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## MEADE COUNTY WATER DISTRICT SUPPLEMENTAL INFORMATION (CONTINUED) BONDS PAYABLE TO KENTUCKY INFRASTRUCTURE AUTHORITY DECEMBER 31, 2007

YEAR	Principal <u>Payments</u>
2008	16,035
2009	16,520
2010	17,019
2011	17,533
2012	18,063
2013	18,609
2014	19,172
2015	19,751
2016	20,348
2017	20,963
2018	21,597
2019	22,250
2020	22,922
2021	23,615
2022	24,329
2023	25,064
2024	25,821
	\$ 349,611

See Note 3 in the financial statements.

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Richardson Pennington & Skinner, PSC

Joseph E. Richardson William A. Talley Jon D. Chesser Bob E. Wientjes Ruth A. Payne Kentucky Offices: Louisville Brandenburg Hardinsburg Leitchfield

#### REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Commissioners Meade County Water District Vine Grove, Kentucky

We have audited the financial statements of the business-type activities of Meade County Water District, as of and for the year ended December 31, 2007, which collectively comprise the Meade County Water District's basic financial statements and have issued our report thereon dated March 23, 2008. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

#### **Internal Control Over Financial Reporting**

In planning and performing our audit, we considered Meade County Water District's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Meade County Water District's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Meade County Water District's internal control over financial reporting.

Our consideration of internal control over financial reporting was for the limited purpose described in the preceding paragraph and would not necessarily identify all deficiencies in internal control over financial reporting that might be significant deficiencies or material weaknesses. However, as discussed below, we identified certain deficiencies in internal control over financial reporting that we consider to be significant deficiencies.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects Meade County Water District ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of Meade County Water District financial statements that is more than inconsequential will not be prevented or detected by Meade County Water District internal control. We consider the deficiencies described in the following paragraphs to be significant deficiencies in internal control over financial reporting.

Due to the limited number of personnel, the Company has not established adequate segregation of duties. Individuals in the accounting department have the ability to initiate transactions, record the transactions, and reconcile the related accounting records.

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the Meade County Water District's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control over financial reporting that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

#### Compliance and Other Matters

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**U**DATE:

As part of obtaining reasonable assurance about whether Meade County Water District's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

This report is intended solely for the information and use of management and the Public Service Commission and is not intended to be and should not be used by anyone other than these specified parties.

Richardson, Pannington 1 Stanner, PSC.

Louisville, Kentucky March 23, 2008

# ATTACHMENT #3

# **ENGINEERING REPORT**

- Water System Improvements
- Elevated Water Storage Tank

OF KENTLO

# **Engineering Report and Hydraulic Analysis** Phase VII Water System Improvements Meade County Water District (MCWD)

PREPARED FOR:	Kentucky Division of Water	S S KEVIN J.
PREPARED BY:	Brian E. Bradley, E.I.T./ HDR   Quest	17602
	Kevin J. Brian, P.E./HDR   Quest	SOLONAL S
DATE:	September 18, 2007	""""""""""""""""""""""""""""""""""""""

This memorandum summarizes the scope of improvements, existing and projected water demands, water supply capacity and hydraulic analysis for the Phase VII Water System Improvements Project.

#### Scope of Improvements

The Phase VII Water System Improvements Project involves the construction of approximately 13 miles of 6-inch through 10-inch DI/PVC water mains along five (5) state and county roadways in Meade County, Kentucky. In addition to providing water service to unserved areas, these extensions will improve system reliability and hydraulics by providing two grid-ties to the existing distribution system.

#### Water Demands

MCWD's existing average day demand is approximately 775,200 gpd. This amount includes approximately 147,000 gpd that is sold wholesale to the community of Doe Valley. The projected future demand (at full buildout) with the proposed waterline extensions is 82,800 gpd (276 dwellings/lots at 300 gpd/dwelling). Past history on previous expansion projects have shown that half or approximately 138 dwellings will connect in the first 5 years. The projected 5 year total average day demand with this expansion is 816,600 gpd.

#### Water Supply

MCWD purchases water wholesale from the City of Brandenburg at the Brandenburg Pump Station/Interconnect and from Hardin County Water District No. 1 at the KY 1600 Interconnect and KY 144 BPS/Interconnect (emergency/back-up only). Existing supply capacity is 400 gpm or 576,000 gpd at the Brandenburg PS and 450 gpm or 648,000 gpd at the KY 1600 Interconnect (gravity). The total connected supply capacity is approximately 1,224,000 gpd.

### Hydraulic Analysis

A hydraulic analysis was performed to evaluate pressure and flow for peak hour demands and flushing velocities for the proposed 6-inch, 8-inch and 10-inch water mains. Future water demands along the corridor of the proposed water main improvements, was based on an estimated build-out of 276 dwellings/lots.

The results of the analysis are based on the following water system boundary conditions:

- System Average Day Demand (ADD)Existing775,200 gpdNew Waterline Ext.82,800 gpd(276 dwellings x 300 gpd)700 gpdTotal858,000 gpd
- Peak Hour Demand (3 x ADD) = 1787 gpm
- Garrett and Payneville Elevated Water Storage Tanks = 947.5 (mid-operating level)
- KY 1600 Interconnect Open = 450 500 gpm
- Brandenburg Pump Station = 400 gpm
- KY 144 Pump Station off

### Results

<u>Peak Demand</u>. During a peak hour demand simulation, the minimum pressure is above 43 psi along the proposed waterline extensions and above 37 psi in MCWD's service area.

<u>Flushing Demand.</u> To maintain a flushing velocity of 2.5 feet per second, as required by Kentucky Division of Water, flowrates of 225 gpm, 392 gpm and 615 gpm are required through the 6-, 8- and 10-inch pipelines respectively. The residual pressure at these flushing rates during an average day demand simulation is between 21 to 130 psi.

The following attachments are provided with this technical memorandum:

- Peak hour demand (PHD) Pipe 2000 output results (7 pages)
- PHD Individual node maps for each improvement area (2 maps)
- Flushing demand Pipe 2000 output results for each waterline extension (11 pages)

### Peak Flow Demand Simulation

Phase VII Water System Improvements Meade County Water District Meade County, KY

Date & Time: Tue Sep 18 11:07:30 2007

INPUT DATA FILENAME ----- L:\HDRCON~1\CO183D~1\HYDRAU~1\VII\_peak.DT2 TABULATED OUTPUT FILENAME ---- L:\HDRCON~1\CO183D~1\HYDRAU~1\VII\_peak.OT2 POSTPROCESSOR RESULTS FILENAME --- L:\HDRCON~1\CO183D~1\HYDRAU~1\VII peak.RS2

UNITS SPECIFIED

FLOWRATE ..... = gallons/minute
HEAD (HGL) .... = feet
PRESSURE .... = psig

REGULATING VALVE DATA

VALVE	VALVE	VALVE
LABEL	TYPE	SETTING
		(ft or gpm)
Battletown P	PRV-1	869.88
RV-1	FCV-1	400.00

#### PIPELINE DATA

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE #1		LENGTH (ft)			
P-701	J- 92	311	1513.00	10.00	130.0000	0.00
P-702	J- 91	J- 92	3300.00	10.00	130.0000	0.00
P-703	J- 90	• • • •	3200.00	10.00	130.0000	0.00
P-704	237	J- 90	1661.86	10.00	130.0000	0.00
P-705	J- 94	J- 93	1106.11	8.00	130.0000	0.00
P-706	J- 94	J- 96	3450.00	8.00	130.0000	0.00
P-707	J- 96	J- 97	2700.00	8.00	130.0000	0.00
P-708	J- 97	J- 98	750.00	8.00	130.0000	0.00
P-709	J- 98	J- 99	3500.00	8.00	130.0000	0.00
P-710	J- 99	J-100	3400.00	8.00	130.0000	0.00
P-711	J-100	J- 95	2040.68	8.00	130.0000	0.00
P-712	J- 95	J-102	3550.00	8.00	130.0000	0.00
P-713	J-102	J-103	1950.00	8.00	130.0000	0.00
P-714	J-103	J-104	3500.00	8.00	130.0000	0.00
P-715	J-104	J-105	4475.00	8.00	130.0000	0.00
P-716	J-105	J-101	3550.00	8.00	130.0000	0.00
P-717	J-107	J-109	2975.00	8.00	130.0000	0.00
P-718	J-109	J-108	1350.00	8.00	130.0000	0.00
P-719	J-108	J-112	1900.00	8.00	130.0000	0.00
P-720	J-112	J-110	3300.00	8.00	130.0000	0.00
P-721	J-110	J-103	2750.00	8.00	130.0000	0.00
P-722	J- 93	J-111	5400.00	6.00	130.0000	0.00
P-723	J-111	J-113	2450.00	6.00	130.0000	0.00
P-724	J-113	J-114	3000.00	6.00	130.0000	
P-725	J-114	J-107	2700.00	6.00	130.0000	0.00
P-726	J-107	J-106	2573.47	8.00	130.0000	0.00

#### PUMP/LOSS ELEMENT DATA

THERE IS A DEVICE AT NODE Brandenbur DESCRIBED BY THE FOLLOWING DATA: (ID= 19)

HEAD	FLOWRATE	EFFICIENCY
(ft)	(gpm)	(%)
380.00	0.00	75.00 (Default)
320.00	280.00	75.00 (Default)
248.00	402.00	75.00 (Default)

THERE IS A DEVICE AT NODE Flaherty P DESCRIBED BY THE FOLLOWING DATA: (ID= 17)

FLOWRATE	EFFICIENCY	
(gpm)	( 8 )	
0.00	75.00 (Default	)
200.00	75.00 (Default	)
400.00	75.00 (Default	)
	(gpm) 0.00 200.00	(gpm) (%) 0.00 75.00 (Default 200.00 75.00 (Default

## END NODE DATA

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	JUNCTION ELEVATION (ft)	EXTERNAL GRADE (ft)
O-Battleto O-Brandenb I-Flaherty	PRV STATION Brandenburg	0.00 0.00	755.00 663.00 750.00	869.88
Garrett J- 89 J- 90	Garrett Tank	19.40 6.93	838.00 684.00 820.00	947.50
J- 91 J- 92 J- 93		6.93 6.93 0.00	760.00 710.00 639.00	
J- 94 J- 95 J- 96		6.75 0.00 6.75	640.00 690.00 740.00	
J- 97 J- 98 J- 99		6.75 6.75 6.75	686.00 710.00 667.00	
J-100 J-101 J-102		6.75 9.90 9.90	675.00 827.00 720.00	
J-103 J-104 J-105		0.00 9.90 9.90	0.00 735.00 695.00	
J-106 J-107 J-108		7.35 0.00 9.60	670.00 698.00 700.00	
J-109 J-110 J-111		9.60 9.60 11.40	700.00 700.00 625.00	
J-112 J-113 J-114		9.60 11.40 11.40	690.00 625.00 650.00	
Payneville R- 1 R- 2	Payneville T KY 144 KY 1600		812.50 700.00 750.00	947.50 930.00 1000.00
R- 3 R- 4 O-RV-1	Brandenburg Brizendine 1	0.00	650.00 965.00 663.00	770.00 1070.00
I-Battleto I-Brandenb O-Flaherty I-RV-1	PRV STATION Brandenburg	0.00 0.00 0.00 0.00	755.00 663.00 750.00 663.00	

OUTPUT OPTION DATA

OUTPUT SELECTION: ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT MAXIMUM AND MINIMUM PRESSURES = 10

SUPPLY ZONE DATA

THIS SYSTEM HAS MULTIPLE SUPPLY ZONES

ZONE NO.	1 IS SUPPLIED	THROUGH THE FOLLOWING ~@Payneville	PIPES: ~@R- 3	~@Garrett
	~@R- 2	~@R- 1		
ZONE NO.	2 IS SUPPLIED ~@R- 4	THROUGH THE FOLLOWING	PIPES:	
SISTEM	CONFIGUR	ATION		
NUMBER OF	PIPES	(p) = 439		

NOLIDEIN	0Ľ			• • •	 • • •	• • •	(P)		409
NUMBER	OF	END NOI	DES		 		(j)		397
NUMBER	OF	PRIMARY	LOOPS	5	 		(1)		38
NUMBER	OF	SUPPLY	NODES	• • •	 ••		(f)		6
NUMBER	OF	SUPPLY	ZONES		 		(z)	==	2

RESULTS OBTAINED AFTER 16 TRIALS: ACCURACY = 0.00014

#### PIPELINE RESULTS

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE M #1	NUMBERS #2	FLOWRATE (gpm)	HEAD LOSS (ft)	MINOR LOSS (ft)	LINE VELO. (ft/s)	HL+ML/ 1000 (ft/ft)	HL/ 1000 (ft/ft)
P-701	J- 92	311	149.98	0.28	0.00	0.61	0.18	0.18
P-702	J- 91	J- 92	156.91	0.66	0.00	0.64	0.20	0.20
P-703	J- 90	J- 91	163.84	0.69	0.00	0.67	0.22	0.22
P-704	237	J- 90	170.77	0.39	0.00	0.70	0.23	0.23
P-705	J- 93	J- 94	54.85	0.09	0.00	0.35	0.08	0.08
P-706	J- 94	J- 96	48.10	0.23	0.00	0.31	0.07	0.07
P-707	J~ 96	J- 97	41.35	0.14	0.00	0.26	0.05	0.05
P-708	J- 97	J- 98	34.60	0.03	0.00	0.22	0.04	0.04
P-709	J- 98	J- 99	27.85	0.08	0.00	0.18	0.02	0.02
P-710	J- 99	J-100	21.10	0.05	0.00	0.13	0.01	0.01
P-711	J-100	J- 95	14.35	0.01	0.00	0.09	0.01	0.01
P-712	J- 95	J-102	14.35	0.03	0.00	0.09	0.01	0.01
P-713	J-102	J-103	4.45	0.00	0.00	0.03	0.00	0.00
P-714	J-103	J-104	29.70	0.09	0.00	0.19	0.03	0.03
P-715	J-104	J-105	19.80	0.06	0.00	0.13	0.01	0.01
P-716	J-105	J-101	9.90	0.01	0.00	0.06	0.00	0.00
P-717	J-107	J-109	63.65	0.33	0.00	0.41	0.11	0.11
P-718	J-109	J-108	54.05	0.11	0.00	0.34	0.08	0.08
P-719	J-108	J-112	44.45	0.11	0.00	0.28	0.06	0.06
P-720	J-112	J-110	34.85	0.12	0.00	0.22	0.04	0.04
P-721	J-110	J-103	25.25	0.06	0.00	0.16	0.02	0.02
P-722	J- 93	J-111	13.09	0.13	0.00	0.15	0.02	0.02
P-723	J-111	J-113	1.69	0.00	0.00	0.02	0.00	0.00
P-724	J-114	J-113	9.71	0.04	0.00	0.11	0.01	0.01
P-725	J-107	J-114	21.11	0.16	0.00	0.24	0.06	0.06
P-726	J-106	J-107	84.76	0.49	0.00	0.54	0.19	0.19

PUMP/LOSS ELEMENT RESULTS

NAME	FLOWRATE (gpm)	INLET HEAD (ft)	OUTLET HEAD (ft)	PUMP HEAD (ft)	EFFIC- ENCY (%)	USEFUL POWER (Hp)	INCREMTL COST (\$)	#PUMPS PARALLEL		NPSH Avail. (ft)
Brandenbur Device "Fl	400.00 aherty Pu" is		338.24	249.4				 * *	* *	121.9

## END NODE RESULTS

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	HYDRAULIC GRADE (ft)	NODE ELEVATION (ft)		NODE PRESSURE (psi)
O-Battleto O-Brandenb I-Flaherty Garrett J- 90	PRV STATION Brandenburg Garrett Tan	0.00 0.00	930.38 1001.24 930.00 947.50	755.00 663.00 750.00 838.00 820.00	175.38 338.24 180.00 109.50 127.75	76.00 146.57 78.00 47.45 55.36
J- 90 J- 91 J- 92 J- 93 J- 94 J- 95		6.93 6.93 0.00 6.75 0.00	947.75 947.05 946.39 928.89 928.80 928.26	760.00 710.00 639.00 640.00 690.00	127.75 187.05 236.39 289.89 288.80 238.26	81.06 102.44 125.62 125.15 103.25
J- 96 J- 97 J- 98 J- 99 J-100		6.75 6.75 6.75 6.75 6.75 6.75	928.57 928.43 928.41 928.32 928.27	740.00 686.00 710.00 667.00 675.00	188.57 242.43 218.41 261.32 253.27	81.71 105.06 94.64 113.24 109.75
J-101 J-102 J-103 J-104 J-105		9.90 9.90 0.00 9.90 9.90	928.07 928.24 928.23 928.14 928.08	827.00 720.00 735.00 695.00	101.07 208.24 193.14 233.08	43.80 90.24 83.69 101.00
J-106 J-107 J-108 J-109 J-110		7.35 0.00 9.60 9.60 9.60	929.45 928.96 928.52 928.63 928.29	670.00 698.00 700.00 700.00 700.00	259.45 230.96 228.52 228.63 228.29	112.43 100.08 99.02 99.07 98.93
J-111 J-112 J-113 J-114 Payneville	Payneville	11.40 9.60 11.40 11.40	928.76 928.41 928.76 928.80 947.50	625.00 690.00 625.00 650.00 812.50	303.76 238.41 303.76 278.80 135.00	131.63 103.31 131.63 120.81 58.50
R- 1 R- 2 R- 3 R- 4	KY 144 KY 1600 Brandenburg Brizendine	1	930.00 1000.00 770.00 1070.00	700.00 750.00 650.00 965.00	230.00 250.00 120.00 105.00	99.67 108.33 52.00 45.50
O-RV-1 I-Battleto I-Brandenb O-Flaherty I-RV-1	PRV STATION Brandenburg	0.00 0.00 0.00 0.00 0.00	947.97 944.30 751.81 972.17 1000.34	663.00 755.00 663.00 750.00 663.00	284.97 189.30 88.81 222.17 337.34	123.49 82.03 38.49 96.27 146.18

#### PRESSURES

JUNCTION NUMBER	MAXIMUM PRESSURES (psi)	JUNCTION NUMBER	MINIMUM PRESSURES (psi)
492	184.59	32.4	37.37
491	176.27	323	37.39
490	167.48	I-Brandenbur	38.49
493	166.13	468	39.81
498	165.23	467	40.16
432	159.07	315	41.33
474	153.50	J-101	43.80
465	148.33	R- 4	45.50
J-604	147.73	Garrett	47.45
J-608	147.54	466	47.94

#### REGULATING VALVE REPORT

VALVE LABEL	VALVE TYPE	VALVE SETTING (psi or g)	0111100	UPSTREAM PRESSURE (psi)	DOWNSTREAM PRESSURE (psi)	THROUGH FLOW (gpm)
Battletown P	PRV-1	49.78	CLOSED	82.03	76.00	0.00
RV-1	FCV-1	400.00	ACTIVATED	146.18	123.49	400.00

### SUMMARY OF INFLOWS AND OUTFLOWS

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES

(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE	FLOWRATE	NODE
NAME	(gpm)	TITLE
Garrett	445.89	Garrett Tank
Payneville	462.37	Payneville T
R- 1	0.00	KY 144
R- 2	458.71	KY 1600
R- 3	400.00	Brandenburg
R- 4	20.58	Brizendine 1
NET SYSTEM INFLOW NET SYSTEM OUTFLOW NET SYSTEM DEMAND	$ = 1787.55 \\ N = 0.00 \\ = 1787.55 $	

\*\*\*\*\* HYDRAULIC ANALYSIS COMPLETED \*\*\*\*\*

#### Flushing Demand Simulation

Phase VII Water System Improvements Meade County Water District Meade County, KY

Flushing Demand (Node J-92) = 615 gpm

Date & Time: Tue Sep 18 10:33:23 2007

INPUT DATA FILENAME ----- L:\HDRCON~1\CO183D~1\HYDRAU~1\VII\_Flush2.DT2 TABULATED OUTPUT FILENAME ---- L:\HDRCON~1\CO183D~1\HYDRAU~1\VII\_Flush2.OT2 POSTPROCESSOR RESULTS FILENAME --- L:\HDRCON~1\CO183D~1\HYDRAU~1\VII\_Flush2.RS2

UNITS SPECIFIED

FLOWRATE ..... = gallons/minute
HEAD (HGL) .... = feet
PRESSURE .... = psig

REGULATING VALVE DATA

VALVE LABEL	VALVE TYPE	VALVE SETTING (ft or gpm)
Battletown P	PRV-1	869.88
RV-1	FCV-1	400.00

#### PIPELINE DATA

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE	NODE	NAMES	LENGTH	DIAMETER	ROUGHNESS	MINOR
NAME	#1	#2	(ft)	(in)	COEFF.	LOSS COEFF.
P-701	J- 92	311	1513.00	10.00	130.0000	0.00
P-702	J- 91	J- 92	3300.00	10.00	130.0000	0.00
P-703	J- 90	J- 91	3200.00	10.00	130.0000	0.00
P-704-XX	237	J- 90	1665.59	10.00	130.0000	0.00

#### PUMP/LOSS ELEMENT DATA

THERE IS A DEVICE AT NODE Brandenbur DESCRIBED BY THE FOLLOWING DATA: (ID= 19)

HEAD	FLOWRATE	EFFICIENCY
(ft)	(gpm)	( 응 )
380.00	0.00	75.00 (Default)
320.00	280.00	75.00 (Default)
248.00	402.00	75.00 (Default)

THERE IS A DEVICE AT NODE Flaherty P DESCRIBED BY THE FOLLOWING DATA: (ID= 17)

HEAD	FLOWRATE	EFFICIENCY
(ft)	(gpm)	(음)
190.00	0.00	75.00 (Default)
173.00	200.00	75.00 (Default)
68.00	400.00	75.00 (Default)

#### END NODE DATA

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	JUNCTION ELEVATION (ft)	EXTERNAL GRADE (ft)
J- 90 J- 91 J- 92		615.00 2.31 2.31	820.00 760.00 710.00	

OUTPUT OPTION DATA

OUTPUT SELECTION: ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT MAXIMUM AND MINIMUM PRESSURES = 10

SUPPLY ZONE DATA

THIS SYSTEM HAS MULTIPLE SUPPLY ZONES

ZONE NO. 1 IS SUPPLIED THROUGH THE FOLLOWING PIPES: CONTINUE - OR- 3 - OGarrett - OR- 2 - OR- 1

ZONE NO. 2 IS SUPPLIED THROUGH THE FOLLOWING PIPES:  ${\sim} @R{-} 4$ 

SYSTEM CONFIGURATION

NUMBER	OF	PIPES	(p)	=	439
NUMBER	OF	END NODES	(j)	==	397
NUMBER	OF	PRIMARY LOOPS	(1)	=	38
NUMBER	OF	SUPPLY NODES	(f)	=	6
NUMBER	OF	SUPPLY ZONES	(z)	=	2

Case: 0

RESULTS OBTAINED AFTER 17 TRIALS: ACCURACY = 0.00296

PIPELINE RESULTS

STATUS CODE:	XX -CLOSED	PIPE	CV -CHECK VALVE	C				
P I P E N A M E	NODE #1	NUMBERS #2	FLOWRATE	HEAD LOSS	MINOR LOSS	LINE VELO.	HL+ML/ 1000	HL/ 1000
			(gpm)	(ft)	(ft)	(ft/s)	(ft/ft)	(ft/ft)
P-701	311	J- 92	619.62	3.84	0.00	2.53	2.54	2.54
P-702	J- 92	J- 91	617.31	8.32	0.00	2.52	2.52	2.52
P-703	J- 91	J- 90	615.00	8.01	0.00	2.51	2.50	2.50
P-704-XX	237	J- 90						

PUMP/LOSS ELEMENT RESULTS

NAME	FLOWRATE (gpm)	INLET HEAD (ft)	OUTLET HEAD (ft)	PUMP HEAD (ft)	EFFIC- ENCY (%)	USEFUL POWER (Hp)	INCREMTL COST (\$)	TOTAL COST (\$)	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. (ft)
Brandenbur Device "F.	400.00 laherty Pu" is		338.24	249.4					**	* *	121.9
END	NODE R	ESUI	JTS								
NO NA		NODE TITLE	DEM	RNAL IAND pm)	HYDRA GRA (		NODE ELEVATIC (ft)	N I	ESSURE HEAD (ft)	NODE PRESSU (psi	IRE
J- J- J-	91		2	.00 .31 .31	91	9.27 7.28 5.60	820.0 760.0 710.0	0 1	89.27 L57.28 215.60	38.6 68.1 93.4	6

## MAXIMUM AND MINIMUM VALUES

#### PRESSURES

JUNCTION NUMBER	MAXIMUM PRESSURES (psi)	JUNCTION NUMBER	MINIMUM PRESSURES (psi)
492	191.40	324	37.61
491	183.16	323	37.62
490	174.47	315	38.43
493	172.79	I-Brandenbur	38.49
498	171.92	J- 90	38.68
432	162.50	468	39.81
474	157.47	467	40.16
J-604	155.07	R- 4	45.50
465	154.97	Garrett	47.45
J-608	154.52	466	47.94

REGULATING VALVE REPORT

VALVE LABEL	VALVE TYPE	VALVE SETTING (psi or g)		UPSTREAM PRESSURE (psi)	DOWNSTREAM PRESSURE (psi)	THROUGH FLOW (gpm)
Battletown P	PRV-1	49.78	CLOSED	83.25	83.03	0.00
RV-1	FCV-1	400.00	ACTIVATED	146.18	129.85	400.00

SUMMARY OF INFLOWS AND OUTFLOWS

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES

(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE	FLOWRATE	NODE
NAME	(gpm)	TITLE
Garrett	368.01	Garrett Tank
Payneville	71.64	Payneville T
R- 1	0.00	KY 144
R- 2	362.03	KY 1600
R- 3	400.00	Brandenburg
R- 4	6.86	Brizendine 1
NET SYSTEM INFLO NET SYSTEM OUTFL NET SYSTEM DEMAN	00.0 = WC	

\*\*\*\*\* HYDRAULIC ANALYSIS COMPLETED \*\*\*\*\*

### Flushing Demand Simulation

Phase VII Water System Improvements Meade County Water District Meade County, KY

Flushing Demand (Node J-101) = 392 gpm

Date & Time: Tue Sep 18 09:49:30 2007

INPUT DATA FILENAME ----- L:\HDRCON~1\CO183D~1\HYDRAU~1\VII\_Flush.DT2 TABULATED OUTPUT FILENAME ---- L:\HDRCON~1\CO183D~1\HYDRAU~1\VII\_Flush.OT2 POSTPROCESSOR RESULTS FILENAME --- L:\HDRCON~1\CO183D~1\HYDRAU~1\VII\_Flush.RS2

UNITS SPECIFIED

FLOWRATE ..... = gallons/minute
HEAD (HGL) .... = feet
PRESSURE .... = psig

REGULATING VALVE DATA

VALVE	VALVE	VALVE
LABEL	TYPE	SETTING
		(ft or gpm)
Battletown P	PRV-1	869.88
RV-1	FCV-1	400.00

#### PIPELINE DATA

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE	NODE	NAMES	LENGTH	DIAMETER	ROUGHNESS	MINOR
N A M E	#1	#2	(ft)	(in)	COEFF.	LOSS COEFF.
P-704	237	J- 90	1665.59	10.00	130.0000	0.00
P-705	J- 94	J- 93	1106.11	8.00	130.0000	0.00
P-706	J- 94	J- 96	3450.00	8.00	130.0000	0.00
P-707	J- 96	J- 97	2700.00	8.00	130.0000	0.00
P-708	J- 97	J- 98	750.00	8.00	130.0000	0.00
P-709	J- 98	J- 99	3500.00	8.00	130.0000	0.00
P-710	J- 99	J-100	3400.0Ņ	8.00	130.0000	0.00
P-711	J-100	J- 95	2040.68	8.00	130.0000	0.00
P-712	J- 95	J-102	3550.00	8.00	130.0000	0.00
P-713	J-102	J-103	1950.00	8.00	130.0000	0.00
P-714	J-103	J-104	3500.00	8.00	130.0000	0.00
P-715	J-104	J-105	4475.00	8.00	130.0000	0.00
P-716	J-105	J-115	3076.62	8.00	130.0000	0.00
P-717	J-107	J-109	2975.00	8.00	130.0000	0.00
P-718	J-109	J-108	1350.00	8.00	130.0000	0.00
P-719	J-108	J-112	1900.00	8.00	130.0000	0.00
P-720	J-112	J-110	3300.00	8.00	130.0000	0.00
P-721	J-110	J-103	2750.00	8.00	130.0000	0.00
P-722	J- 93	J-111	5400.00	6.00	130.0000	0.00
P-723	J-111	J-113			130.0000	
P-724	J-113	J-114	3000.00	6.00	130.0000	0.00
P-725	J-114	J-107	2700.00	6.00	130.0000	0.00
P-726	J-107	J-106	2573.47	8.00	130.0000	0.00

#### PUMP/LOSS ELEMENT DATA

THERE IS A DEVICE AT NODE Brandenbur DESCRIBED BY THE FOLLOWING DATA: (ID= 19)

HEAD	FLOWRATE	EFFICIENCY
(ft)	(gpm)	(응)
380.00	0.00	75.00 (Default)
320.00	280.00	75.00 (Default)
248.00	402.00	75.00 (Default)

THERE IS A DEVICE AT NODE Flaherty P DESCRIBED BY THE FOLLOWING DATA: (ID= 17)

HEAD	FLOWRATE	EFFICIENC	Υ
(ft)	(gpm)	( %)	
190.00	0.00	75.00	(Default)
173.00	200.00	75.00	(Default)
68.00	400.00	75.00	(Default)

#### END NODE DATA

NODE NAME	NODE TITLE		JUNCTION ELEVATION (ft)	
J = 93 $J = 94$ $J = 95$ $J = 96$ $J = 97$ $J = 98$ $J = 99$ $J = 100$ $J = 101$ $J = 102$ $J = 103$ $J = 103$ $J = 104$ $J = 105$ $J = 106$ $J = 107$ $J = 108$ $J = 109$ $J = 110$ $J = 111$ $J = 112$ $J = 113$		0.00 2.25 0.00 2.25 2.25 2.25 2.25 392.00 3.30 0.00 3.30 0.00 3.30 3.30 2.45 0.00 3.20 3.20 3.20 3.20 3.20 3.80 3.20 3.80 3.20 3.80	639.00 640.00 690.00 740.00 686.00 710.00 667.00 675.00 825.00 720.00 710.00 735.00 695.00 695.00 698.00 700.00 700.00 700.00 625.00 690.00 625.00	(10)
J-114		3.80	650.00	

#### OUTPUT OPTION DATA

#### OUTPUT SELECTION: ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT MAXIMUM AND MINIMUM PRESSURES = 10

#### SUPPLY ZONE DATA

THIS SYSTEM HAS MULTIPLE SUPPLY ZONES

ZONE NO.	1 IS SUPPLIED	THROUGH THE FOLLOWING	PIPES:		
		~@Payneville	~@R-	3	~@Garrett
	~@R- 2	~@R- 1			
ZONE NO.	2 TS SUPPLIER	THROUGH THE FOLLOWING	PIPES:		

ZONE NO. 2 IS SUPPLIED THROUGH THE FOLLOW ~@R- 4

#### SYSTEM CONFIGURATION

NUMBER	OF	PIPES $\dots$ $(p) =$	441
NUMBER	OF	END NODES(j) =	399
NUMBER	OF	PRIMARY LOOPS $\dots \dots \dots$	38
NUMBER	OF	SUPPLY NODES(f) =	6
NUMBER	OF	SUPPLY ZONES(z) =	2

Case: 0

RESULTS OBTAINED AFTER 19 TRIALS: ACCURACY = 0.00203

#### PIPELINE RESULTS

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE 1 #1	NUMBERS #2	FLOWRATE (gpm)	HEAD LOSS (ft)	MINOR LOSS (ft)		HL+ML/ 1000 (ft/ft)	
P-705	J- 93	J- 94	181.39	0.86	0.00	1.16	0.77	0.77
P-706	J- 94	J- 96	179.14	2.61	0.00	1.14	0.76	0.76
P-707	J- 96	J- 97	176.89	1.99	0.00	1.13	0.74	0.74
P-708	J- 97	J- 98	174.64	0.54	0.00	1.11	0.72	0.72
P-709	J- 98	J- 99	172.39	2.46	0.00	1.10	0.70	0.70
P-710	J- 99	J-100	170.14	2.34	0.00	1.09	0.69	0.69
P-711	J-100	J- 95	167.89	1.37	0.00	1.07	0.67	0.67
P-712	J- 95	J-102	167.89	2.38	0.00	1.07	0.67	0.67
P-713	J-102	J-103	164.59	1.26	0.00	1.05	0.65	0.65
P-714	J-103	J-104	398.60	11.64	0.00	2.54	3.33	3.33
P-715	J-104	J-105	395.30	14.66	0.00	2.52	3.27	3.27
P-716	J-105	J-115	392.00	9.92	0.00	2.50	3.22	3.22
P-717	J-107	J-109	246.81	4.07	0.00	1.58	1.37	1.37
P-718	J-109	J-108	243.61	1.80	0.00	1.55	1.34	1.34
P-719	J-108	J-112	240.41	2.48	0.00	1.53	1.30	1.30
P-720	J-112	J-110	237.21	4.20	0.00	1.51	1.27	1.27
P-721	J-110	J-103	234.01	3.41	0.00	1.49	1.24	1.24
P-722	J-111	J- 93	2.91	0.01	0.00	0.03	0.00	0.00
P-723	J-113	J-111	6.71	0.02	0.00	0.08	0.01	0.01
P-724	J-114	J-113	10.51	0.05	0.00	0.12	0.02	0.02
P-725	J-107	J-114	14.31	0.08	0.00	0.16	0.03	0.03
P-726	J-106	J-107	261.12	3.91	0.00	1.67	1.52	1.52

NAME	FLOWRATE (gpm)	INLET HEAD (ft)	OUTLET HEAD (ft)	PUMP HEAD (ft)	EFFIC- ENCY (%)	USEFUL POWER (Hp)	INCREMTL COST (\$)	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. (ft)
- Brandenbur Device "Fl	400.00 .aherty Pu" i	88.81 s closed	338.24	249.4				 * *	**	121.9

## END NODE RESULTS

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	HYDRAULIC GRADE (ft)	NODE ELEVATION (ft)		NODE PRESSURE (psi)
J- 92		2.31	953.43	710.00	243.43	105.49
J- 93		0.00	926.99	639.00	287.99	124.80
J- 94		2.25	926.14	640.00	286.14	123.99
J- 95		0.00	914.82	690.00	224.82	97.42
J- 96		2.25	923.53	740.00	183.53	79.53
J- 97		2.25	921.53	686.00	235.53	102.06
J- 98		2.25	920.99	710.00	210.99	91.43
J- 99		2.25	918.53	667.00	251.53	108.99
J-100		2.25	916.19	675.00	241.19	104.52
J-101		392.00	873.44	825.00	48.44	20.99
J-102		3.30	912.44	720.00	192.44	83.39
J-103		0.00	911.18	710.00	201.18	87.18
J-104		3.30	899.54	735.00	164.54	71.30
J-105		3.30	884.89	695.00	189.89	82.28
J-106		2.45	931.05	670.00	261.05	113.12
J-107		0.00	927.14	698.00	229.14	99.29
J-108		3.20	921.27	700.00	221.27	95.88
J-109		3.20	923.07	700.00	223.07	96.66
J-110		3.20	914.59	700.00	214.59	92.99
J-111		3.80	927.00	625.00	302.00	130.87
J-112		3.20	918.79		228.79	99.14
J-113		3.80	927.02			130.87
J-114		3.80	927.06	650.00	277.06	120.06

#### PRESSURES

JUNCTION NUMBER	MAXIMUM PRESSURES (psi)	JUNCTION NUMBER	MINIMUM PRESSURES (psi)
492	189.23	J-101	20.99
491	180.99	J-115	36.82
490	172.30	323	37.92
493	170.62	324	37.92
498	169.75	I-Brandenbur	38.49
432	163.14	468	39.81
474	155.79	467	40.16
J- 43	151.93	315	44.66
489	151.93	R- 4	45.50
465	151.14	Garrett	47.45

#### REGULATING VALVE REPORT

VALVE LABEL	VALVE TYPE	VALVE SETTING (psi or g	0111100	UPSTREAM PRESSURE (psi)	DOWNSTREAM PRESSURE (psi)	
Battletown P	PRV-1	49.78	CLOSED	83.20	80.86	0.00
RV-1	FCV-1	400.00	ACTIVATED	146.18	127.14	400.00

#### SUMMARY OF INFLOWS AND OUTFLOWS

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES

(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE	FLOWRATE	NODE
NAME	(gpm)	TITLE
Garrett	-67.67	Garrett Tank
Payneville	257.09	Payneville T
R- 1	0.00	KY 144
R- 2	388.27	KY 1600
R- 3	400.00	Brandenburg
R- 4	6.86	Brizendine 1
NET SYSTEM INFLO NET SYSTEM OUTFL NET SYSTEM DEMAN	OW = -67.67	

\*\*\*\*\* HYDRAULIC ANALYSIS COMPLETED \*\*\*\*\*

## **Engineering Report and Hydraulic Analysis** Phase VII Elevated Water Storage Tank Meade County Water District (MCWD)

Phase VII El Meade Coun	SERVER OF KENT	
PREPARED FOR:	Kentucky Division of Water	So KEVIN J.
PREPARED BY:	Brian E. Bradley, E.I.T./ HDR   Quest	BRIAN
	Kevin J. Brian, P.E./HDR Quest	E CONCENSION OF THE REAL
DATE:	January 25, 2008	689 5 3 6 89 5 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

This memorandum summarizes the scope of improvements, existing and projected water demands, water supply capacity and hydraulic analysis for the Phase VII Elevated Water Storage Tank Project.

## Scope of Improvements

The Phase VII Elevated Water Storage Tank Project involves the construction of a 500,000 gallon elevated water storage tank and approximately 350 feet of 12-inch DI/PVC water main approximately 1 mile south of the intersection of Kentucky Highway 144 and Kentucky Highway 333 adjacent to Kentucky Highway 144 in Meade County, Kentucky. This construction will improve system reliability and hydraulics by providing additional storage to the existing distribution system.

## Water Demands

MCWD's existing average day demand is approximately 775,200 gpd. This amount includes approximately 147,000 gpd that is sold wholesale to the community of Doe Valley. The projected future demand (at full buildout) of the Phase VII Water System Improvements is 82,800 gpd (276 dwellings/lots at 300 gpd/dwelling). Past history on previous expansion projects have shown that half or approximately 138 dwellings will connect in the first 5 years. The projected 5 year total average day demand with this expansion is 816,600 gpd.

## Water Supply

MCWD purchases water wholesale from the City of Brandenburg at the Brandenburg Pump Station/Interconnect and from Hardin County Water District No. 1 at the KY 1600 Interconnect and KY 144 BPS/Interconnect (emergency/back-up only). Existing supply capacity is 400 gpm or 576,000 gpd at the Brandenburg PS and 450 gpm or 648,000 gpd at the KY 1600 Interconnect (gravity). The total connected supply capacity is approximately 1,224,000 gpd.

Technical Memorandum

## Hydraulic Analysis

An Extended Period Simulation (EPS) using a 72 hour AWWA Diurnal Curve was performed to demonstrate a complete fill and drain cycle every 72 hours. Future water demands of the proposed Phase VII Water System Improvements were based on an estimated build-out of 276 dwellings/lots.

The results of the analysis are based on the following water system boundary conditions:

•	System Average Day Demand (ADD)	
	Existing	775,200 gpd
	Proposed Waterline Ext.	82,800 gpd
	(276 dwellings x 300 gpd)	
	Total	858,000 gpd

- Demand was based on a 72 hour AWWA Diurnal Curve
- Elevated Water Storage Tanks operate within the top 2/3 of the tank
- KY 1600 Interconnect when Open = 400 450 gpm (Interconnect is open when the new tank level is below 938 and off when it is above 945)
- Brandenburg Pump Station = 350 gpm
- KY 144 Pump Station off

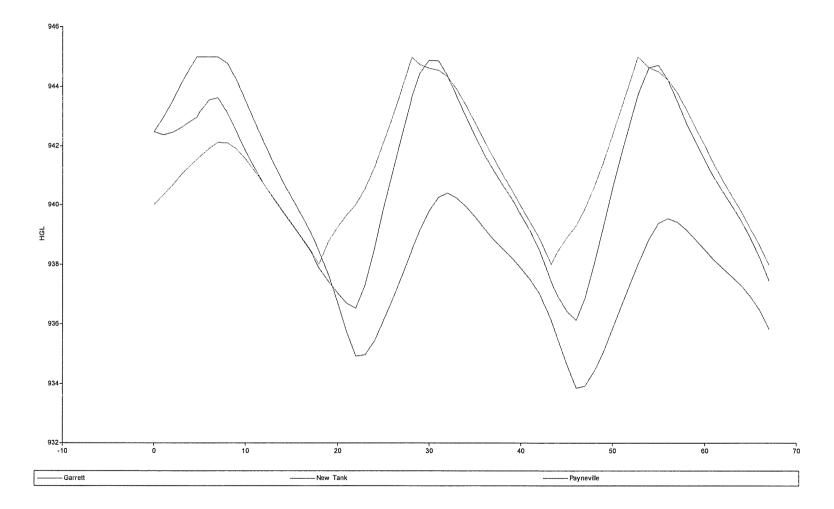
## Results

<u>Extended Period Simulation</u>. During an extended period simulation, the hydraulic grade line for the New Tank varies from 938 to 945 feet. Within its operating range the New Tank turns over 3 times within 72 hour simulation.

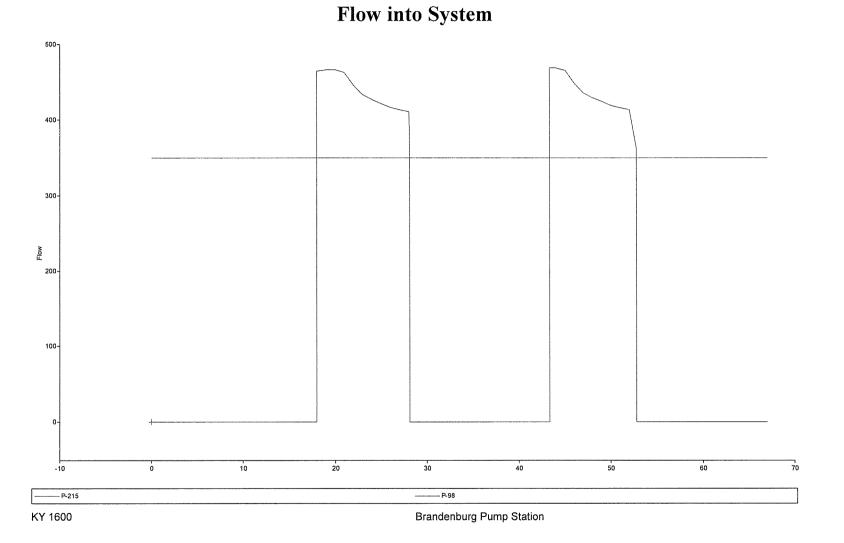
The following attachments are provided with this technical memorandum:

- Variable Head Tank Data Pipe 2000 output results (6 pages)
- Hydraulic Grade Lines for Tanks (1 graph)
- Flow into System (1 graph)

## Phase VII Elevated Water Storage Tank - Meade County Water District (MCWD) Hydraulic Grade Lines for Tanks



## Phase VII Elevated Water Storage Tank - Meade County Water District (MCWD)



## Phase VII – Water Lines and Storage Tank Meade County Water District Filename: TankEPS.P2K

## 

Node	MnPres	MnHead	MnHGL	MnTime	MxPres	MxHead	MxHGL	MxTime Elevation
61	110.36	254.68	934.68	43.30	120.65	278.42	958.42	52.74 680.0
62	110.36	254.68	934.68	43.30	120.65	278.42		52.74 680.0
147	114.69	264.68	934.68	43.30	124.98	288.42	958.42	52.74 670.0
148	110.39	254.75	934.75	43.30	120.65	278.42	958.42	52.74 680.0
151	98.27	226.78	934.78	43.30	108.52	250.42		52.74 708.0
164	101.77	234.86	934.86	43.30	111.78	257.95		52.74 700.0
167	123.47	284.92	934.92	43.30	133.33	307.68		52.74 650.0
168	108.36	250.05	935.05	43.30	118.00	272.31	957.31	52.74 685.0
169	114.85	265.04	935.04	43.30	124.50	287.31	957.31	52.74 670.0
170	92.12	212.58	935.58	43.30	101.13	233.37		52.74 723.0
205	99.98	230.71	935.71	43.30	108.84	251.18		52.74 705.0
215	110.81	255.71	935.71	43.30	119.68	276.18	956.18	52.74 680.0
216	90.49	208.81	935.81	43.30	99.27	229.08	956.08	52.74 727.0
217	113.26	261.36	936.36	43.30	121.66	280.75	955.75	52.74 675.0
218	108.93	251.39	936.39	43.30	117.32	270.74		52.74 685.0
219	108.95	251.41	936.41	43.30	117.34	270.77	955.77	52.74 685.0
220	115.45	266.42	936.42	43.30	123.91	285.94		52.74 670.0
221	91.61	211.42	936.42	43.30	100.23	231.31		52.74 725.0
222	67.77	156.39	936.39	43.30	76.40	176.31	956.31	52.74 780.0
223	80.77	186.39	936.39	43.30	89.40	206.31	956.31	52.74 750.0
224	102.45	236.42	936.42	43.30	111.31	256.88	956.88	52.74 700.0
225	98.11	226.41	936.41	43.30	106.98	246.88	956.88	52.74 710.0
226	100.29	231.43	936.43	43.30	109.23	252.07	957.07	52.74 705.0
227	80.95	186.80	936.80	43.30	90.06	207.83	957.83	52.74 750.0
228	98.05	226.26	936.26	43.30	107.11	247.17	957.17	52.74 710.0
229	102.30	236.08	936.08	43.30	111.50	257.30	957.30	52.74 700.0
230	110.81	255.73	935.73	43.30	120.28	277.58	957.58	52.74 680.0
231	110.67	255.40	935.40	43.30	120.41	277.87	957.87	52.74 680.0
232	91.07	210.15	935.15	43.30	101.02	233.13	958.13	52.74 725.0
233	84.41	194.79	934.79	43.30	94.72	218.58	958.58	52.74 740.0
234	101.74	234.78	934.78	43.30	112.10	258.68	958.68	52.74 700.0
235	97.39	224.76	934.76	43.30	107.89	248.98	958.98	52.74 710.0
237	66.01	152.33	937.33	43.30	75.33	173.85	958.85	52.74 785.0
238	99.67	230.00	930.00	0.00	99.67	230.00	930.00	0.00 700.0
239	93.53	215.83	935.83	43.30	113.51	261.95	981.95	52.74 720.0
240	89.19	205.83	935.83	43.30	109.18	251.95	981.95	52.74 730.0
245	93.00	214.62	934.62	43.30	106.01	244.63	964.63	52.74 720.0
246	93.00	214.61	934.61	43.30	106.01	244.63	964.63	52.74 720.0
247	80.01	184.64	934.64	43.30	93.01	214.63	964.63	52.74 750.0
248	84.35	194.66	934.66	43.30	97.34	224.63	964.63	52.74 740.0
249	84.35	194.66	934.66	43.30	96.17	221.92	961.92	52.74 740.0
250	82.24	189.79	934.79	43.30	96.68	223.11	968.11	52.74 745.0
251	71.44	164.86	934.86	43.30	86.43	199.45	969.45	52.74 770.0
252	61.54	142.01	935.01	43.30	77.43	178.68	971.68	52.74 793.0
253	61.67	142.31	935.31	43.30	79.00	182.31	975.31	52.74 793.0
254	65.57	151.31	935.31	43.30	83.04	191.64	975.64	52.74 784.0
255	58.79	135.67	935.67	43.30	76.35	176.18	976.18	52.74 800.0
256	63.03	145.44	935.44	43.30	80.51	185.80	975.80	52.74 790.0
257	58.80	135.70	935.70	43.30	76.36	176.22	976.22	52.74 800.0
259	75.93	175.23	935.23	43.30	93.44	215.64	975.64	52.74 760.0
260	75.87	175.08	935.08	43.30	93.44	215.63	975.63	52.74 760.0

Noo	de	MnPres	MnHead	MnHGL	MnTime	MxPres	MxHead	MxHGL	MxTime Elevation
									and
	261	80.20		935.08					
	262	80.20		935.07		97.78		975.63	
	263	80.20		935.08				975.63	
	264 265	84.51 75.84		935.01 935.02		102.11 93.44		975.63 975.63	
	265	75.84		935.02		93.44		975.63	
	267	84.58		935.19		102.11		975.64	
	268	84.58		935.19	43.30			975.64	
	269	71.66		935.36				975.80	
	270	62.98		935.34	43.30			975.80	
	271	49.98		935.34	43.30			975.80	
	272	75.98		935.34	43.30			975.80	
	273	67.53		935.84	43.30			976.42	
	274 275	110.85 67.52		935.80 935.81	43.30 43.30			956.08 956.08	
	276	102.37	236.24	936.24	43.30			952.54	
	277	93.70		936.23		100.62		952.19	
	278	85.04		936.24	43.30	91.89		952.06	
	279	76.38	176.25	936.25	43.30			951.78	
	280	78.55	181.26	936.26	43.30	85.20		951.62	
	281	78.53	181.23	936.23		85.28		951.79	
	282	76.37	176.23	936.23		83.15		951.89	
	283 284	80.70 77.23	186.23 178.23	936.23 936.23	43.30 43.30	87.53 84.08		951.99 952.04	
	285	74.20	171.22	936.22				952.04	
	286	85.03	196.23	936.23		91.89		952.04	
	287	103.65		936.19	43.30			952.27	
	288	67.68	156.19	936.19	43.30	74.62		952.20	
	289	65.51	151.18	936.18	43.30	72.39		952.06	
	290	68.54	158.18	936.18	43.30	75.39		951.98	
	291	71.13	164.16	936.16	43.30	77.99		951.98	
	292 293	80.66 80.65	$186.14 \\ 186.12$	936.14 936.12	43.30 43.30	87.52 87.52		951.98 951.98	
	293	84.98	196.12	936.12	43.30	91.86		951.98	
	295	102.31	236.10	936.10	43.30	109.19		951.98	
	296	89.32	206.11	936.11		96.19		951.98	
4	297	85.03	196.22	936.22	43.30	91.79	211.82	951.82	52.74 740.0
	298	72.12		936.44		77.92		949.82	
	299	74.44	171.78	936.78	43.30				
	309	89.66		936.92		96.38		952.42	
	310 311	83.24 92.88	192.09 214.34	937.09	43.30	90.30	208.38	953.38	52.74 745.0 52.74 723.0
	312	75.90	175.16	937.16	43.30	83.71	193.18	955.18	
	313	76.67	176.94	936.94	43.30	84.64	195.33	955.33	
	314	79.17	182.70	936.70	43.30	87.33	201.52	955.52	
	315	37.56	86.68	936.68	43.30	45.73	105.52	955.52	
	316	87.09	200.98	935.98	69.00	90.89	209.74	944.74	
	317	102.25	235.97	935.97	69.00	106.06	244.74	944.74	
	318	82.75	190.97	935.97	69.00	86.56		944.74	
	319 320	87.52 63.29	201.98 146.06	935.98 936.06	69.00 70.00	91.32 67.10	210.74 154.84	944.74 944.84	
	321	63.29	146.06	936.06	70.00	67.11	154.87	944.84	
	322	76.29	176.06	936.06	70.00	80.09	184.83	944.83	
	323	32.96	76.06	936.06	70.00	36.76		944.82	
	324	32.96	76.06	936.06	70.00	36.76		944.82	
	325	67.73	156.30	936.30	69.00	71.59	165.20	945.20	
	326	109.36	252.37	936.37	69.00	114.29	263.75	947.75	
	327	104.94	242.16	937.16	69.00	111.02	256.19	951.19	
	328 329	124.65 114.29	287.65 263.76	935.65 934.76	69.00 69.00	130.10 121.47	300.24 280.32	948.24 951.32	
	331	114.29	263.76	934.76	69.00	121.47	280.32	951.32 951.32	
	332	101.72	234.74	934.74	69.00	108.91	251.32	951.32	

Node	MnPres	MnHead	MnHGL	MnTime	MxPres	MxHead		MxTime H	Elevation
333	104.59	241.37	936.37	69.00	109.86	253.53	948.53	28.11	695.0
334			936.37		129.71	299.32	949.32	4.68	650.0
335		281.37	936.37	69.00	128.56		951.68		655.0
336	114.82	264.97	934.97		122.31	282.25	952.25		670.0
337		281.41	936.41		128.64	296.87	951.87		655.0
338			936.35		138.18	318.87	951.87		633.0
339		249.26	936.26		114.78		951.87		687.0
340			936.05		135.14	311.86	951.86		640.0
341		296.04	936.04	69.00	135.14	311.86	951.86		640.0
342		296.03 296.03	936.03 936.03	69.00 69.00	$135.14 \\ 135.14$	311.86 311.86	951.86 951.86		640.0 640.0
343 344		298.03	936.71		126.48	291.88	952.88		661.0
345			937.37		127.81		954.95		660.0
346		286.70	937.70		132.14		955.95		651.0
347			938.26		128.91	297.48	957.48		660.0
348		268.70	938.70		125.08	288.64	958.64		670.0
349			938.83				958.99	4.68	662.0
350	122.84	283.48	939.48	69.00	131.98	304.56	960.56	4.68	656.0
351	121.58	280.57	940.57	69.00	131.33	303.07	963.07		660.0
352			941.06		136.13		964.15		650.0
353			941.87				965.53		
354			935.88				944.73		710.0
355			935.71		101.71		944.71		710.0
356			935.71		97.37 76.57		944.71 944.71		720.0 768.0
357 358			935.70 935.69				944.71		710.0
359			935.09				944.66		725.0
360			934.81				944.66		690.0
361			934.31				944.64		680.0
362			933.96				944.63		748.0
363			933.82			269.62	944.62		675.0
364	109.94	253.70	933.70	69.00	114.67	264.62	944.62	52.74	680.0
365	106.85	246.58	933.58	69.00	111.63	257.62	944.62		687.0
366			933.48				944.61		670.0
367			933.38				944.61		660.0
368			933.33				944.61		687.0
369			933.30				944.61 944.61		675.0 670.0
370 371			933.29 933.29				944.61		670.0
372							944.61		680.0
373			933.28				944.61		685.0
374			933.28	69.00		249.61			
375			933.28		106.00		944.61		700.0
376			933.32		112.50		944.61	52.74	685.0
377			933.31	69.00	125.50		944.61		655.0
378			933.31		123.33		944.61		660.0
379			933.37		127.66		944.61		650.0
380			933.34		115.10		944.61		679.0
381			933.32		116.83		944.61		675.0
382			933.31		128.53		944.61		648.0
383			933.30				944.61 944.61		645.0 670.0
384 385			933.29 933.28		119.00 116.83		944.61		675.0
386			933.28				944.61		650.0
387			933.28				944.61		670.0
388			933.28				944.61		674.0
389			933.28				944.61		707.0
390			933.27		114.66	264.61	944.61	52.74	680.0
391	. 118.42		933.27				944.61		660.0
392			933.26				944.61		630.0
393			933.28				944.61		690.0
394			933.29				944.61		672.0
395	5 107.60	248.30	933.30	69.00	112.50	259.61	944.61	52.74	685.0

1	Node	MnPres	s MnHea	d MnHGL	MnTime	e MxPres	s MxHead	MxHGL	MxTin	ne Elevation
39	6 1	L15.40	266.31	933.31	69.00	120.30	277.61	944.61	52.74	667.0
				933.38	69.00	122.03		944.61	52.74	663.0
		122.80		933.38	69.00			944.61	52.74	
		118.43		933.31	69.00	123.33		944.61	52.74	
		122.76	283.30	933.30	69.00	127.66		944.61	52.74	
		122.76 157.43	283.30 363.29	933.30 933.29	69.00 69.00	127.66 162.33	294.61 374.61	944.61 944.61	52.74 52.74	
		130.40	300.93	933.29	69.00	140.46		964.15		640.0
		136.03	313.91	940.91	69.00	146.10		964.15		627.0
		139.06	320.90	940.90	69.00	149.13		964.15		620.0
		128.23	295.90	940.90	69.00	138.30		964.15	4.68	645.0
		132.57	305.93	940.93	69.00	142.63		964.15		635.0
		126.06	290.90	940.90	69.00	136.13		964.15		650.0
		124.73	287.83	942.83	69.00	135.14	311.86	966.86		655.0
		128.35 126.47	296.19 291.85	943.19 941.85	69.00 69.00	138.82 136.73		967.35 965.53		647.0 650.0
		119.95	276.82	941.82	69.00	130.23		965.53		665.0
		119.95	276.81	941.81	69.00	130.23	300.53	965.53		665.0
		130.78	301.80	941.80	69.00	141.06		965.53		640.0
		117.78	271.81	941.81	69.00	128.06	295.53	965.53	4.68	670.0
44	48	119.95	276.80	941.80	69.00	130.23	300.53	965.53		665.0
		126.96	292.98	942.98	69.00	137.61	317.55	967.55		650.0
		125.77	290.23	940.23	69.00	136.62		965.28		650.0
		128.70	297.01	937.01	69.00	139.78	322.57	962.57		640.0 660.0
		119.59 123.39	275.98 284.75	935.98 934.75	69.00 69.00	130.70 134.52	301.62 310.43	961.62 960.43		650.0
		119.05	274.73	934.73	69.00	130.18	300.42	960.43		660.0
		119.05	274.72	934.72	69.00	130.18	300.42	960.42		660.0
		114.71	264.72	934.72	69.00	125.85	290.42	960.42	4.68	670.0
		120.78	278.72	934.72	69.00	131.92	304.42	960.42	4.68	656.0
		120.78	278.71	934.71	69.00	131.92	304.42	960.42		656.0
		142.98	329.95	934.95	69.00	154.22	355.89	960.89		605.0
		140.76	324.83	934.83	69.00	152.02	350.82	960.82 960.29		610.0 605.0
		142.54 149.04	328.93 343.93	933.93 933.93	69.00 69.00	153.96 160.46	355.29 370.29	960.29		590.0
	66	49.12	113.34			49.12		760.34		647.0
	67	41.69	96.20	757.46				757.46		661.3
	68	41.42	95.57	756.83				756.83		661.3
4 (	69	137.68	317.73	933.73	69.00	149.16		960.22		616.0
		130.26	300.59		69.00	141.77		960.16		633.0
		122.89	283.58	933.58	69.00	134.39		960.14		650.0
		140.22	323.58	933.58		151.73				610.0
		144.56 151.51	333.60 349.63	933.60 933.63	69.00 69.00	156.06 162.99	360.13 376.12	960.13 960.12		600.0 584.0
		142.38	328.58	933.58	70.00	153.88	355.11	960.12		605.0
		127.18	293.49	933.49	70.00	138.71	320.11	960.11		640.0
		109.83	253.46	933.46	70.00	121.38	280.11	960.11	4.68	680.0
4	78	57.80	133.40	933.40	70.00	69.38	160.11	960.11		800.0
	79	69.46	160.28	933.28	70.00	81.07	187.09	960.09		773.0
	80	61.62	142.20	933.20	70.00	73.27	169.09	960.09		791.0
	81	57.70	133.15	933.15	70.00	69.37	160.08	960.08		800.0
	82 83	64.19 57.68	148.13 133.11	933.13 933.11	70.00 70.00	75.87 69.37	175.08 160.08	960.08 960.08		785.0 800.0
	84	44.24	102.10	933.11	70.00	55.93	129.07	960.08		831.0
	85	53.34	123.09	933.09	70.00	65.03	150.07	960.07		810.0
	86	47.27	109.09	933.09	70.00	58.96	136.07	960.07		824.0
	87	77.17	178.09	933.09	70.00	88.86	205.07	960.07	4.68	755.0
	88	76.53	176.62	931.62	69.00	88.86	205.07	960.07		755.0
		147.61	340.63	931.63	69.00	159.93	369.07	960.07		591.0
		167.98	387.66	931.66	69.00	180.30	416.07	960.07		544.0
		176.69	407.75	931.75	69.00 69.00	188.97	436.08 455.08	960.08 960.08		524.0 505.0
		184.96 166.38	426.82 383.95	931.82 931.95	69.00 69.00	197.20 178.57	455.08 412.08	960.08		548.0
		146.45	337.97	931.95 931.97	69.00	158.64	366.08	960.08		594.0
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	Node		MnHead				MxHead			Elevation
495	118.30						960.12	4,68	3 660.0	
496		323.23	933.23	69.0	0 151.7		3 960.13	4.6	8 610.0	
498	165.51								8 550.0	
499	134.74								8 621.0	
537	139.50								8 610.0 0 750.0	
538 539	78.00 80.52								4 750.0	
542	50.33								0 647.0	
543	62.09								0 624.0	
544	84.96								0 740.0	
545	122.84	283.48			0 127.6	7 294.6	1 944.61		4 650.0	
546	112.90								4 673.0	
547	105.15								4 691.0	
548	90.46								4 725.0 4 750.0	
549 555	79.67 122.48								4 750.0 8 661.3	
556	122.40								8 661.3	
557	136.03						8 960.28	4.6	8 620.0	
558	123.02							4.6	8 650.0	
559	404.67	933.85	933.85	69.0	0 416.1				8 0.0	
560	127.18								8 640.0	
564	111.63								8 674.0	
``J-6	101.68								4 700.0	
O-Battleto	76.53 162.57		931.62 1038.16				6 1038.16		8 755.0 0 663.0	
O-Brandenb I-Flaherty									0 750.0	
Garrett	42.47								0 838.0	
	110.36								4 680.0	
J- 2	83.56					6 245.2	1 988.21	52.7	4 743.0	
J- 3	91.36								4 725.0	
J- 4	93.53								4 720.0	
J- 5	89.19								4 730.0	
J- 7 J- 8	72.17 93.03								4 770.0 4 720.0	
J- 8 J- 9	93.03 84.36								4 740.0	
J- 10	92.87								4 723.0	
J- 11	122.13								8 660.0	
J- 12	117.39	270.90	940.90			6 294.1	5 964.15	4.6	8 670.0	
J- 13	407.74								8 0.0	
J- 14	130.21								8 634.0	
J- 15	147.38								8 594.0	
J- 16 J- 17	117.78						3 965.53 0 960.20		8 670.0 8 655.0	
J- 18	101.25								8 700.0	
J- 19	120.75								8 655.0	
J- 20	144.59								8 600.0	
J- 21	131.59		933.66	69.0	0 143.0	8 330.1	9 960.19	4.6	8 630.0	
J- 22	135.92								8 620.0	
J- 23	113.38								8 672.0	
J- 24	99.07								8 705.0	
J- 25	404.56								8 0.0 8 690.0	
J- 26 J- 27	105.56								6 690.0 8 665.0	
J- 28	131.55								6 630.0	
J- 29	146.72								8 595.0	
J- 30	111.86							4.6	8 675.0	
J- 31	114.55				0 125.4	9 289.6	0 959.60	4.6	670.0	
J- 32	100.68								8 700.0	
J- 33	404.48									
J- 34	86.41								8 734.0	
J- 35	127.09 118.94								8 640.0 8 660.0	
J- 36 J- 37	118.94								68 628.0	
J- 38	108.05								68 685.0	
5 50	100.00		201.07	00.0				1.0		

Node	MnPres	MnHead	MnHGL	MnTime	MxPres	MxHead	MxHGL	MxTime Elevation
J- 39	117.55	271.27	934.27	69.00	128.53	296.61	959.61	4.68 663.0
J- 40			935.83		80.66	186.15	986.15	
J- 41			934.82	69.00	122.45	282.58	952.58	
J- 42	110.15		934.18	69.00	121.17	279.63	959.63	
J- 43	147.61	340.64	931.64	69.00	159.93	369.07	960.07	4.68 591.0
J- 44	126.45	291.81	941.81	69.00	136.73	315.53	965.53	4.68 650.0
J- 45			931.57		121.36	280.07	960.07	
J- 46			934.18	69.00	130.72	301.65	959.65	
J- 47			931.57		416.03	960.07	960.07	
J- 48			931.56		125.70	290.07	960.07	
J- 49			931.58		91.03	210.07	960.07	4.68 750.0
J- 50			931.57		90.16	208.07	960.07	4.68 752.0
J- 51			934.18	69.00	129.85	299.65	959.65	
J- 52 J- 53			933.50 934.18	69.00 69.00	416.05 129.85	960.12 299.65	960.12 959.65	
J- 54			934.10		131.58	303.64	959.63	
J- 55			934.19		132.01	304.64	959.64	
J- 56			934.19		133.31	307.64	959.64	
J- 57			934.19	69.00	119.43	275.60	959.60	
J- 58			934.19		132.44	305.64	959.64	
J- 59			934.18	69.00	130.71	301.64	959.64	
J- 60			934.18	69.00	130.71	301.65	959.65	
J- 63			934.18	69.00	130.71	301.63	959.63	
J- 64			934.18	69.00	127.67	294.63	959.63	
J- 65			934.18	69.00	129.84	299.64	959.64	
J- 66	121.41		934.18	69.00	132.44	305.63	959.63	4.68 654.0
J- 67	116.21	268.18	934.18	69.00	127.24	293.63	959.63	4.68 666.0
J- 68	114.05	263.18	934.18	69.00	125.08	288.64	959.64	4.68 671.0
J- 69			934.18	69.00	130.28	300.64	959.64	4.68 659.0
J- 70			934.33	69.00	138.29		960.13	
J- 71			934.18	69.00	125.24	289.01	960.01	4.68 6/1.0
J- 72			934.18	69.00	123.84	285.79	959.79	
J- 73			934.30	69.00	125.72	290.11	960.11	
J- 74			934.96		412.10	950.99		4.68 0.0
J- 75 J- 76			935.83 933.41	43.30 70.00	$119.16 \\ 416.05$	275.00	1000.00 960.11	
J- 77		244.72	934.72	69.00	113.24	261.32	951.32	
J- 78			934.73		117.57	271.32	951.32	
J- 79			934.73		122.54	282.78	952.78	
J- 80			934.61	69.00	107.52	248.12	953.12	
J- 81			934.48		123.58	285.18	955.18	
J- 82	104.17		934.40	69.00	113.96	262.98	956.98	4.68 694.0
J- 83			934.36	69.00	127.10	293.32	958.32	
J- 84	112.41	259.42	934.42	69.00	122.02	281.58	956.58	4.68 675.0
J- 85	99.50	229.61	934.61	69.00	107.19	247.36	952.36	4.68 705.0
J- 86	109.46	252.60	934.60	69.00	117.23	270.53	952.53	4.68 682.0
J- 87	80.00	184.62	934.62	69.00	87.59	202.14	952.14	4.68 750.0
J- 88	405.69		936.21	69.00	412.42	951.75	951.75	4.68 0.0
J- 89			934.60	69.00	116.53	268.92	952.92	
J- 90			937.62	43.30	59.89	138.20	958.20	52.74 820.0
J- 91			937.80	43.30	85.34	196.95	956.95	
J- 92		227.49	937.49	43.30	106.45	245.65	955.65	52.74 710.0
J- 93			934.04	69.00	139.15	321.12	960.12	
J- 94	127.42	294.05	934.05	69.00	138.71	320.11	960.11	4.68 640.0
J- 95 J- 96	105.77 84.09	244.07 194.05	934.07 934.05	69.00 69.00	117.04 95.38	270.08 220.10	960.08 960.10	4.68 690.0 4.68 740.0
J- 98 J- 97		248.05	934.05	69.00	95.38	274.10	960.10	4.68 686.0
J- 97 J- 98	97.09	248.06	934.06	69.00	108.38	274.10	960.10	4.68 710.0
J- 99		267.07	934.00	69.00	127.01	293.09	960.10	
J-100	112.26	259.07	934.07	69.00	123.54	285.09	960.09	
J-101	46.40	107.08	934.08	69.00	57.67	133.07	960.07	4.68 827.0
J-102		214.08	934.08	69.00	104.03	240.08	960.08	4.68 720.0
, J-103		934.08	934.08	69.00	416.03	960.07	960.07	
J-104	86.27	199.08	934.08	69.00	97.53	225.07	960.07	4.68 735.0

	Node	MnPre	s Mn		MnHG		MnTime								МхЛ	ime	Elevation
J-105	5 103	.60 2	39.08				00 11			265.			.07		. 68	695.	.0
J-106	5 114		64.11			69.		5.6		290.		960.		4	. 68	670.	. 0
J-107			36.10			69.		3.5		262.		960.				698.	
J-108			34.10			69.		2.6		260.		960.		4	. 68	700.	. 0
J-109	) 101		34.10			69.		2.6		260.		960.	.06	4	. 68	700.	. 0
J-110	) 101	.44 2	34.09	934	.09	69.	00 11	2.7	0 2	260.	07	960.	.07	4	. 68	700.	. 0
J-111	. 133	.93 3	09.07	934	.07	69.	00 14	5.2	1 3	335.	09	960	.09	4	.68	625.	. 0
J-112	2 105	.77 2	44.09	934	.09	69.	00 11	7.0	3 2	270.	06	960	.06	4	.68	690.	. 0
J-113	3 133	.93 3	09.08	934	.08	69.	00 14	5.2	0	335.	80	960	.08	4	.68	625.	. 0
J-114	123	.11 2	84.09	934	.09	69.	00 13	4.3	6	310.	07	960	.07	4	. 68	650.	. 0
J-601	. 146	.90 3	39.00	934	.00	69.	00 15	8.2	7 :	365.	24	960	.24	4	. 68	595,	. 0
J-602	2 125	.67 2	90.02	934	.02	69.	00 13	7.0	0 3	316.	14	960	.14	4	.68	644.	. 0
J-603	3 137	.38 3	17.03	934	.03	69.	00 14	8.6	7	343.	09	960	.09	4	.68	617.	. 0
J-604			44.16	934	.16	69.	00 16	0.4	9	370.	37	960	.37	4	.68	590.	. 0
J-605	5 142		29.32		.32	69.	00 15	4.0		355.		960	.47	4	. 68	605	.0
J-606	5 134	.12 3	09.51	934	.51	69.	00 14	5.4	1 .	335.	55	960	.55	4	.68	625.	. 0
J-607	138	.55 3	19.73	934	.73	69.	00 14	9.7		345.		960.	.64	4	.68	615.	. 0
J-608	8 148	.61 3	42.94	933	.94	69.	00 16	0.0	1 .	369.	26	960	.26	4	.68	591.	. 0
J-609			84.08			69.		4.3		310.		960				650.	
J-610	) 133		09.02			69.		5.2		335.		960		4	.68	625.	. 0
J-611			32.13			70.		2.2		259.		960				701.	
J-612			13.13			70.		4.0		240.		960				720.	
J-613			53.15			70.		8.0		180.		960				780.	
J-614			24.66			43.		9.0		251.		961				710.	
J-615			04.78	934		43.		9.0		228.		958				730	
J-616			24.78			43.		7.6		248.		958				710.	
J-617				1069		20.		6.6				1070				870.	
J-618				1069		20.		2.7				1070	.00	2	.00	879. 850.	.0
J-619				1069		20.		5.3				1070					
J-NT1			17.93			43.		9.5		137.		957				820.	
New Tank			08.00			67.		5.2		127.		957				830	
Payneville			20.89			70.		3.9		147.		960				812	
R- 1			30.00			0.		9.6		230.		930				700.	
R- 2				1000		0.		8.3				1000				750.	
R- 3			20.00			0.		2.0		120.			.00			650.	
R- 4				1070		0.		5.5				1070				965.	
O-RV-1			82.73			69.		3.0		307.		970				663.	
I-Battletc			78.09			70.		8.8		205.		960				755	
I-Brandenb			92.75			0.		0.1		92.		755				663.	
O-Flaherty			85.82			43.		0.5		231.			.95			750.	
I-RV-1	. 162	.29 3	/4.51	1037	.51	0.	00 16	2.2	9.	3/4.	51	T037	.51	υ	.00	663.	.0

\*\*\*\*\* HYDRAULIC ANALYSIS COMPLETED \*\*\*\*\*

# ATTACHMENT #4

- KDOW Approvals
- KYTC Encroachment Permits
- CSX Pipeline Crossing Agreement



#### ENVIRONMENTAL AND PUBLIC PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Ernie Fletcher Governor **Division of Water** 14 Reilly Road Frankfort, Kentucky 40601-1190 www.kentucky.gov

Teresa J. Hill Secretary

September 26, 2007

Mr. Tim Osborne, Field Supervisor Meade County Water District 1003 Armory Place Brandenburg, Kentucky 40108

Dear Mr.Osborne,

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of 9,020 feet of 10-inch PVC and 47,580 feet of 8-inch PVC and 12,960 feet of 6-inch PVC and 620 feet of 6-inch DI waterline. 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.

If you have any questions regarding this decision, please contact Fred Sarabi, at (502) 564-3410, extension 549.

Sincerely UDonna S. Marlin, Manager Drinking Water Branch **Division** of Water

DSM/FFSEnclosureHDR/Quest Engineers, Inc.CC:Meade County Health Department.



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### Distribution-Major Construction Meade Co Water District Subject Item Inventory

## Activity ID No.: APE20070002

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# Subject Item Inventory:

	ID	Designation	Description
	AIOO34020		
	PORT27	Waterline Extension	9,020 feet of 10-inch PVC and 47,580 feet of 8-inch PVC and 12,960 feet of 6-inch PVC and 620 feet of 6-inch DI
1	Subject Ite	m Groups:	, and 12,960 feet of 6-inch PVC and 620 feet of 6-inch DI

# Subject Item Groups:

ID	Description	
GACT26	9,020 feet of 10-inch PVC and 47,580 feet of 8-inch	Components
	PVC and 12,960 feet of 6-inch PVC and 620 feet of	PORT27 9,020 feet of 10-inch PVC and 47,580 feet of 8-inch PVC and 12,960 feet of 6-inch PVC and 620 feet of 6-inch DI
	6-inch DI	of 6-inch DI

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

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Activity ID No.: APE20070002

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## GACT26 (continued):

#### 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)]
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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Page 2 of 7

# Facility Requirements

# Activity ID No.: APE20070002

# PORT27 (continued):

Limitation Requirements:

No.	Parameter	Conditi
L-7		Condition
~ ,	Distance	When water lines and sewers cross,
		<ol> <li>water lines shall be laid such that either</li> <li>the the top of the water 1</li> </ol>
		<ul> <li>a) the the top of the water line is a vertical Distance &gt;= 18 in below the bottom of the sewer line or</li> <li>b) the bottom of the water line is a vertical Distance &gt;= 18 in above the top of the sewer line or</li> <li>c) 1 full length of the water pipe shall be located as a several line or and</li> </ul>
		2) 1 full length of the water line is a vertical Distance $\geq 18$ in above the bottom of the sewer line or
7.0		<ul> <li>a) the bottom of the water line is a vertical Distance &gt;= 18 in below the bottom of the sewer line or</li> <li>2) I 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</li> <li>3) special structural support for the water and sewer pipes may be required. [Recommended Standards for Water Works 8.6]</li> <li>The open end of an air relief pipe from automatic values shall be</li> </ul>
L-8	Distance	The standards for Weter Weter Weter Statistical International Standards for Weter
		The open end of an air relief pipe from automatic valves shall be extended a Distance >= 1.0 ft above grade and provided with manual air relief valves is recommended wherever possible. [Recommended Stand be extended to the top of the pit. It
	,	screened, downward-facing elbow. The pipe from a
		is applicable is recommended wherever non-its operated valve shall be extend to be been and provided with
-9	Pressure	
	riessure	
		Pipes shall not be installed unless all points of the distribution system remain designed for ground level Pressure >= 20 psi und 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. Pressure >= 30 psi must be available on the discharge of the disc
		months: All Year Statistical In Stat
-10	Pressure	2 control basis: Minimum.
		Pressure >= 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.
•11 • • • •		applicable during the following monther at user arge side of all meters 1401 to the
	Residual Disinfection	New or release 1
		construction and before the shall be thoroughly disinfects 1 (
		New or relocated water lines shall be thoroughly disinfected (in accordance with AWWA Standard C651) upon completion of such amounts as to produce an initial disinfectant concentration of at least 50 ppm and a Residual Disinfection $\geq 25$ monitoring applicable to the line does not show it horough flushing and place the line time to the line does not show it.
		end of 24 hours. Followed at initial disinfectant concentration of a relocated lines use chloring of
		such amounts as to produce an initial disinfectant concentration of at least 50 ppm and a Residual Disinfection completion of end of 24 hours. Follow the line disinfection with thorough flushing and place the lines use chlorine or chlorine compounds in monitoring applicable to the line does not show the presence of Coliform. 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 to the presence of the following months: All Year. Statistical basis: Minimum.
		Coliform. [401 KAR 8:150 Section 4(1) Section 4(1)
		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.
		- our, Statistical basis: Minimum.

Page 4 of 7

Activity ID No.: APE20070002

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# PORT27 (continued):

## Narrative Requirements: Additional Limitations:

Condition No.	Condition
T-2	Additional Limitations: Water line installation shall be in accordance with AWWA standard
T-3	Additional Limitations: Water line installation shall be in accordance with AWWA standards or manufacturer recommendations. [Recommended Standards for Water Works 8.5.1] Additional Limitations: Pipes, fittings, valves and fire hydrants shall conform to the latest standards issued by the AWWA or NSF (if such standards exist). [Recommended Standards for Water Works 8.0.1] Additional Limitations:
T-4	At high points in a state
Γ-5	Additional Limitations: Additional Limitations: Additional Limitations:
-6	Additional Limitations: A fire hydrant or blow-off shall be required at the end of each doct and the
<b>`-7</b>	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] Additional Limitations: For each fire hydrant, auxiliary valves shall be installed in the local deal and line.
	For each fire hydrant, auxiliary valves shall be installed in the hydrant lead pipe. [Recommended Standards for Water Works 8.3.3] 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 containing valves, blow-offs, meters, or other underground or to the surface of the ground where they are not subject to flooding by surface water. [Recommended Standards for Water Works 8.4.3] Additional Limitations:
-	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 ionpermeable 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]

Page 6 of 7

STEVEN L. BESHEAR GOVERNOR



LEONARD K. PETERS SECRETARY

#### **ENERGY AND ENVIRONMENT CABINET**

DEPARTMENT FOR ENVIRONMENTAL PROTECTION DIVISION OF WATER 14 REILLY ROAD FRANKFORT, KENTUCKY 40601 www.kentucky.gov

July 14, 2008

Mr. Tim Osborne, Field Manager Meade Co Water District 1003 Armory Place Brandenburg, KY 40108

> RE: Meade Co Water District AI # 34020, APE20080003 PWSID # 0820369-08-003 Phase VII Water System Improvements-WL & Stor. Tank Meade County, KY

Dear Mr. Osborne:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 500,000 Gallon Elevated Water Storage Tank and 350 feet of 12 inch waterline. 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.

Additionally, your application indicates that the above described project and the previously approved project from September 26, 2007 with PWSID #0820369-07-002 are partially funded by a State Revolving Fund (SRF) Loan / an EPA Special Appropriation (SPAP) Grant. Consequently, the following stipulations must also be observed.

- 1. This approval is for the technical aspects of this project only. Approval of the SRF/SPAP aspects of this project will be addressed in a separate letter. You are <u>NOT</u> authorized to advertise for bids at this time. We are currently whiting for EPA approval of the Environmental Review Document on this project, specifications which include all the provisions required for SRF/SPAP projects, and a SRF/SPAP Specifications Checklist.
- 2. If sanitary features of the approved plans are to be changed during construction, the engineer shall submit the revision to the Division of Water for approval prior to implementation of the modification. Written approval from the Division of Water must be granted prior to on-site work dedicated to the adjustment.
- 3. When this project is completed, the engineer shall submit as-built drawings to the Division of Water.



AI# 34020, APE20080003 PWSID # 0820369-08-003 July 14, 2008 Page 2 of 2

If you have any questions concerning this project, please contact Mr. Jonathan Reynolds at 502-564-8158 extension 595.

Sincerely,

Pilez MI

for

Donna S. Marlin, Manager Drinking Water Branch Division of Water

MR:JR

Enclosures

C: Quest Engineers Inc Meade County Health Department Public Service Commission Water Resources Water Quality David Holroyd, EPA Region IV Project Administration Section, RPPS Branch

Meade Co Water District

Subject Item Inventory

# Subject Item Inventory:

Activity ID No.: APE20080003

ID	Designation	Description
AIOO3402	20	
PORT31	Water line	350 feet of 12 inch PVC waterline
STORI		500,000 Gallon Elevated Water Storage Tank
Subject It	tem Groups:	
ID D GACT30 50	Description 00,000 Gallon Elevated Water Storag	ge Tank STOR1 500,000 Gallon Elevated Water Storage Tank PORT31 350 feet of 12 inch PVC waterline

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

Activity ID No.: APE20080003

# GACT30 (Phase VII Water System Im) 500,000 Gallon Elevated Water 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 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 Condition No. Condition 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 S-2 be implemented without the prior written approval of the Cabinet. [401 KAR 8:100 Section 1(8)]

Page 1 of 13

Meade Co Water District Facility Requirements

Activity ID No.: APE20080003

# GACT30 (continued):

Submittal/Action Requirements:

Condition No.	Condition
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)]
Narrativo Addit	e Requirements:
Condition	
No	Condition
Γ-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	
10.	Condition
	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 this permit does not address the authority of the permittee to require or licenses required by this Cabinet and other state, federal and local to the permittee to require the theorem.
- 5	Further being of the permittee to provide service to the area to be area to b
	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)] 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, and 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(7)]

Page 2 of 13

Activity ID No.: APE20080003

# PORT31 (Water line) 350 feet of 12 inch PVC waterline:

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  $\geq 6$  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, 40] KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Minimum. L-3 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. 1.-4 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-5 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 L-6 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.

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Meade Co Water District Facility Requirements

Activity ID No.: APE20080003

### PORT31 (continued):

Limitation Requirements:

Condition No.	Parameter	Condition
L-7	Distance	<ul> <li>When water lines and sewers cross,</li> <li>1) water lines shall be laid such that either</li> <li>a) the the top of the water line is a vertical Distance &gt;= 18 in below the bottom of the sewer line or</li> <li>b) the bottom of the water line is a vertical Distance &gt;= 18 in above the top of the sewer line,</li> <li>2) I 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, and</li> <li>3) special structural support for the water and sewer pipes may be required. [Recommended Standards for Water Works 8.6.3] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.</li> </ul>
L-8	Distance	The open end of an air relief pipe from automatic valves shall be extended a Distance >= 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.
L-9	Pressure	Pipes shall not be installed unless all points of the distribution system remain designed for ground level Pressure >= 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.
L-10	Pressure	Pressure >= 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.
L-11	Residual Disinfection	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 >= 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. 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.

Page 4 of 13

Activity ID No.: APE20080003

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# PORT31 (continued):

Limitation Requirements:

Page 5 of 13

Condition	n Parameter	Condition
L-12	Velocity	Fach blow off a contract of the
Monitor	ring Requirements:	Each blow-off or fire hydrant shall be sized so that Velocity >= 2.5 ft/sec can be achieved in the water main served by the blow-o or hydrant during flushing. [Recommended Standards for Water Works 8.1.6.b, 401 KAR 8:100 Section 1(7)] This requirement applicable during the following months: All Year. Statistical basis: Minimum.
Condition No.	Parameter	Condition
M-1	leaks	The presence on the
		Standards for Water Works 8 5 51 TT
Additi	e Requirements: onal Limitations:	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:
Additi ondition	e Requirements: ional Limitations: Condition	Instantaneous determination.
Additi ondition o.	Condition	
Additi ondition o.	Condition Additional Limitations: Water line installation shall	Instantaneous determination. Instantaneous determination. be in accordance with AWWA standards or manufacturer recommendations. [Recommended Standards for Water Works 8.5.1] re hydrants shall conform to the latest standards issued by the AWWA or NSF (if such standards exist). PVC and PE piping used must tandard 61. [Recommended Standards for Water Works 8.0.1]

Activity ID No.: APE20080003

#### PORT31 (continued):

Narrative Requirements:

#### Additional Limitations:

Condition No. Condition Additional Limitations: T-4 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] T-5 Additional Limitations: For each fire hydrant, auxiliary valves shall be installed in the hydrant lead pipe. [Recommended Standards for Water Works 8.3.3] T-6 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] Additional Limitations: T-7 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] Additional Limitations: T-8 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] Additional Limitations: T-9 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)]

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Meade Co Water District Facility Requirements

Activity ID No.: APE20080003

# STOR1 (Elevated Storage Tank) 500,000 Gallon Elevated Water Storage Tank:

## Limitation Requirements:

Condition No. Parameter Condition L-1 High and low level Depth >= 30 ft apart should not be allowed in storage structures providing pressure to a distribution system. Depth [Recommended Standards for Water Works 7.3.2] This requirement is applicable during the following months: All Year. L-2 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 >= 10 ft away from the base of the 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 1.-3 Height Tanks shall have an overflow which is brought down to a Height  $\geq 12$  and  $\leq 24$  in above the ground surface, a) of sufficient diameter to permit waste of water in excess of the filling rate, b) c) open downward, screened with twenty-four mesh noncorrodible screen installed within the pipe at a location least susceptible to damage by d) vandalism, and when not internal, e) located on the outside of the tank so that any discharge is visible, e) i) when internal. e) ii) located in the access tube. [Recommended Standards for Water Works 7.0.7] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable. L-4 Height Tanks shall have manholes that are framed a Height  $\geq$  4 in above the surface of the roof at the opening and a) fitted with a solid watertight cover which overlaps the framed opening and extends down around the frame at least 2 inches. b) 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.

Page 7 of 13

Meade Co Water District Facility Requirements

Activity ID No.: APE20080003

#### STOR1 (continued):

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 tank. The design of tanks shall meet or exceed the minimum requirements of pertinent safety laws and regulations in the areas where the tanks are constructed, a) include ladders, ladder guards and balcony railings (where applicable), b) locate entrance hatches in safe places. c) provide railings or handholds where persons must transfer from an access tube to the water compartment, and d) consider confined space entry requirements. e) Additionally, if tanks have riser pipes over 8 inches in diameter, the tanks shall have protective bars over the riser openings inside of the tank. [Recommended Standards for Water Works 7.0.12] Additional Limitations: T-3 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] T-5 Additional Limitations: All storage structures and their appurtenances, especially the riser pipes, overflows, and vents, shall be designed to prevent freezing. [Recommended Standards for T-6 Additional Limitations: Tanks shall be constructed with no openings except properly constructed vents, manholes, overflows, risers, drains, control ports, and piping for inflow and outflow. Any pipes running through the roof or sidewall must be welded or properly gasketed. [Recommended Standards for Water Works 7.0.10]

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Activity ID No.: APE20080003

## STOR1 (continued):

### Narrative Requirements: Additional Limitations:

Condition	
<u>No.</u>	Condition
T-7	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]
T-8	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]
T-9	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]
T-10	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]
T-11	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]
T-12	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)]
T-13	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]
T-14	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]

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Meade Co Water District Facility Requirements

Activity ID No.: APE20080003

### STOR1 (continued):

Narrative Requirements: Additional Limitations:

Condition No.	Condition
T-15	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]
T-16	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]
T-17	<ul> <li>Additional Limitations:</li> <li>Storage structures shall be vented. Overflows shall not be considered as vents. Open construction between the sidewall and roof is not permitted. Vents shall</li> <li>a) prevent the entrance of rainwater,</li> <li>b) exclude birds and animals, and</li> <li>c) exclude insects and dust (as much as compatible with effective venting).</li> <li>Vents may use four-mesh noncorrodible screen. [Recommended Standards for Water Works 7.0.9]</li> </ul>
T-18	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]
T-19	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]
T-20	Additional Limitations: Proper protection shall be given to metal surfaces by a) paints or other protective coatings and/or b) cathodic protective devices. [Recommended Standards for Water Works 7.0.17]

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Meade Co Water District Facility Requirements

Activity ID No.: APE20080003

## STOR1 (continued):

#### Narrative Requirements: Additional Limitations:

Condition	
No.	Condition
T-21	Additional Limitations: If cathodic protection is utilized, a) competent technical personnel should design and install the protection and b) a maintenance contract should be provided. [Recommended Standards for Water Works 7.0.17]
T-22	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)]
T-23	<ul> <li>Additional Limitations:</li> <li>Paints and coatings <ul> <li>a) shall meet NSF standard 61,</li> <li>b) shall be acceptable to the Division of Water,</li> <li>c) shall be properly applied and cured, and</li> <li>d) shall not transfer any substance to the water which will be toxic or cause tastes or odors (following curing).</li> <li>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</li> </ul> </li> </ul>

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Meade Co Water District Facility Requirements

Activity ID No.: APE20080003

#### STOR1 (continued):

Narrative Requirements: Additional Limitations:

Condition			
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 newstorage structures 1) remove all scaffolding, planks, tools, rags, and other items that are not part of the structural or operational facilities of the storage structure, 2) clean thoroughly by sweeping, scrubbing, using high-pressure water jets, or some equivalently effective means, and 3) use chlorine or chlorine compounds as subsequently described. Finalize disinfection by a) chlorination method 1, described in detail at AWWA Standard C652 Section 4.3.1, b) chlorination method 2, described in detail at AWWA Standard C652 Section 4.3.2, or c) chlorination method 3, described in detail at AWWA Standard C652 Section 4.3.3. See the following conditions for abreviated 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]			
Condition			
If applicable, chlorination method 1 generally requires a) filling a storage structure to the overflow level with water providing a free chlorine Residual Disinfection >= 10 ppm and b) i) completely draining the storage facility and refilling or b) 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]			
<ul> <li>If applicable, chlorination method 2 generally requires</li> <li>a) scrubbing or spraying the water-contact surfaces of a storage structure with a water solution having an available chlorine concentration = 200 ppm and</li> <li>b) purging of the strong chlorine solution and filling to the overflow level. [Recommended Standards for Water Works 7.0.18]</li> </ul>			

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Meade Co Water District Facility Requirements

Activity ID No.: APE20080003

## STOR1 (continued):

Narrative Requirements:

Condition No.	Condition
T-27	<ul> <li>If applicable, chlorination method 3 generally requires</li> <li>a) filling a storage structure to approximately 5% of the total storage volume with water having an available chlorine concentration of 50 ppm,</li> <li>b) continued filling of the storage structure to the overflow level with normal potable water, and</li> <li>c) purging the storage structure so that various disinfection by-products do not reach water consumers. [Recommended Step in 1.6]</li> </ul>

KAR 8:100 Section 1(7)]

Page 13 of 13



TRANSPORTATION CABINET

# RECEIVED

FEB 1 5 2008

# HDR Engineering, Inc.

Bill MC.

Bill Nighbert Secretary

Marc Williams Commissioner of Highways

Jank Site

Department of Highways District 4 Office 634 East Dixie P.O. Box 309 Elizabethtown, KY 42702 (270) 766-5066

November 20, 2007

TIM OSBORNE MEADE COUNTY WATER DIST. P.O. BOX 367 BRANDENBURG,KY 40108

SUBJECT: Meade County, MP-82-144-30 KY 144 () Permit Number 04-0605-07

Dear TIM OSBORNE:

Your application for an encroachment permit has been approved by the Department of Highways. We are returning two copies of the approved permit so one may be kept in your record files. The other copy must be given to the party responsible for completing the project and must be kept at the jobsite at all times.

Please see that the work is done in strict conformity with the permit and any other applicable conditions (See Form TC99-21 and any other attached documents, conditions or specifications). The work should be completed no later than January 1, 2009. When the permitted work and any necessary restoration have been completed please notify this office by using the attached form which will serve as notification for final inspection.

If there are any questions regarding this permit, please do not hesitate to contact Steve Hall, Permits Engineer at 270-766-5066 or fax number 270-766-5069.

Sincerely,

Patty Dunaway Chief District Engineer Department of Highways District 4 -Elizabethtown Post Office Box 309 Elizabethtown, KY 42702-0309



An Equal Opportunity Employer M/F/D

Ernie Fletcher Governor

> OSBORNE DE COUNTY WATER DIST.

KENTUCKY	TRANSPORTATION	CABINET
De	partment of Highways	
	Permits Branch	

PERMIT NO. 04 - 0605 -0 Released Date ENCROACHMENT PERMIT CANT IDENTIFICATION. А PROJECT IDENTIFICATION: ACCESS CONTROL X By Permit Partial Mende County WAter District Full NAME: COUNTY: MARLE PRIORITY ROUTE NO: HUN-1414 CONTACT PERSON: Tim OS bokne MILEPOINT: 3D,0 Left 🕅 Right X-ing ADDRESS Y. Q. BOX 367 PROJECT STATUS: X Maint. Const. BRANGENBURG CITY: -082-0/44-030-031 PROJECT # STATE: ZIP CODE: 40108 STATE: PROJECT # FEDERAL: PHONE: area code ( 270 422-5006 ROAD/ STREET NAME: ATTACHMENTS: TYPE OF ENCROACHMENT: COMMERCIAL ENTRANCE - BUSINESS Standard Drawings (List on TC 99-21 under Misc.) Applicant's Plans PRIVATE ENTRANCE: Single Family [] Farm Highway Plan and Profile Sheets UTILITY: Overhead Underground TC 99-3 (Ponding Encroachment Specs, & Conditions) GRADE: ☐ Fill Landscape on R/W TC 99-4 (Rest Area Usage Specs. & Conditions) VOV 2020C OF MUSHVW AIRSPACE: Agreement Lease TC 99-5 (Tree Cutting/Trimming Specs. & Conditions) TC 99-6 (Chemical Use of Specs. & Conditions) ENLAGNCE OTHER: (Specify) Service TC 99-10 (Typical Hwy. Boring Crossing Detail) WATER TANK for TC 99-12 (Overhead Utility Encroachment Diagram) TC 99-13 (Surface Restoration Methods) TC 99-21 (Encroachment Permit General Notes & Specs.) TC 99-22 (Agreement for Services to be Performed) TYF INDEMNITY: C Bond Cash TC 99-23 (Mass Transit Shelter Specs, & Conditions) SCLF-INSURED AMOUNT ENCUMBERED \$ N IA Other Attachments (Specify): OTHER - Section (CC NAME AND ADDRESS OF LOCAL INSURANCE AGENCY OR SELFice. ENTRANCE INSURED REPRESENTATIVE: INDEMNITY: The applicant, in order to secure this obligation, has deposited with the Transportation Cabinet as a guarantee of conformance with the Department's Encroachment Permit requirements, an indemnity in the amount of \$ as determined by the Departnent. It shall be the responsibility of the applicant or permitee, his heirs and assignees to keep all indemnities in full force until construction or reconstruction has been completed and duly accepted by an authorized agent of the Transportation Cabinet, Department of Highways, BRIEF DESCRIPTION OF WORK TO BE DONE: (If private entrance, show sketch with pipe location. Separate attached drawings required for encroachments other than private entrances.) Service ENTRANCE for New HANK site NEAR Flahenty on Ky Hwy 144

MPORTANT (PLEASE READ): Applicant does not intend to apply for excess RAW

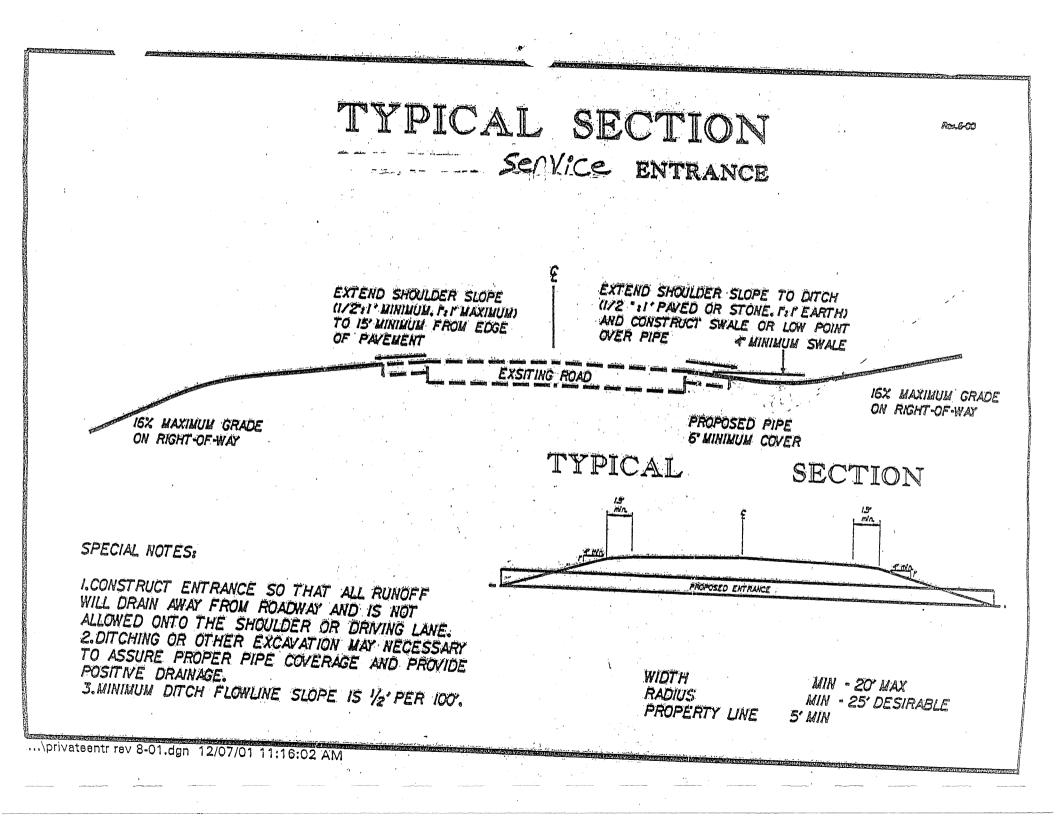
When the work is completed in accordance with the terms of this encroachment permit, your idemnity will be released. However, the permit is frective until revoked by the Transportation Cabinet and the terms on the permit accompanying permit documents and drawings remain in effect s long as the encroachment exists. <u>FUTURE MAINTENANCE OF THE ENCROACHMENT IS THE RESPONSIBILITY OF THE PERMITTEE</u>. It is nortant that you understand the requirements of this encroachment permit application and accompanying documents. If you have not done so, is subjected that you review these documents and place the permit package in a safe place for future reference.

copy of this permit and all documents shall be given to your contractor and shall be readily available at the work site for the encroachment emit inspector to review at all times. Failure to meet this requirement may result in cancellation of this permit.

THE EVENT THIS APPLICATION IS APPROVED. THIS DOCUMENT SHALL CONSTITUTE A PERMIT FOR THE APPLICANT TO USE THE GHT-OF-WAY, BUT ONLY IN THE MANNER AUTHORIZED BY THIS DOCUMENT AND REGULATIONS OF THE DEPARTMENT AND THE RAWINGS. PLANS, ATTACHMENTS, AND OTHER PERTINENT DATA ATTACHED HERETO, AND MADE & PART HEREOF

TC 99-1 Rev. 7/95

	The permise agrees to the following terms and conditions:
	1. The permittee shall comply with part is the
:	1. The permittee shall comply with and is bound by the requirements of the Department's Permits Manual as revised to and in effect on the date of the Issuance of this permit which is made a part hereof by reference for the facilities and/or provide and bear the expenses for signs, storage lanes, or other corrective measures reasonably deemed necessary by the Department and as set forth in the Department of written notice regarding such adjustments, relocation, additions, modifications, and/or corrective measures, such time to be specified in the notice. In Department of the permittee, at no expense to the Department. (This applies only to Entrance Permitts.)
3	The said encroachment will not infinge on the frontage rights of an eta with a contract of the permittee's entrance necessary to accommodate signalization (including necessary easemptic) and in accordance with
4.	Date Date Date
5.	Any permit granted hereunder shall be with the full understanding that it shall not interfere with any similar rights or permits heretofore granted to any other party except as otherwise provided by law. A plan prepared by <u>Similar Control Neceptation</u> and dated <u>11-19-07</u> is attached hereto and made a part hereof, which describes the facilities to be constructed by law. not use the facilities authorized herein in any manner contrary to that prescribed by this permit and plan. Normal usage and routine maintain such facilities in accordance with said plan, and the permit and plan.
	permittee for which facilities this permit is granted. The permittee agrees as a new marked by law is attached herelo and made a part has the facilities authorized hereit is granted. The permittee agrees as a new marked by law is attached herelo and made a part has the facilities authorized hereit is granted.
6.	similite shall complexity in the permit of construct and matching to be constructed by the
7.	libility of analised and all times from date when under the permittee shall
8.	Upon a violation of any of the provisions of this permit, the Department may revoke the permit by giving notice to the permittee as set forth in the notice, and in the event said facilities are not so removed on this permittee.
9.	
10.	reconstruction, relocation, or Improvement of the abutting highway, the Denadment ments include by the Department for the Californian as a by the Denadment and the provisions of the Title VI of the Civil Rights Act of 1964 (42 procedures provided in Paragraph 8 above and the abutting highway, the Denadment ments and the Department for the Civil Rights Act of 1964 (42
11.	
12.	rine work authorized by this permit is on a project in the construction phase. It shall be the Resident Engineer on the project in coordinate it is bound by the
-	Perilli UDPS bol allowed
	structure agrees to keep the priority route to which us
THE	UNDERSIGNED APPLICANT (here the second clear of dirt, mud, and debris during construction and for the life of the
	(being duly authorized representative/owner) DOES A CREETER and this permit.
	UNDERSIGNED APPLICANT (being duly authorized representative/owner) DOES AGREE TO ALL TERMS AND CONDITIONS SET FORTH HEREIN.
REC	Completion Date
INCO	CHIMENDED FOR APPROVAL
	Tech-II hames the set of some Signature
PRIV	inter a settern and a settern and a settern a set
	ATE ENTRANCE: TO BE COMPLETED BY PERSONNEL INSTALLING FACILITY.
Installe	
	Title
	Signature



NOTICE OF COMPLETION OF ENCROACHMENT PERMIT WORK

Please return this form to the District Office when work is completed and ready for final inspection.

Applicant Identification	Project Identification		
Name: MEADE COUNTY WATER DIST.(*)	Permit Number: 04-0605-07		
Contact Person: TIM OSBORNE	County: Meade		
Address: 1003 ARMORY PLACE	Route Number: 144		
City: BRANDENBURG	Road Name:		
State: KY Zip: 40108	Milepoint: 30		
Telephone: 270-828-3399			

.

I wish to notify the Department of Highways that the above mentioned permit work and any necessary right of way restoration have been completed and are ready for final inspection.

App			

Please	Return To:	Department of Highways District 4 Elizabethtown Post Office Box 309 Elizabethtown, Ky. 42702-0309
ď	Attention:	Steve Hall, Permits Engineer



TRANSPORTATION CABINET

Department of Highways District 4 Office

634 East Dixie

P.O. Box 309 Elizabethtown, KY 42702

(270) 766-5066

RECEIVED

FEB 1 5 2008

HDR Enginedill Nighbert

Marc Williams Commissioner of Highways

ponduraly poves b Parallel Encroachment

November 5, 2007

TIM OSBORNE MEADE COUNTY WATER DIST. P.O. BOX 367 BRANDENBURG,KY 40108

SUBJECT: Meade County, Various Locations KY 144, KY 79, KY 428, KY 2727 Permit Number 04-0587-07

Dear TIM OSBORNE:

Your application for an encroachment permit has been approved by the Department of Highways. We are returning two copies of the approved permit so one may be kept in your record files. The other copy must be given to the party responsible for completing the project and must be kept at the jobsite at all times.

Please see that the work is done in strict conformity with the permit and any other applicable conditions (See Form TC99-21 and any other attached documents, conditions or specifications). The work should be completed no later than January 1, 2009. When the permitted work and any necessary restoration have been completed please notify this office by using the attached form which will serve as notification for final inspection.

If there are any questions regarding this permit, please do not hesitate to contact Steve Hall, Permits Engineer at 270-766-5066 or fax number 270-766-5069.

Sincerely,

FOR Patty Dunaway Chief District Engineer Department of Highways District 4 -Elizabethtown Post Office Box 309 Elizabethtown, KY 42702-0309



An Equal Opportunity Employer M/F/D

Ernie Fletcher Governor NOTICE OF COMPLETION OF ENCROACHMENT PERMIT WORK

Please return this form to the District Office when work is completed and ready for final inspection.

Applicant IdentificationProject IdentificationName: MEADE COUNTY WATER DIST.(\*)Permit Number: 04-0587-07Contact Person: TIM OSBORNECounty: MeadeAddress: 1003 ARMORY PLACERoute Number: VariousCity: BRANDENBURGRoad Name:State: KY Zip: 40108Milepoint:VariousTelephone: 270-828-3399Various

I wish to notify the Department of Highways that the above mentioned permit work and any necessary right of way restoration have been completed and are ready for final inspection.

Applicant

Please Return To:

Department of Highways District 4 Elizabethtown Post Office Box 309 Elizabethtown, Ky. 42702-0309

Attention:

Steve Hall, Permits Engineer

	Permits Branch
	ACHMENT PERMIT PERMIT NO. 04-0587-07
APPLICANT IDENTIFICATION:         NAME:       Meade County Water District         ITACT PERSON:       Tim Osborne         ADDRESS:       1003 Armory Place, P.O. Box 367         CITY:       Brandenburg         STATE:       KY         ZIP CODE:       40108         PHONE:       area code (270)         422-5006       1003 Armory Place, P.O. Box 367         CITY:       Brandenburg         STATE:       KY         ZIP CODE:       40108         PHONE:       area code (270)         422-5006       1003         TYPE OF ENCROACHMENT:       COMMERCIAL ENTRANCE - BUSINESS         ORMERCIAL ENTRANCE:       Single Family         PRIVATE ENTRANCE:       Single Family         GRADE:       Fill         GRADE:       Fill         GRADE:       Agreement         OTHER:       (Specify)         TYPE OF INDEMNITY:       Bond         SELF-INSURED AMOUNT ENCUMBERED \$         OTHER       OTHER         NAME AND ADDRESS OF LOCAL INSURANCE AGENCY O         S <sup>r.+</sup> F-INSURED REPRESENTATIVE:	<ul> <li>TC 99-3 (Ponding Encroachment Specs. and Conditions)</li> <li>TC 99-4 (Rest Area Usage Specs. and Conditions)</li> <li>TC 99-5 (Tree Cutting/Trimming Specs. and Conditions)</li> <li>TC 99-6 (Chemical Use of Specs. and Conditions)</li> <li>TC 99-10 (Typical Highway Boring Crossing Detail)</li> <li>TC 99-12 (Overhead Utility Encroachment Diagram)</li> <li>TC 99-13 (Surface Restoration Methods)</li> <li>TC 99-21 (Encroachment Permit General Notes and Specs.)</li> <li>TC 99-23 (Mass Transit Shelter Specs. and Conditions)</li> <li>Other Attachments (Specify):</li> <li>See Encroachment Description attached</li> </ul>
mance with the Department's Encroachment Permit requirement the Department. It shall be the responsibility of the applicant of construction or reconstruction has been completed and duly act Highways. BRIEF DESCRIPTION OF WORK TO BE DONE. Various perpendicular roadway crossings via bore and jack winght-of-way for the construction of water main (6-inch, 8-inch KY 428, KY 144 (Midway Road), and KY 2727 (Haysville Road)	r permitee, his heirs and assignees to keep all indemnities in full force until acepted by an authorized agent of the Transportation Cabinet, Department of ith steel encasement pipe and various parallel encroachments along and 10-inch water lines). Routes include KY 144 (Flaherty Road), KY 79, d).
IMPORTANT (PLEASE READ): Applicant 🗌 does	does not intend to apply for excess R/W.

effect as long as the encroachment exists. FUTURE MAINTENANCE OF THE ENCROACHMENT IS THE RESPONSIBILITY OF THE <u>PERMITEE.</u> It is important that you understand the requirements of this encroachment permit application and accompanying documents. If you have not done so, it is suggested that you review these documents and place the permit package in a safe place for future reference.

A c of this permit and all documents shall be given to your contractor and shall be readily available at the work site for the encroachment permit inspector to review at all times. Failure to meet this requirement may result in cancellation of this permit.

IN THE EVENT THIS APPLICATION IS APPROVED, THIS DOCUMENT SHALL CONSTITUTE A PERMIT FOR THE APPLICANT TO USE THE RIGHT-OF-WAY, BUT ONLY IN THE MANNER AUTHORIZED BY THIS DOCUMENT AND REGULATIONS OF THE DEPARTMENT AND THE DRAWINGS, PLANS, ATTACHMENTS, AND OTHER PERTINENT DATA ATTACHED HERETO AND MADE A PART HEREOF.

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- 1. The permittee shall comply with and is bound by the requirements of the Department's Permits Manual as revised to and in effect on the date of the issuance of this permit which is made a part hereof by reference.
- 2. Permittee agrees that if the Department determines that vehicular capacity deficiencies or over capacity conditions develop as a result of the installation and use of this facility, the permittee shall adjust, relocate, or reconstruct the facilities and/or provide and bear the expenses for signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department and as set forth in the Department's Permit Manual within a reasonable length of time after receipt of written notice regarding such adjustments, relocation, additions, modifications, and/or corrective measures, such time to be specified in the notice. In cases where traffic signals are permitted or required, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee and/or the Department in accordance with Department policy then in force as set forth in the Traffic Manual. Any modifications to the permittee, at no expense to the Department. (This applies only to Entrance Permits.)
- 3. The said encroachment will not infringe on the frontage rights of an abutting owner without written consent of the said owner as hereto: "I(we) consent to the granting of attached permit."

Date \_\_\_\_\_

(This does not apply to utilities which serve the general public.)

- 4. Any permit granted hereunder shall be with the full understanding that it shall not interfere with any similar rights or permits heretofore granted to any other party except as otherwise provided by law.
- 5. A plan prepared by <u>HDR|Quest</u> and dated <u>September 14, 2007</u> is attached hereto and made a part hereof, which describes the facilities to be constructed by the permittee for which facilities this permit is granted. The permittee agrees as a condition to the issuance of the permit to construct and maintain such facilities in accordance with said plan, and the permittee shall not use the facilities authorized herein in any manner contrary to that prescribed by this permit and plan. Normal usage and routine maintenance only are authorized under this permit.
- 6. Permittee shall comply with the Manual on Uniform Traffic Control Devices as revised to and in effect on the date of the issuance of this permit which is made a part hereof by reference.
- 7. Permittee shall at all times from date when work is first commenced and until such time as all facilities are removed from the right-of-way premise, defend, protect, and save harmless the Department from all liability, claims, and demands arising out of work undertaken by the permittee pursuant to this permit, due to any negligent act or omission by the permittee, its servants; agents; employees, or contractors. This-provision shall not inure to the benefit of any third party or operate to enlarge any liability of the Department beyond that existing at common law if this right to indemnity did not exist.
- 8. Upon a violation of any of the provisions of this permit, the Department may revoke the permit by giving notice to the permittee in writing to remove from the right-of-way any facilities placed thereon within a reasonable time as set forth in the notice, and in the event said facilities are not so removed, and the right-of-way restored the Department may cause same to be removed, and the costs thereof shall be charged to the permittee.
- 9. The permittee, his successors and assigns shall use the encroachment premises in compliance with all Federal requirements imposed pursuant to the provisions of the Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000-1) and regulations of the U.S. Department of Transportation as set forth in Title 49 C.F.R., Part 21, and as said regulations may be amended.
- 10. Permittee agrees that in the event it should become necessary, as may be reasonably determined by the Department, for the facilities covered by this permit to be removed or relocated in connection with the reconstruction, relocation, or improvement of the abutting highway, the Department may revoke this permit and require removal or relocation by the permittee at his own expense according and pursuant to the procedures provided in Paragraph 8 above except in those cases where the Department is required by law to pay any or all the same.
- 11. The permittee understands and agrees that this permit is personal to the permittee and shall not inure to his successors and assigns without the written approval of the Department that he is bound by the provisions of this permit as long as the encroachment exists unless a written release has been obtained from the Department. (Does not apply to utilities serving the general public.)
- 13. This permit does not alleviate any requirements of any other government agency.
- 14. Permittee agrees to keep the priority route in which this permit was issued clear of dirt, mud, and debris during construction and for the life of this permit.

#### ANY ATTEMPT TO ALTER THIS FORM CONSITUTES A VOID PERMIT.

	authorized representative/owner) DOES AGREE TO	O ALL TERMS AND CONDITIONS SET
FORTH HEREIN.		

XJanuary 1st, 2009 July 1st, 20	9-19-07	Im Oslon	
Completion Date	Date	Signature	
RECOMMENDED FOR APPROVAL	A-A-St	- 1 ^	
Tech-H	James Stimm	Path B. Ilm	11-5-07
Title	Signature	Chief District Engineer	Date
PRIVATE ENTRANCE: TO BE COMPLE	TED BY PERSONNEL INSTALL	ING FACILITY.	
Installed By:			
Title		Signature	Date
ANY ATTEMPT	TO ALTER THIS FORM	I CONSITUTES A VOID PERMIT.	

Project Locations						
	County	Route	Termini	Mile Point	Left/Right	Crossing
MP	082	144	016-021	16.73	R	N
MP	082	144	028-031	28.745	R	N
MP	082	79	001-005	1.263	L	Y
RS	082	428	000-004	0	L	Y
RS	082	2727	000-003	0	L	Y

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#### KENTUCKY TRANSPORTATION CABINET Department of Highways Permits Branch

TC 99-2 Rev. 12/95 Page 1 of 4

#### ENCROACHMENT PERMIT GENERAL NOTES & SPECIFICATIONS

<u>I.</u>	FETY
<u>A. (</u>	Seneral Requirements All signs and control of traffic shall be in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways, latest
X	edition, Part VI, and safety requirements shall comply with the Permits Manual.
Q	All work necessary in shoulder or ditchline areas of a state highway is to be scheduled to be promptly completed so that hazards adjacent to the traveled-way are kept to an absolute minimum.
Ŕ	No more than one (1) traveled-lane is to be blocked or obstructed during normal working hours. All signs and flagmen during lane closure shall conform to the Manual on Uniform Traffic Control Devices.
R	When it is necessary to block one (1) traveled-lane of a state highway, the normal working hours shall be as directed by the Department. No lanes are to be blocked or obstructed during adverse weather conditions (i.e., rain, snow, fog, etc.) without specific permission from the Department. Working hours shall be between $\frac{100777}{100777}$ and $\frac{300747}{100777}$ .
$\boxtimes$	The traveled-way and shoulders shall be kept clear of mud and other construction debris at all times during construction of the permitted facility.
R	No nonconstruction equipment or vehicles or office trailers will be allowed on the right-of-way during working hours.
R	The right-of-way shall be left free and clear of equipment, material, and vehicles during non-working hours.
<u>B. 'E</u>	xplosives
X	No explosive devices or explosive material shall be used within state right-of-way without proper license and approval of Kentucky Department of Mines and Minerals, Explosive Division.
<u>C. C</u>	ther Safety Requirements
R	A RUD
	Before "U" Dig
	CALL TOLL FREE
	3000.752-6007
1	<u>1-900-752-6007</u>
. U	For Buried Line / Cabel Locations
. U	1-800-752-6007         For Buried Line / Cabel Locations         TLITTES         *All work necessary within the right-of-way shall be behind a temporary fence erected prior to a boring operation.
	For Buried Line / Cabel Locations
	For Buried Line / Cabel Locations ILITIES *All work necessary within the right-of-way shall be behind a temporary fence erected prior to a boring operation. *The temporary woven wire fence shall be removed immediately upon completion of work on the right-of-way and control of access
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	<u>For Buried Line / Cabel Locations</u> <u>ILITIES</u> <u>*All work necessary within the right-of-way shall be behind a temporary fence erected prior to a boring operation. *The temporary woven wire fence shall be removed immediately upon completion of work on the right-of-way and control of access immediately restored to original condition, in accordance with applicable Kentucky Department of Highways Standard Drawings. *All vents, valves, manholes, etc. are to be located outside the right-of-way. *Encasement pipe shall extend from right-of-way line to right-of-way line and shall be one continuous run of pipe. The encasement pipe shall be welded at all joints. The boring pit and tail ditch shall extend past the existing toe of slope or bottom of ditch line and shall be a minimum of deep. Encasement pipe shall conform to current standards for highway crossings in accordance with the Permits Manual. #2<sup>-1/1</sup> Parallel lines shall be constructed between back slope of ditch line and right-of-way line and shall have a minimum of defined. #2<sup>-1/1</sup></u>
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	<u>For Buried Line / Cabel Locations</u> <u>ILTIES</u> <u>*All work necessary within the right-of-way shall be behind a temporary fence erected prior to a boring operation. *The temporary woven wire fence shall be removed immediately upon completion of work on the right-of-way and control of access immediately restored to original condition, in accordance with applicable Kentucky Department of Highways Standard Drawings. *All vents, valves, manholes, etc. are to be located outside the right-of-way. *Encasement pipe shall extend from right-of-way line to right-of-way line and shall be one continuous run of pipe. The encasement pipe shall be welded at all joints. The boring pit and tail ditch shall extend past the existing toe of slope or bottom of ditch line and shall be a minimum of eeee deep. Encasement pipe shall conform to current standards for highway crossings in accordance with the Permits Manual. #2'' Parallel lines shall be constructed between back slope of ditch line and right-of-way line and shall have a minimum of epermite above top of pipe or conduit. #2'' All <u>pavement cuts</u> shall be restored per Kentucky Transportation Cabinet Form No. TC 99-13. Aerial crossing of this utility line shall have a minimum clearance of feet from the high point of the roadway to the low point of the ine (calculated at the coefficient for expansion of 120 degrees Farenheit).</u>
	<u>For Buried Line / Cabel Locations</u> <u>The temporary within the right-of-way shall be behind a temporary fence erected prior to a boring operation. *The temporary woven wire fence shall be removed immediately upon completion of work on the right-of-way and control of access immediately restored to original condition, in accordance with applicable Kentucky Department of Highways Standard Drawings. *All vents, valves, manholes, etc. are to be located outside the right-of-way. *Encasement pipe shall extend from right-of-way line to right-of-way line and shall be one continuous run of pipe. The encasement pipe shall be welded at all joints. The boring pit and tail ditch shall extend past the existing toe of slope or bottom of ditch line and shall be a minimum of deep* deep. Encasement pipe shall conform to current standards for highway crossings in accordance with the Permits Manual. Parallel lines shall be constructed between back slope of ditch line and right-of-way line and shall have a minimum of "cover above top of pipe or conduit_deep preferred) #ICC Parallel lines shall be restored per Kentucky Transportation Cabinet Form No. TC 99-13. Arerial crossing of this utility line shall have a minimum clearance of feet from the high point of the roadway to the low point of the ine (calculated at the coefficient for expansion of 120 degrees Farenheit). The 30' clear zone requirement will be met to the extent possible in accordance with Chapter 99-02.0313 of the Permits Manual.</u>

III. GENERAL AOSHA	TC 99-21 Rev. 12/95
Kentucky Occupational Safety and Health Standards for the cons 1926.651 Specific Excavation Requirements) "Prior to opening ar installations: i.e., sewer, telephone, water, fuel, electric lines, etc., located. When the excavation approaches the estimated location	Page 2 of 4 struction industry which has the effect of law states in part: (Page 52 in excavation, effort shall be made to determine whether underground will be encountered, and if so, where such underground installations are of such an installation, the exact location shall be determined and when it stallation. Utility companies shall be contacted and advised of proposed
B. Archaeological	
shall be made immediately with the Division of Environmental Ana	uring the course of construction work or maintenance operations, contact lysis which maintains an archaeologist on its staff, or with the Office of the ng this consultation, further action shall be decided on a case-by-case ng Engineer or their designated representative.
C. Utilities in the Work Areas	
The permittee is to be responsible for any damage to existing utilit necessary, as determined by the Department or by the owner of the approval of the Department.	ies and any utility modifications or relocations within State right-of-way ne utility, are to be at the expense of the permittee and subject to the
All existing manholes and valve boxes are to be adjusted to be flue	<u>sh</u> with finished grade.
IV, RIGHT-OF-WAY RESTORATION	
All disturbed portions of the right-of-way are to be restored to gras for Road and Bridge Construction (latest edition). A satisfactory to prior to release of indemnity. Sodding or seeding as follows;	is as per Kentucky Department of Highways Standard Specifications arf, as determined by the Department, is to be established by the permittee
Lawn or High Maintenance Situation	-70% Lawn Fescue (e.g., variety - Falcon) -30% Bluegrass or 70% Lawn Rye (e.g., variety - Derby) 30% Bluegrass
Right-off-Way Lawn Maintenance Situation	-70% KY 31 Fescue -30% Perennial Rye Grass or 100% KY Fescue
Two tons clean straw mulch per acre of seeding.	Kentucky Department of Highways Standard Specifications for Road
and Bridge Construction (latest edition).	Kendeky Department of Algaways Standard Opeoneations for Rodd
Substitutes for sod such as artificial turf or rocked mulch or paved	areas may be acceptable if they are aesthetically pleasing.
All ditch flow lines and all ditch side slopes are to be sodded.	
Existing concrete right-of-way markers are not to be disturbed, but with new concrete markers to match the original markers, in accor Markers which are entirely removed are to be re-established in the Department.	if damaged in any way, they are to be entirely replaced by the permittee dance with Kentucky Department of Highways Standard Drawings. proper locations by the permittee and to the satisfaction of the
Other right-of-way restoration requirements are as follows:	
Use silt checks on silt	Fence 95 Needed
V. DRAINAGE	
seating in accordance with Department Standard Specifications for until inspected by the Department and express permission obtained	
All gutter lines at the base of new curbs are to be on continuous graved areas within the right-of-way, are not acceptable.	rades, and pockets of water along curbs, or in entrance areas or othe
All drainage structures and appurtenances (manholes, catch basin and shall be constructed in accordance with the Department Stand	es, curbing, inlet basins, etc.) shall conform to Department specifications dard Drawings. Type required:

New Service

	Permit No.		TC 99-2				
VI.	PAVING		Rev. 12/95				
	No bituminous pavement is to be installed within the right-of-way bet 40°F, without the express consent of the Department. No bituminou	veen November 15 and April 1, nor when the temperature s pavement is to be installed when the underlying course is	s wet				
L	Paving within the right-of-way shall be as follows:		I				
	Base (Type)	(Thickness)					
	Surface Base (Type)						
	Finished Surface (Type)	(Thickness)					
	Existing pavement and shoulder material shall be removed to accom	nodate the above paving specifications.	1				
	The finished surface of all new pavement within the right-of-way shall be true to the required slope and grade, uniform in density and texture, free of irregularities, and equivalent in riding qualities to the adjacent highway pavement or as determined by the Department of Highways.						
	All materials and methods of construction, including base and subgrade preparation, shall be in accordance with Kentucky Department of Highways Specifications for Road and Bridge Construction, latest edition.						
	24 hours notice to the Department is required prior to beginning paving operations:						
	Phone:						
	To insure proper surface drainage the new pavement is to be flush wi the existing edge of the pavement as specified on drawings.	h the edge of existing highway pavement and is to slope a	way from				
	Existing edge of pavement shall be saw cut to provide a straight and u accordance with Kentucky Department of Highways Standard Specific pavement.						
VII.	SIDEWALKS SPECIFICATIONS						
<u>A. N</u>	ew Sidewalks						
Γ	Sidewalks are to be constructed of Class A concrete (3,500 p.s.i. test) ,e bituminous entrance and 4" in thickness across the remaining sec	, are to be * feet in width, are to be 6" in thickn ions.	less across				
$\Box$	Sidewalks are to have tooled joints, not less than 1" in depth at *four ( through the sidewalk at intervals not to exceed fifty (50) feet.	<ol> <li>foot intervals, and ½ premolded expansion joints extend</li> </ol>	ling entirely				
	* This dimension should be equal	to the width of the sidewalk					
	All materials and methods of construction, including curing, is to be in Specifications for Road and Bridge Construction, latest edition.	accordance with Kentucky Department of Highways Stand	lard				
<u>B. E</u>	disting Sidewalks	•					
	(Applicable if existing sidewalks are being relocated) Use of the sidew maintained across the construction area at all times.	alk is not to be blocked or obstructed, and a usable walkw	ay is to be				
	All damaged sections of the sidewalks are to be entirely replaced to ma	tch existing sections.	<b>;</b> *				
VIII. 1	DENSE GRADED SHOULDERS						
$\mathbf{N}$	Any existing dense graded aggregate shoulders in the entire frontage v on which dirt has been placed or mud is deposited or tracked, are to b material and replaced to proper grade with new dense graded aggrega	e restored to original condition by removal of all contamination					
	All new aggregate shoulders as specified on the plan are to consist of a calcium chloride.	o" compacted dense graded aggregate 21/2 pounds per sq	luare yard				
$\boxtimes$	All dense graded aggregate shoulders are to slope away from the new	edge of pavement at the rate of $\mathcal{Y}$ " per foot.					
	URBING						
	uminous Curbs						
	Bituminous concrete curbs shall be given a paint coat of asphalt emuls						
Ľ	" e surface under the bituminous concrete curb shall be tacked with a	-	61 linh				
	سا bituminous concrete curbs shall be constructed of a Class I bitumin specifications.	ous concrete mixture as specified by official Department of					
	All bituminous curbs shall be of the rolled curb type with a minimum ba The top of the curb shall be constructed in such a manner as to guarar		_ inches.				

<u>B.</u> C	B. Concrete Curbs TC 99-21 Rev. 12/95				
	All curbs or curb and gutter are to be constructed of Class A concrete (3,500 p.s.i. test) and are to be uniform in height, width, and alignment, true to grade and satisfactory in finish and appearance as determined by the Department. All materials and methor construction, including curing, is to be in accordance with Department of Highways Standard Specifications for Road and Bridge Construction, latest edition.	Page 4 of 4 ods of			
	All concrete curbs are to be 6" in width, extend" above finished grade and 12" below finished grade, with all v edge rounded to ½" radii.	isible			
	All concrete curbs shall have expansion joints constructed at intervals of not more than 30 feet and ½" premolded expansion joint (cut to conform to the curb or to the curb and gutter section) shall be used in each expansion joint.	t material			
	The last feet of all concrete curbs are to be tapered down to finish grade.				
X. R	IGHT-OF-WAY FENCE REPLACEMENT				
	The replacement fence shall be a height of at least 48" and shall be of sufficient density to contain all animals. (If applicable)				
	The replacement fence shall be a minimum of one foot (1') and a maximum of two feet (2') outside the right-of-way line.				
	The fence materials and design shall meet accepted industry standards and be treated as paintable.				
	The permittee shall be required to maintain the fence in a high state of repair.				
	The existing fence shall be removed by permittee and stored at Department's maintenance storage yard for future reuse by the De	epartment.			
	The control of access shall not be diminished as a result of replacement of the fence.				
	Miscellaneous:				

## NOTICE TO PERMITTEE

THE PERMITTEE AGREES THAT ALL WORK WITHIN THE EXISTING RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE PLANS AS APPROVED AND PERMITTED BY AN ENCROACHMENT PERMIT, ANY CHANGES OR VARIANCES MADE AT THE TIME OF CONSTRUCTION WITHOUT WRITTEN APPROVAL FROM THE DEPARTMENT OF HIGHWAYS SHALL BE REMOVED BY THE PERMITTEE AT NO EXPENSE TO THE DEPARTMENT OF HIGHWAYS AND SHALL BE REDONE TO CONFORM WITH THE APPROVED PLANS.

## KTC Encroachment Descriptions Phase VII Water System Improvements Meade County Water District

#### Drawing #8

This project includes the bore and jack of 40 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) along KY 79 at the intersection of KY 261 at Station 29+00 as shown on drawing #8.

## Drawing #9

This project includes the installation of an 8-inch water main along KY 79 within the State R/W from Station 45+00 to Station 46+50 as shown on drawing #9.

### Drawing #10

This project includes the bore and jack of 40 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) crossing KY 79 at Station 82+00 as shown on drawing #10.

## Drawing #13

This project includes the bore and jack of 60 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) along KY 79 at the intersection of Ky 428 (Guston Road) at Station 166+50 as shown on drawing #13.

#### Drawing #16

This project includes the bore and jack of 60 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) along KY 428 at the intersection of KY 2727 (Haysville Road) at Station 65+50 as shown on drawing #16.

#### Drawing #17

This project includes the bore and jack of 50 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) crossing KY 428 (Guston Road) at Station 118+20 as shown on drawing #17.

#### Drawing #18

This project includes the bore and jack of 35 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) crossing KY 428 (Guston Road) near the CSX Rail Road Crossing in Guston KY at Station 135+70 as shown on drawing #18.

## Drawing #18

This project includes an Open Cut of 110 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) along KY 428 (Guston Road) at the intersection of KY 710 at Station 143+75 as shown on drawing #18.

#### Drawing #18 - #19

This project includes the installation of an 8-inch water main along KY 428 (Guston Road) within the State R/W from Station 135+70 to Station 149+00 as shown on drawing #18 - #19.

## Drawing #21

This project includes the installation of an 6-inch water main along KY 144 (Midway Road) within the State R/W from Station 16+50 to Station 20+00 as shown on drawing #21.

## Drawing #21

This project includes the bore and jack of 50 lineal feet of 12-inch steel casing pipe (6-inch carrier pipe) along KY 144 (Midway Road) at the intersection of KY 70 at Station 10+00 as shown on drawing #21.

## Drawing #24

This project includes the installation of an 6-inch water main along KY 144 (Midway Road) within the State R/W from Station 104+50 to Station 112+00 as shown on drawing #24.

## Drawing #25

This project includes the bore and jack of 50 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) along KY 144 (Midway Road) at the intersection of KY 2727 (Haysville Road) at Station 145+20 as shown on drawing #25.

## Drawing #26

This project includes the bore and jack of 50 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) along KY 2727 (Haysville Road) at the intersection of Molly Brown Road at Station 10+00 as shown on drawing #26.

## Drawing #27

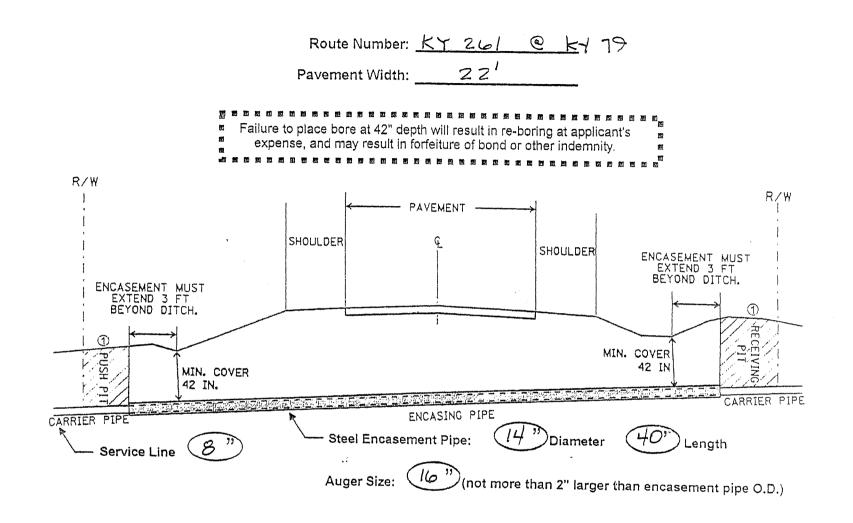
This project includes the installation of an 8-inch water main along KY 2727 (Haysville Road) within State R/W from Station 48+00 to Station 51+00 as shown on drawing #27.

## Drawing #28

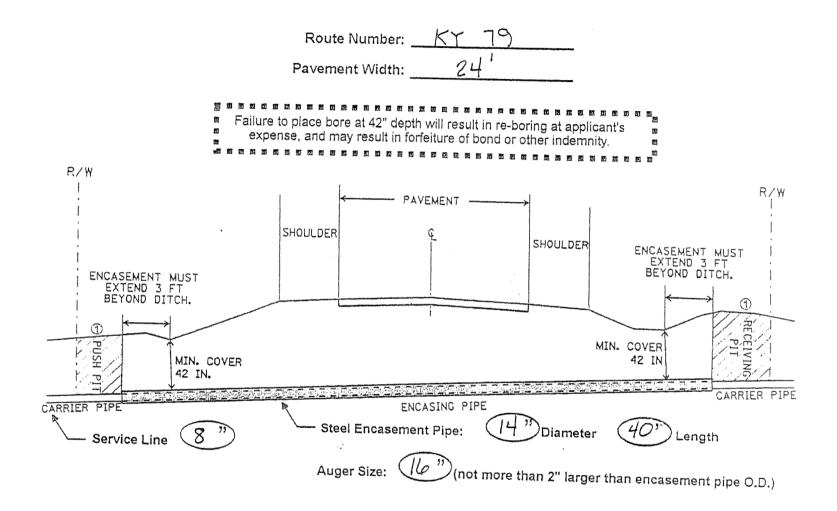
This project includes the bore and jack of 50 lineal feet of 14-inch steel casing pipe (8-inch carrier pipe) along KY 2727 (Haysville Road) at the intersection of KY 1726 (Dooley Road) at Station 78+00 as shown on drawing #28.

## Drawing #29

This project includes the installation of an 8-inch water main along KY 2727 (Haysville Road) within State R/W from Station 97+50 to Station 130+00 as shown on drawing #29.

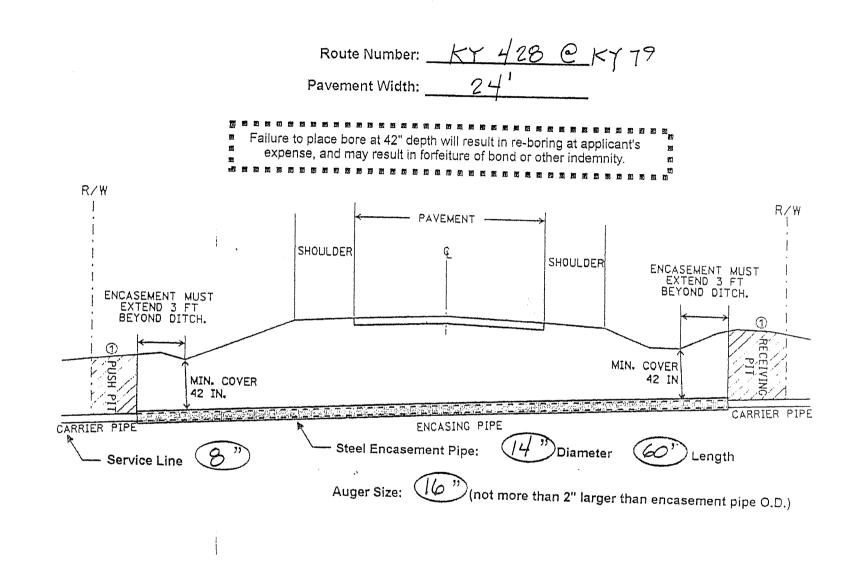


- 2. All ditch lines shall be restored to original condition.
- 3. Shape, seed, and straw all disturbed areas.
- Services over 2" shall be steel encased unless exempt under Chapter Two of the KYTC Permits Guidance Manual.



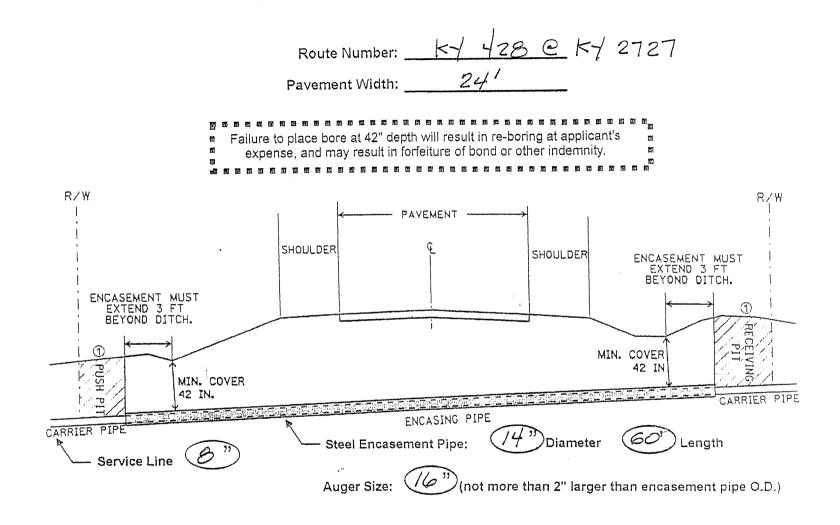
- 2. All ditch lines shall be restored to original condition.
- 3. Shape, seed, and straw all disturbed areas.
- Services over 2" shall be steel encased unless exempt under Chapter Two of the KYTC Permits Guidance Manual.

KENTUCKY DEPARTMENT OF HIGHWAYS
TYPICAL HIGHWAY BORING CROSSING DETAIL
TC99-10 Rev. 04/06 Dist. 4



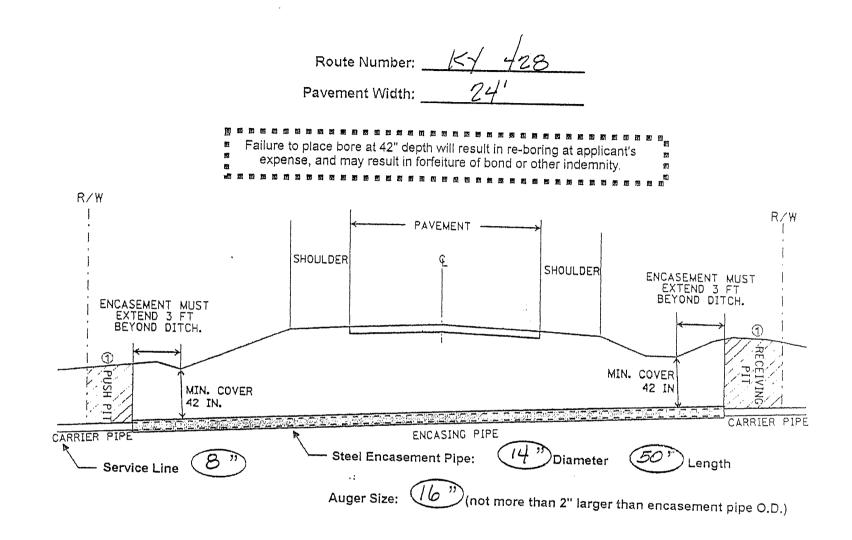
- 2. All ditch lines shall be restored to original condition.
- 3. Shape, seed, and straw all disturbed areas.
- Services over 2" shall be steel encased unless exempt under Chapter Two of the KYTC Permits Guidance Manual.

KENTUCKY DEPARTMENT OF HIGHWAYS
TYPICAL HIGHWAY BORING CROSSING DETAIL
TC99-10 Rev. 04/06 Dist. 4



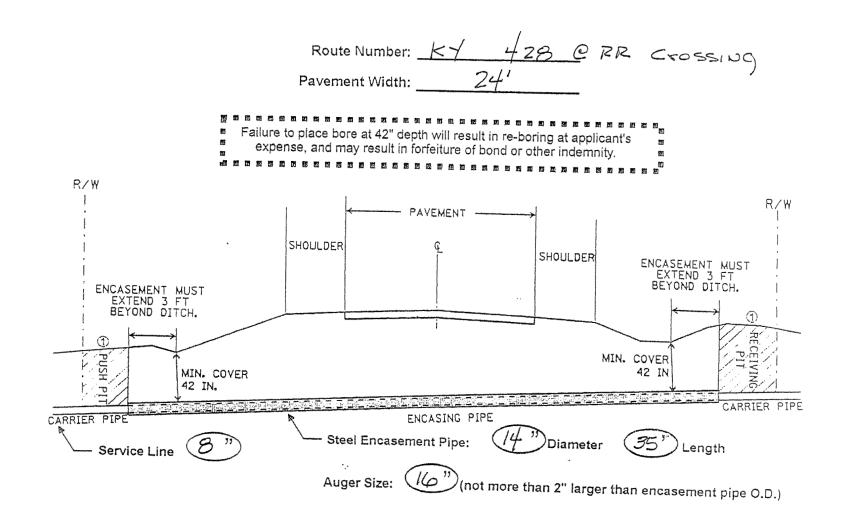
- 2. All ditch lines shall be restored to original condition.
- 3. Shape, seed, and straw all disturbed areas.
- 4. Services over 2" shall be steel encased unless exempt under Chapter Two of the KYTC Permits Guidance Manual.

KENTUCKY DEPARTMENT OF HIGHWAYS
TYPICAL HIGHWAY BORING CROSSING DETAIL
TC99-10 Rev. 04/06 Dist. 4



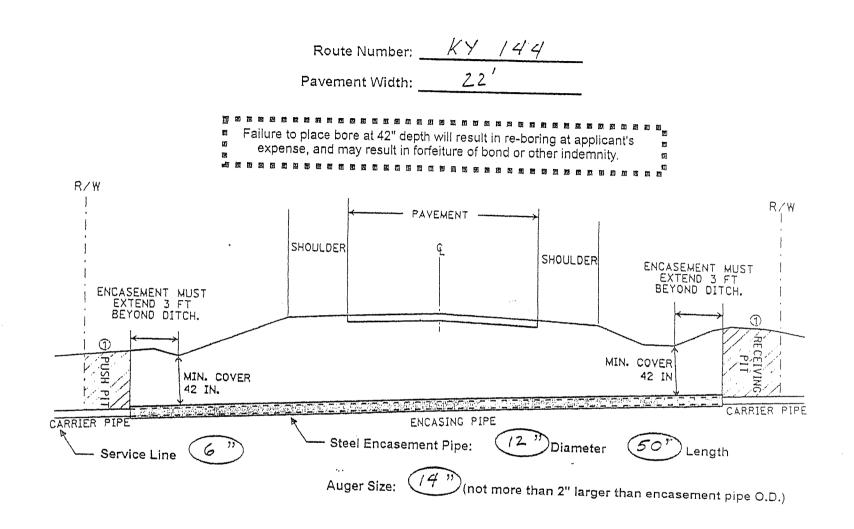
- 2. All ditch lines shall be restored to original condition.
- 3. Shape, seed, and straw all disturbed areas.
- Services over 2" shall be steel encased unless exempt under Chapter Two of the KYTC Permits Guidance Manual.

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TYPICAL HIGHWAY BORING CROSSING DETAIL
TC99-10 Rev. 04/06 Dist. 4

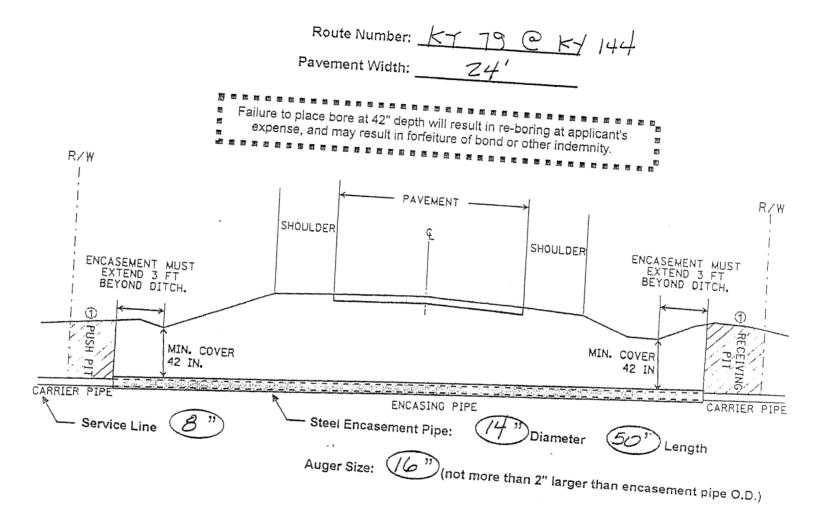


- 2. All ditch lines shall be restored to original condition.
- 3. Shape, seed, and straw all disturbed areas.
- Services over 2" shall be steel encased unless exempt under Chapter Two of the KYTC Permits Guidance Manual.

KENTUCKY DEPARTMENT OF HIGHWAYS
TYPICAL HIGHWAY BORING CROSSING DETAIL
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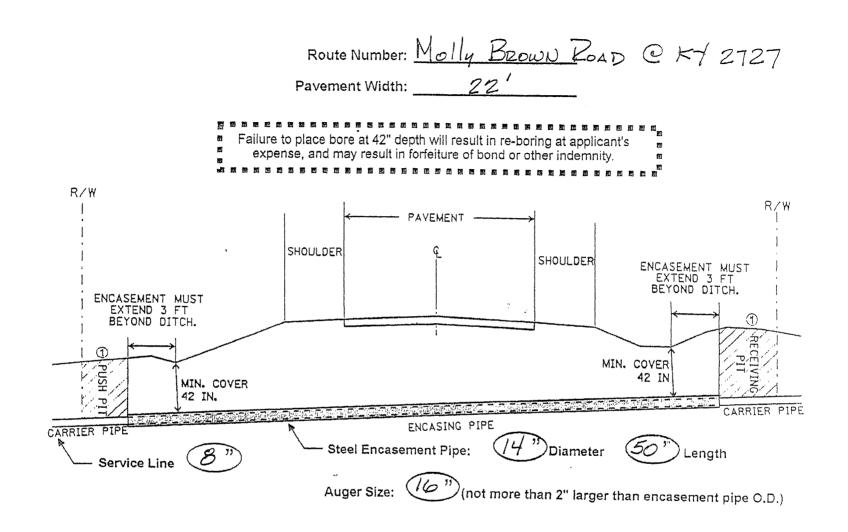


- 2. All ditch lines shall be restored to original condition.
- 3. Shape, seed, and straw all disturbed areas.
- Services over 2" shall be steel encased unless exempt under Chapter Two of the KYTC Permits Guidance Manual.



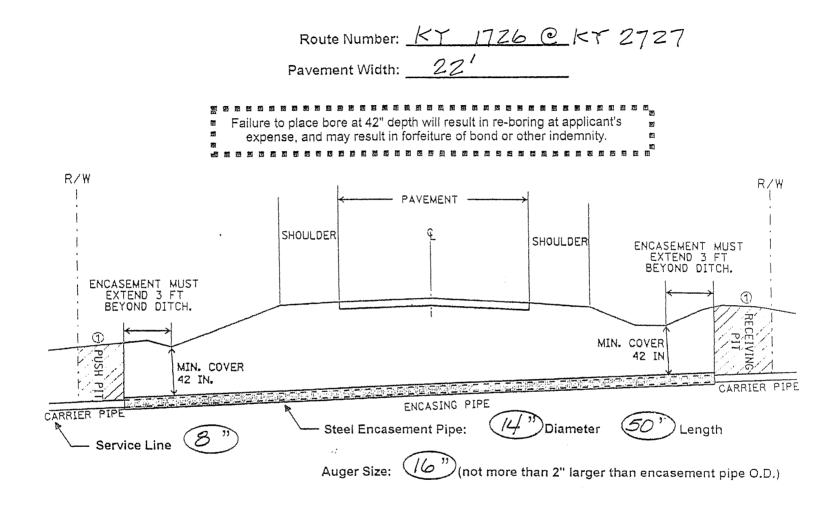
- 1 Push pit and receiving pit shall be backfilled and thoroughly compacted. 2. All ditch lines shall be restored to original condition.
- 3. Shape, seed, and straw all disturbed areas.
- 4. Services over 2" shall be steel encased unless exempt under Chapter Two of the KYTC Permits Guidance Manual.

KENTUCKY DEPARTMENT OF HIGHWAYS
TYPICAL HIGHWAY BORING CROSSING DETAIL
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KENTUCKY DEPARTMENT OF HIGHWAYS
TYPICAL HIGHWAY BORING CROSSING DETAIL
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- 4. Services over 2" shall be steel encased unless exempt under Chapter Two of the KYTC Permits Guidance Manual.

KENTUCKY
DEPARTMENT OF HIGHWAYS
TYPICAL HIGHWAY BORING CROSSING DETAIL
TC99-10 Rev. 04/06 Dist. 4

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#### PIPELINE CROSSING AGREEMENT

THIS AGREEMENT, Made and effective as of April 25, 2008, by and between CSX TRANSPORTATION, INC., a Virginia corporation, whose mailing address is 500 Water Street, Jacksonville, Florida 32202, hereinafter called "Licensor," and MEADE COUNTY WATER DISTRICT, a municipal corporation, political subdivision or state agency, under the laws of the Commonwealth of Kentucky, whose mailing address is 1003 Armory Place, Brandenburg, Kentucky 40108, hereinafter called "Licensee," WITNESSETH:

WHEREAS, Licensee desires to construct, use and maintain a pipeline, solely for the transmission of potable water, <u>hereinafter called "Pipeline,"</u> under or across property owned or controlled by Licensor at or near Guston, County of Meade, Commonwealth of Kentucky, located at Valuation Station 2084+44, Milepost OHR 45.23, LH & ST. L Subdivision, <u>hereinafter called the "Crossing,"</u> as shown on print of drawing labeled "Phase VII Water System Improvements Meade County Water District", dated September 21, 2007, attached hereto and made a part hereof; other details and data pertaining to said Pipeline being as indicated on Application Form dated October 3, 2007, also attached hereto and made a part hereof;

NOW, THEREFORE, in consideration of the mutual covenants, conditions, terms and agreements herein contained, the parties hereto agree and covenant as follows:

#### 1. LICENSE:

1.1 Subject to Article 17, Licensor, insofar as it has the legal right, power and authority to do so, and its present title permits, and subject to:

(A) Licensor's present and future right to occupy, possess and use its property within the area of the Crossing for any and all purposes;

(B) All encumbrances, conditions, covenants, easements, and limitations applicable to Licensor's title to or rights in the subject property; and

(C) Compliance by Licensee with the terms and conditions herein contained;

does hereby license and permit Licensee to construct, maintain, repair, renew, operate, use, alter or change said Pipeline at the Crossing above for the term herein stated, and to remove same upon termination.

1.2 The term <u>Pipeline</u>, as used herein, shall include only the pipes, ducts, casing, vents, manholes, connectors, fixtures, appliances and ancillary facilities devoted exclusively to the transmission usage above within the Crossing, and as shown on attached Application Form.

1.3 No additional pipeline or other facilities shall be placed, allowed or maintained by Licensee in, upon or along the Crossing except upon separate prior written consent of Licensor.

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## 2. ENCROACHMENT INVENTORY FEE; TERM:

2.1 In lieu of annual payments and in consideration of Licensor's waiver of future fee increases, Licensee shall pay Licensor a one-time nonrefundable Encroachment Inventory Fee of FIVE HUNDRED AND AND 00/100 U.S. DOLLARS (\$500.00) upon execution of this Agreement. Licensee agrees that the Encroachment Inventory Fee applies only to the original Licensee under this Agreement. In the event of a successor (by merger, consolidation, reorganization and/or assignment) or if the original Licensee changes its name, then Licensee shall be subject to payment of Licensor's current administrative and document preparation fees for the cost incurred by Licensor in preparing and maintaining this Agreement on a current basis.

2.2 However, Licensee assumes sole responsibility for, and shall pay directly (or reimburse Licensor), any additional annual taxes and/or periodic assessments levied against Licensor or Licensor's property solely on account of said Pipeline or Crossing.

2.3 This Agreement shall terminate as herein provided, but shall also terminate upon (a) default, (b) Licensee's cessation of use of the Pipeline or Crossing for the purpose(s) above, (c) removal of the Pipeline, (d) subsequent mutual consent, and/or (e) failure of Licensee to complete installation within 5 (five) years from the effective date of this Agreement.

2.4 In further consideration for the license or right hereby granted, Licensee hereby agrees that Licensor shall not be charged or assessed, directly or indirectly, with any part of the cost of the installation of said Pipeline and appurtenances, and/or maintenance thereof, or for any public works project of which said Pipeline is a part.

## 3. CONSTRUCTION, MAINTENANCE AND REPAIRS:

3.1 Licensee shall construct, maintain, relocate, repair, renew, alter, and/or remove said Pipeline, in a prudent, workmanlike manner, using quality materials and complying with: any applicable standard(s) or regulation(s) of Licensor (A.R.E.M.A. Specifications) and Licensee's particular industry, and/or any governmental or regulatory body having jurisdiction over the Crossing or Pipeline.

3.2 Location and construction of Pipeline shall be made strictly in accordance with design(s) and specifications furnished to and approved by Licensor, and of material(s) and size(s) appropriate for the purpose(s) above recited.

3.3 All Licensee's work and exercise of rights hereunder shall be undertaken at time(s) satisfactory to Licensor and so as to eliminate or minimize any impact on or interference with the safe use and operation of Licensor's property and appurtenances thereto.

3.4 In the installation, maintenance, repair and/or removal of said Pipeline, Licensee shall not use explosives of any type or perform or cause any blasting without the separate express written consent of Licensor. As a condition to such consent, a representative will be assigned by

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Licensor to monitor blasting, and Licensee shall reimburse Licensor for the entire cost and/or expense of furnishing said monitor.

3.5 Any repairs or maintenance to Pipeline, whether resulting from acts of Licensee, or natural or weather events, which are necessary to protect or facilitate Licensor's use of its property, shall be made by Licensee promptly, but in no event later than thirty (30) days after Licensee has notice as to the need for such repairs or maintenance.

3.6 Licensor, in order to protect or safeguard its property, rail operations, equipment and/or employees from damage or injury, may request immediate repair or renewal of the Pipeline, and if the same is not performed, may make or contract to make such repairs or renewals, at the sole risk, cost and expense of Licensee.

3.7 Neither the failure of Licensor to object to any work done, material used, or method of construction or maintenance of said Crossing, nor any approval given or supervision exercised by Licensor, shall be construed as an admission of liability or responsibility by Licensor, or as a waiver by Licensor of any of the obligations, liability and/or responsibility of Licensee under this Agreement.

3.8 All work on the Crossing shall be conducted in accordance with Licensor's safety rules and regulations.

3.9 Licensee hereby agrees to reimburse Licensor any loss, cost or expense (including losses resulting from train delays and/or inability to meet train schedules) arising from any failure of Licensee to make repairs or conduct maintenance as required by Section 3.5 above or from improper or incomplete repairs or maintenance to Pipeline.

#### 4. **PERMITS, LICENSES:**

4.1 Before any work hereunder is performed, or before use of the Crossing for the contracted purpose, Licensee, at its sole cost and expense, shall obtain all necessary permit(s) (including but not limited to zoning, building, construction, health, safety or environmental matters), letter(s) or certificate(s) of approval. Licensee expressly agrees and warrants that it shall conform and limit its activities to the terms of such permit(s), approval(s) and authorization(s), and shall comply with all applicable ordinances, rules, regulations, requirements and laws of any governmental authority (state, federal or local) having jurisdiction over Licensee's activities, including the location, contact, excavation and protection regulations of the Occupational Safety and Health Act (OSHA) (20 CFR 1926.651(b), et al.), and State "One Call" - "Call Before You Dig" requirements.

4.2 Licensee assumes sole responsibility for failure to obtain such permit(s) or approval(s), for any violations thereof, or for costs or expenses of compliance or remedy.

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## 5. MARKING AND SUPPORT:

5.1 With respect to any subsurface installation or maintenance upon Licensor's property, Licensee, at its sole cost and expense, shall:

(A) Support track(s) and roadbed in a manner satisfactory to Licensor;

(B) Backfill with satisfactory material and thoroughly tamp all trenches to prevent settling of surface of land and roadbed of Licensor; and

(C) Either remove any surplus earth or material from Licensor's property or cause said surplus earth or material to be placed and distributed at location(s) and in such manner as Licensor may approve.

5.2 After construction or maintenance of Pipeline, Licensee shall:

(A) Restore said track(s), roadbed and other disturbed property; and

(B) Erect, maintain and periodically verify the accuracy of aboveground markers, in a form approved by Licensor, indicating the location, depth and ownership of Pipeline or related facilities.

5.3 Licensee shall be solely responsible for any subsidence or failure of lateral or subjacent support in the Crossing area for a period of three (3) years after completion of installation.

## 6. TRACK CHANGES:

6.1 In the event that rail operations and/or track maintenance result in changes in grade or alignment of, additions to, or relocation of track(s) or other facilities, or in the event future use of Licensor's right-of-way and property necessitate any change of location, height or depth of Pipeline or Crossing, Licensee, at its sole cost and expense and within thirty (30) days after notice in writing from Licensor, shall make changes in Pipeline or Crossing to accommodate such track(s) or operations.

6.2 If Licensee fails to do so, Licensor may make or contract to make such changes at Licensee's cost.

## 7. **PIPE CHANGES:**

7.1 Licensee shall periodically monitor and verify the depth or height of Pipeline and Crossing in relation to the existing tracks and facilities, and shall relocate Pipeline or change Crossing, at Licensee's expense, should such relocation or change be necessary to comply with the minimum clearance requirements of this Agreement or of any public authority.

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7.2 If Licensee undertakes to revise, renew, relocate or change all or any part of Pipeline (including any change in circumference, diameter or radius of pipe or carrier pipe, change in operating pressure, or change in materials transmitted in and through said pipe), or is required by any public agency or court order to do so, plans therefor shall be submitted to Licensor for approval before any such change is made. After approval the terms and conditions of this Agreement shall apply thereto.

## 8. INTERFERENCE WITH RAIL FACILITIES:

8.1 Although the Pipeline/Crossing herein permitted may not presently interfere with Licensor's railroad operations or facilities, in the event that the operation, existence or maintenance of said Pipeline, in the sole judgment of Licensor, causes: (a) interference (physical, magnetic or otherwise) with Licensor's communication, signal or other wires, powerlines, train control system, or facilities; or (b) interference in any manner with the operation, maintenance or use of the right-of-way, track(s), structures, pole line(s), devices, other property, or any appurtenances thereto; then and in either event, Licensee, upon receipt of written notice from Licensor of any such interference, and at Licensee's sole risk, cost and expense, shall promptly take such remedial action or make such changes in its Pipeline as may be required in the reasonable judgment of Licensor to eliminate all such interference. Upon Licensee's failure to remedy or change, Licensor may do so or contract to do so, at Licensee's sole cost.

8.2 Without assuming any duty hereunder to inspect Licensee's Pipeline, Licensor hereby reserves the right to inspect same and to require Licensee to undertake necessary repairs, maintenance or adjustments to Pipeline, which Licensee hereby agrees to make promptly, at Licensee's sole cost and expense.

## 9. RISK, LIABILITY, INDEMNITY:

With respect to the relative risk and liabilities of the parties, it is hereby agreed that:

9.1 Licensee hereby assumes, and, to the fullest extent permitted by State law (Constitutional or Statutory, as amended), shall defend, indemnify, and hold Licensor harmless from and against any and all liability, loss, claim, suit, damage, charge or expense which Licensor may suffer, sustain, incur or in any way be subjected to, on account of death of or injury to any person whomsoever (including officers, agents, employees or invitees of Licensor), and for damage to or loss of or destruction of any property whatsoever, arising out of, resulting from, or in any way connected with the construction, presence, existence, repair, maintenance, replacement, operations, use or removal of Pipeline or any structure in connection therewith, or restoration of premises of Licensor to good order or condition after removal, EXCEPT when caused solely by the willful misconduct or gross negligence of Licensor. HOWEVER, to the fullest extent permitted by State law, during any period of actual construction, repair, maintenance, replacement or removal of pipeline, wherein agents, equipment or personnel of Licensee are on the railroad right-of-way, Licensee's liability hereunder shall be absolute, irrespective of any joint, sole or contributory fault or negligence of Licensor.

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9.2 Use of Licensor's right-of-way involves certain risks of loss or damage as a result of the rail operations. Notwithstanding Section 9.1, Licensee expressly assumes all risk of loss and damage to Licensee's Property or Pipeline in, on, over or under the Occupancy, including loss of or any interference with use thereof, regardless of cause, including electrical field creation, fire or derailment arising out of rail operations. For this Section, the term "Licensee's Property" shall include pipe contents as well as property of third parties situated or placed upon Licensor's right-of-way by Licensee or by such third parties at request of or for benefit of Licensee.

9.3 To the extent permitted by State law, as above, Licensee assumes all responsibility for, and agrees to defend, indemnify and hold Licensor harmless from: (a) all claims, costs and expenses, including reasonable attorneys' fees, as a consequence of any sudden or nonsudden pollution of air, water, land and/or ground water on or off the Crossing area, arising from or in connection with the use of this Crossing or resulting from leaking, bursting, spilling, or any escape of the material transmitted in or through said Pipeline; (b) any claim or liability arising under federal or state law dealing with either such sudden or nonsudden pollution of air, water, land and/or ground water arising therefrom or the remedy thereof; and (c) any subsidence or failure of lateral or subjacent support of the tracks arising from such Pipeline leakage.

9.4 Obligations of Licensee hereunder to defend, indemnify and hold Licensor harmless shall also extend to companies and other legal entities that control, are controlled by, subsidiaries of, or are affiliated with Licensor, as well as any railroad that operates over the rightof-way on which the Crossing is located, and their respective officers, agents and employees.

9.5 If a claim is made or action is brought against either party, for which the other party may be responsible hereunder, in whole or in part, such other party shall be notified and permitted to participate in the handling or defense of such claim or action.

9.6 Notwithstanding anything contained in this Agreement, the limitations of liability contained in the state statutes, as amended from time to time, shall not limit Licensor's ability to collect under the insurance policies required to be maintained under this Agreement.

#### **10. INSURANCE:**

10.1 Prior to commencement of surveys, construction or occupation of Crossing pursuant to this Agreement, Licensee shall procure, and shall maintain during the continuance of this Agreement, at Licensee's sole cost and expense, a policy of <u>Commercial General Liability</u> <u>Insurance (CGL)</u>, naming Licensor, and/or its designee, as additional insured and covering liability assumed by Licensee under this Agreement. A coverage limit of not less than THREE MILLION AND 00/100 U.S. DOLLARS (\$3,000,000.00) Combined Single Limit per occurrence for bodily injury liability and property damage liability is currently required as a prudent minimum to protect Licensee's assumed obligations. The evidence of insurance coverage shall be endorsed to provide for thirty (30) days' notice to Licensor, or its designee, prior to cancellation or modification of any policy. Mail CGL certificate, along with agreement, to CSX Transportation, Inc., Speed Code J180,

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500 Water Street, Jacksonville, FL 32202. On each successive year, send certificate to Speed Code C907 at the address listed above.

10.2 If said CGL policy does not automatically cover Licensee's contractual liability during periods of survey, construction, maintenance and continued occupation, a specific endorsement adding such coverage shall be purchased by Licensee. If said CGL policy is written on a "claims made" basis instead of a "per occurrence" basis, Licensee shall arrange for adequate time for reporting losses. Failure to do so shall be at Licensee's sole risk.

10.3 Notwithstanding the provisions of Sections 10.1 and 10.2, Licensee, pursuant to State Statute(s), may self-insure or self-assume, in any amount(s), any contracted liability arising under this Agreement, under a funded program of self-insurance, which fund will respond to liability of Licensee imposed by and in accordance with the procedures established by law.

10.4 Securing such insurance shall not limit Licensee's liability under this Agreement, but shall be additional security therefor.

10.5 In the event Licensee finds it necessary to perform construction or demolition operations within fifty feet (50') of any operated railroad track(s) or affecting any railroad bridge, trestle, tunnel, track(s), roadbed, overpass or underpass, Licensee shall: (a) notify Licensor; and (b) procure and maintain during the period of construction or demolition operations, at no cost to Licensor, <u>Railroad Protective Liability (RPL) Insurance</u>, naming Licensor, and/or its designee, as Named Insured, written on the current ISO/RIMA Form (ISO Form No. CG 00 35 01 96) with limits of FIVE MILLION AND 00/100 U.S. DOLLARS (\$5,000,000.00) per occurrence for bodily injury and property damage, with at least TEN MILLION AND 00/100 U.S. DOLLARS (\$10,000,000.00) aggregate limit per annual policy period, with Pollution Exclusion Amendment (ISO CG 28 31 11 85) if an older ISO Form CG 00 35 is used. The original of such <u>RPL</u> policy shall be sent to and approved by Licensor prior to commencement of such construction or demolition. Licensor reserves the right to demand higher limits.

At Licensor's option, in lieu of purchasing RPL insurance from an insurance company (but not CGL insurance), Licensee may pay Licensor, at Licensor's current rate at time of request, the cost of adding this Crossing, or additional construction and/or demolition activities, to Licensor's <u>Railroad Protective Liability (RPL) Policy</u> for the period of actual construction. This coverage is offered at Licensor's discretion and may not be available under all circumstances.

#### 11. GRADE CROSSINGS; FLAGGING:

11.1 Nothing herein contained shall be construed to permit Licensee, or any contractor of Licensee, to move any vehicles or equipment over the track(s), except at public road crossing(s), without separate prior written approval of Licensor (CSXT Form 7422).

11.2 If Licensor deems it advisable, during the progress of any construction, maintenance, repair, renewal, alteration, change or removal of said Pipeline, to place watchmen,

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flagmen, inspectors or supervisors at the Crossing for protection of operations of Licensor or others on Licensor's right-of-way, and to keep persons, equipment and materials away from the track(s), Licensor shall have the right to do so at the expense of Licensee, but Licensor shall not be liable for failure to do so.

## 12. LICENSOR'S COSTS:

12.1 Any additional or alternative costs or expenses incurred by Licensor to accommodate Licensee's continued use of Licensor's property as a result of track changes or pipe changes shall also be paid by Licensee.

12.2 Licensor's expense for wages ("force account" work) and materials for any work performed at the expense of Licensee pursuant hereto shall be paid by Licensee within thirty (30) days after receipt of Licensor's bill therefor, subject to Licensee's budgetary rules. Licensor may, at its discretion, request an advance deposit for estimated Licensor costs and expenses.

12.3 Such expense shall include, but not be limited to, cost of railroad labor and supervision under "force account" rules, plus current applicable overhead percentages, the actual cost of materials, and insurance, freight and handling charges on all materials used. Equipment rentals shall be in accordance with Licensor's applicable fixed rate(s). Licensor may, at its discretion, require advance deposit for estimated costs and expenses associated herein.

#### 13. DEFAULT, BREACH, WAIVER:

13.1 The proper and complete performance of each covenant of this Agreement shall be deemed of the essence thereof, and in the event Licensee fails or refuses to fully and completely perform any of said covenants or remedy any breach within thirty (30) days after receiving written notice from Licensor to do so (or within forty-eight (48) hours in the event of notice of a railroad emergency), Licensor shall have the option of immediately revoking this Agreement and the privileges and powers hereby conferred, regardless of encroachment inventory fee(s) having been paid in advance for any annual or other period. Upon such revocation, Licensee shall make removal in accordance with Article 14.

13.2 No waiver by Licensor of its rights as to any breach of covenant or condition herein contained shall be construed as a permanent waiver of such covenant or condition, or any subsequent breach thereof, unless such covenant or condition is permanently waived in writing by Licensor.

#### 14. TERMINATION, REMOVAL:

14.1 All rights which Licensee may have hereunder shall cease upon the date of: (a) revocation, (b) termination, (c) subsequent agreement, or (d) Licensee's removal of Pipeline from the Crossing. However, neither revocation nor termination of this Agreement shall affect any claims and liabilities which may have arisen or accrued hereunder, and which at the time of

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termination or revocation have not been satisfied; neither party, however, waiving any third party defenses or actions.

14.2 Within thirty (30) days after revocation or termination, Licensee, at its sole risk and expense, shall (a) remove Pipeline from the right-of-way of Licensor, unless the parties hereto agree otherwise, (b) restore property of Licensor in a manner satisfactory to Licensor, and (c) reimburse Licensor any loss, cost or expense of Licensor resulting from such removal.

## 15. NOTICE:

15.1 Licensee shall give Licensor's Division Engineer (Midwest Division, 11492 Bluegrass Parkway, Louisville, Kentucky 40299) at least thirty (30) days written notice before doing <u>any</u> work on Licensor's right-of-way, except that in cases of emergency shorter notice may be given to said Division Engineer. The rail operations emergency phone number for Licensor is: 1-800-232-0144. The emergency phone number for Licensee is: 1-270-668-7107.

15.2 All other notices and communications concerning this Agreement shall be addressed to <u>Licensee</u> at the address above, and to <u>Licensor</u> at the address shown on Page 1, c/o CSXT Contract Administration, J180; <u>or</u> at such other address as either party may designate in writing to the other.

15.3 Unless otherwise expressly stated herein, <u>all</u> such notices shall be in writing and sent via Certified or Registered Mail, Return Receipt Requested, or by courier, and shall be considered effective upon: (a) actual receipt, or (b) date of refusal of such delivery.

#### 16. ASSIGNMENT:

16.1 The rights herein conferred are the privileges of Licensee only, and Licensee shall obtain Licensor's prior written consent to any assignment of Licensee's interest herein; said consent shall not be unreasonably withheld.

16.2 Subject to Sections 2 and 16.1, this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors or assigns.

16.3 Licensee shall give Licensor written notice of any legal succession (by merger, consolidation, reorganization, etc.) or other change of legal existence or status of Licensee, with a copy of all documents attesting to such change or legal succession, within thirty (30) days thereof.

16.4 Licensor expressly reserves the right to assign this Agreement, in whole or in part, to any grantee, lessee, or vendee of Licensor's underlying property interests in the Crossing.

16.5 In the event of any unauthorized sale, transfer, assignment, sublicense or encumbrance of this Agreement, or any of the rights and privileges hereunder, Licensor, at its option, may revoke this Agreement by giving Licensee or any such assignee written notice of such

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revocation; and Licensee shall reimburse Licensor for any loss, cost or expense Licensor may incur as a result of Licensee's failure to obtain said consent.

#### **17. TITLE:**

17.1 Licensee understands that Licensor occupies, uses and possesses lands, rights-ofway and rail corridors under all forms and qualities of ownership rights or facts, from full fee simple absolute to bare occupation. Accordingly, nothing in this Agreement shall act as or be deemed to act as any warranty, guaranty or representation of the quality of Licensor's title for any particular Right-of-Way in the Crossing occupied, used or enjoyed in any manner by Licensee under any rights created in this Agreement. It is expressly understood that Licensor does not warrant title to any Right-of-Way in the Crossing, and Licensee will accept the grants and privileges contained herein, subject to all lawful outstanding existing liens, mortgages and superior rights in and to the Right-of-Way, and all leases, licenses and easements or other interests previously granted to others therein.

The term "license," as used herein, shall mean with regard to any portion of the 17.2 Right-of-Way which is owned by Licensor in fee simple absolute, or where the applicable law of the State where the Crossing is located otherwise permits Licensor to make such grants to Licensee, a "permission to use" the Right-of-Way, with dominion and control over such portion of the Right-of-Way remaining with Licensor, and no interest in or exclusive right to possess being otherwise granted to Licensee. With regard to any other portion of Right-of-Way occupied, used or controlled by Licensor under any other facts or rights, Licensor merely waives its exclusive right to occupy the Right-of-Way and grants no other rights whatsoever under this Agreement, such waiver continuing only so long as Licensor continues its own occupation, use or control. Licensor does not warrant or guarantee that the license granted hereunder provides Licensee with all of the rights necessary to occupy any portion of the Right-of-Way. Licensee further acknowledges that it does not have the right to occupy any portion of the Right-of-Way held by Licensor in less than fee simple absolute without also receiving the consent of the owner(s) of the fee simple absolute estate. Further, Licensee shall not obtain, exercise or claim any interest in the Right-of-Way that would impair Licensor's existing rights therein.

17.3 Licensee agrees it shall not have nor shall it make, and hereby completely and absolutely waives its right to, any claim against Licensor for damages on account of any deficiencies in title to the Right-of-Way in the event of failure or insufficiency of Licensor's title to any portion thereof arising from Licensee's use or occupancy thereof.

17.4 Licensee agrees to fully and completely indemnify and defend all claims or litigation for slander of title, overburden of easement, or similar claims arising out of or based upon Licensee's facilities placement, or the presence of Licensee's facilities in, on, or along the Crossing, including claims for punitive or special damages.

17.5 Licensee shall not at any time own, or claim any right, title or interest in or to Licensor's property occupied by the Crossings, nor shall the exercise of this Agreement for any

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length of time give rise to any right title or interest in License, to said property other than the license herein created.

#### **18.** GENERAL PROVISIONS:

18.1 This Agreement, and the attached specifications, contains the entire understanding between the parties hereto.

18.2 Neither this Agreement, any provision hereof, nor any agreement or provision included herein by reference, shall operate or be construed as being for the benefit of any third person.

18.3 Except as otherwise provided herein, or in any Rider attached hereto, neither the form of this Agreement, nor any language herein, shall be interpreted or construed in favor of or against either party hereto as the sole drafter thereof.

18.4 This Agreement is executed under current interpretation of applicable Federal, State, County, Municipal or other local statute, ordinance or law(s). However, each separate division (paragraph, clause, item, term, condition, covenant or agreement) herein shall have independent and severable status for the determination of legality, so that if any separate division is determined to be void or unenforceable for any reason, such determination shall have no effect upon the validity or enforceability of each other separate division, or any combination thereof.

18.5 This Agreement shall be construed and governed by the laws of the state in which the Pipeline and Crossing are located.

18.6 If any amount due pursuant to the terms of this Agreement is not paid by the due date, it will be subject to Licensor's standard late charge and will also accrue interest at eighteen percent (18%) per annum, unless limited by local law, and then at the highest rate so permitted.

18.7 Licensee agrees to reimburse Licensor for all reasonable costs (including attorney's fees) incurred by Licensor for collecting any amount due under the Agreement.

18.8 The provisions of this License are considered confidential and may not be disclosed to a third party without the consent of the other party(s), except: (a) as required by statute, regulation or court order, (b) to a parent, affiliate or subsidiary company, (c) to an auditing firm or legal counsel that are agreeable to the confidentiality provisions, or (d) to Lessees of Licensor's land and/or track who are affected by the terms and conditions of this Agreement and will maintain the confidentiality of this Agreement.

18.9 Licensor shall refund to Licensee any overpayments collected, plus any taxes paid in advance; <u>PROVIDED</u>, however, such refund shall not be made when the cumulative total involved is less than One Hundred Dollars (\$100.00).

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate (each of which shall constitute an original) as of the effective date of this Agreement.

Witness for Licensor:

## CSX TRANSPORTATION, INC.

Print/Type Name: \_\_\_\_\_

Print/Type Title:

Witness for Licensee:

## MEADE COUNTY WATER DISTRICT

Ву: \_\_\_\_\_

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Who, by the execution hereof, affirms that he/she has the authority to do so and to bind the Licensee to the terms and conditions of this Agreement.

Print/Type Name: \_\_\_\_\_

Print/Type Title: \_\_\_\_\_

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# ATTACHMENT #5

# DEED FOR TANK SITE ACQUISITION

BOOK DEL PACE : YOU

#### DEED

THIS DEED, made and entered into this the 16th day of June, 2008, by and between GEORGIA HAGER, unmarried, of 70000 FIMMAy Dot Elero and GREGORY HAGER and PATRICIA HAGER. MARIE husband wife. and of Rol { 11r, and JOHN JEFFREY HAGER, unmarried, of 850 FISLEM 656 , herein referred to as First Parties; and FLACK THE EKTEN MEADE COUNTY WATER DISTRICT, of P.O. Box 367, Brandenburg, KY 40108herein referred to as Second Party;

## WITNESSETH:

THAT for and in consideration of the sum of THIRTY THOUSAND and 00/100 dollars (\$30,000.00), the receipt of which is hereby acknowledged. First Parties have bargained and sold and do hereby GRANT and CONVEY unto Second Party, in fee simple, its successors and/or assigns forever, the following described property located in Hardin County, Kentucky, to-wit.

Being a 0.516 acre tract located west off K.Y. Highway 144, near the community of Flaherty, Meade County, Kentucky, more particularly described as follows:

Beginning at a found 5/8" rebar with cap stamped LS 2373 corner to W.S. Medley (DB 522 PG 512), W.S. Medley (DB 410 PG 428, DB 235, PG 134) and W.R. Medley (DB 233 PG 017, DB 097 PG 500); thence N 33 deg. 44 min. 12 sec. W., 652.25' to a set 5/8" rebar being the true point of beginning; thence with new lines in D. Hager S 70 deg. 22 min. 07 sec. W., 150.00' to a set 5/8" rebar; thence N 19 deg. 37 min. 53 sec. W., 150.00' to a set 5/8" rebar; thence N 70 deg. 22 min. 07 sec. E., 150.00' to a set 5/8" rebar; thence S 19 deg. 37 min. 53 sec. E., passing a point at the end of the centerline of a 60' right-of-way easement at 40.00', a total distance of 150.00' to the point of beginning and containing 0.516 acres (more or less) according to a physical survey by Timothy S. Smith, PLS #2373 during October, 2007, per Job No. 07-253.

Unless stated otherwise, any monument referred to herein as a "5/8" rebar is a set 5/8" diameter steel concrete reinforcing rod, twenty-four inches (24") in length, with a vellow plastic cap stamped "T.W. Smith, LS 2373." The basis of bearings stated herein are based on W.S. Medley (DB 522 PG 512) property from a previous survey.

Also, transferred herewith is the right of ingress and egress over a 60' right-of-

way easement lying 15' on both sides of the following described centerline:

Beginning at a found 5/8" rebar with cap stamped LS 2373 corner to W.S. Medley (DB 522 PG 512), W.S. Medley (DB 410 PG 428, DB 235 PG 134) and W.R. Medley (DB 233 PG 017, DB 097 PG 500); thence N 33 deg. 44 min. 12 sec. W.,

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652.25' to a set 5/8" rebar being the southeast corner of the above described 0.516 acre tract; thence crossing G. Hager (DB 080 PG 407) N 19 deg. 37 min. 53 sec. W., 110.00' to a point of being the true point of beginning; thence N 70 deg. 23 min. 43 sec. E., 99.29'; thence N 70 deg. 23 min. 43 sec. E, 99.29'; thence N 59 deg. 42 min. 25 sec. E., 50.00' to a point on the westerly right-of-way of KY Highway 144.

The above described tract is subject to any easements, right-of-ways, restrictions, overlaps, vacancies, uncertainties, planning and zoning requirements either implied or of record.

Also, conveyed herein a 60' right-of-way easement along KY Highway 144.

Being a portion of that same parcel of real property that was conveyed to George A. Hager and Georgia Tlager, husband and wife, by Deed dated February 4, 1950, of record in Deed Book 80, Page 407, in the Office of the Meade County Court Clerk. Thereafter George A. Flager died, vesting title to said property to Georgia Flager, pursuant to the survivorship provision of said deed. Thereafter, she Georgia Flager disclaimed her interest in the said property, see attached Exhibit "A". The said GREGORY HAGER and JOHN JEFFREY HAGER receive said property by the terms of his Last Will and Testament recorded in the Meade County Clerk's Office in Will Book S, Page 423, giving said property to First Parties with full power to sell real property.

TO HAVE AND TO HOLD said property unto Second Party, its successors and/or assigns forever.

And First Parties hereby release and relinquish unto Second Party, its successors and/or assigns forever, all of their right, title, and interest in and to said property with good and perfect right to sell and convey the same as herein done and that the title to said property is perfect, clear and unencumbered except for the 2008 property taxes which are to be prorated, and with said exception First Parties will WARRANT GENERALLY, the said title thereto.

PROVIDED, HOWEVER, that this conveyance is made subject to all restrictions, conditions and easements of record in said Clerk's Office. This conveyance is subject to all applicable zoning and subdivision regulations.

Pursuant to KRS Chapter 382, the First Parties and Second Party, hereto certify that the consideration reflected in this deed is the true, correct, and full consideration paid for the property herein conveyed.

IN TESTIMONY WHEREOF, witness the signatures of the Parties, this 16<sup>th</sup> day of June, 2008.

BOOK 541 PAGE 070

MEADE COUNTY WATER DISTRICT

Butle

By. Joe Bartley Its: General Manager

GEORGIA HAGER

Gregory Loger GREGORY HAGER

2 Jeffrey Haar

STATE OF KENTUCKY: COUNTY OF MEACL

The foregoing instrument was executed, acknowledged, subscribed and sworn to before me this 16th day of June, 2008, by MEADE COUNTY WATER DISTRICT, by Joe Bartley, General Manager.

PATRICIA MARIE HAGER

NOTARY PUBLIC

STATE OF KENTUCKY: COUNTY OF HARDIN:

The foregoing instrument was executed, acknowledged, subscribed and sworn to before me this 16th day of June, 2008, by GEORGIA HAGER.

My commission expires: Jane 30th 2010

NOTARY PUBLIC

## STATE OF KENTUCKY: COUNTY OF HARDIN:

The foregoing instrument was executed, acknowledged, subscribed and sworn to before me this 16th day of June, 2008, by GREGORY HAGER and PATRICIA MARIE HAGER.

My commission expires:  $J_{ex}$   $3 + \frac{1}{2} - \frac{1}{2}$ 

Let D Ose NOTARY PUBLIC

STATE OF KENTUCKY COUNTY OF HARDIN:

The foregoing instrument was executed, acknowledged, subscribed and sworn to before me this 16th day of June, 2008, by JOHN JEFFREY HAGER

My commission expires: June 30 Ft 2010

El, DOse NOTARY PUBLIC

PREPARED BY:

Donald É. Skeeters, Esq., R. Terry Bennett, Esq., David T. Wilson, II, Esq., Michael A. Pike, Esq. Attorneys at Law 550 West Lincoln Trail Blvd. P.O. Box 610 Radcliff, Kentucky 40160

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CASE NO. 06-P-064 BOOK 541 PAGE 072 ESTATE OF GEORGE A. HAGER MEADE DISTRICT COURT PROBATE DIVISION ZOUL NOV 30 P 2: 46

## MEADE CIR/DIST. COURT DISCLAIMER OF REAL ESTATE PARCELS (TESTAMENNTARYDLEY. CLERK.

0631837

Comes the undersigned Affiant and states as follows:

1. The Affiant, Georgia Hager, a/k/a Georgia L. Hager, is the surviving wife of the Decedent, George A. Hager, a/k/a George Hager, a/k/a George Alex Hager who died on March 4, 2006 (hereinafter "Decedent"). Georgia Hager is hereinafter referred to as the "Disclaimant".

2. The Disclaimant is the beneficiary of certain real property owned by the above Decedent, George A. Hager, as of the date of his death on March 4, 2006. Such real property consists of eight (8) parcels of real estate located in Meade County, Kentucky, as more particularly described below (hereinafter collectively the "**Disclaimed Parcels**").

3. The Disclaimant's rights and interests in the Disclaimed Parcels being irrevocably disclaimed herein include (i) all right, title, and interest which the Disclaimant has to the Disclaimed Parcels pursuant to the Decedent's Last Will and Testament dated October 4, 1993 which was probated in the above case, and/or (ii) all right, title, and interest which the Disclaimant has to the Disclaimed Parcels as an heir-at-law of the Decedent in the event the Decedent was considered to have died intestate, and/or (iii) all right, title, and interest which the Disclaimant has to the Disclaimed Parcels pursuant to any dower or other statutory right.

4. The Disclaimant hereby irrevocably disclaims, renounces, and refuses to accept all of her present and future right, title and interest in and to the following described 「ないた」となったのであると、

Disclaimed Parcels, and any partnership interest related to the Disclaimed Parcels, to wit:

## TRACT 1

a fact the second Parcel 1. Beginning at a stake in Right of way of Kentucky State Highway 144, and corner to American Oil Co., thence with said Oil Co. line N. 35-30 E. 223 feet to a stake in Right of way of U.S. Highway 60, thence with said Highway Right of way East 135 feet to a stake, thence North 10 feet to a stake, hence N 85 E 340 feet to a stake in Right of way and corner to Fenley (Standard Oil Station), thence with said Fenley line S. 28 E 160 feet to a stake. thence N. 85 E. 207 feet to a stake corner to Fenley, thence N. 28 W 160 feet to a stake in Right of way of U.S. Highway No. 60, thence with said Highway Right of way N. 85 E. 766 feet, thence N. 81 E. 173 feet to a post, thence N. 72 E. 398 feet to a stake in Right of way corner to J.C. Lemasters, thence with said J. C. Lemasters line and B. C. Redmon's line S. 42 E. 870 feet to a post corner to Redmon, thence with Redman's line and Archbishop Thomas J. McDonough's line S. 46 W. 2385 feet to a stake in Right of way of Ky. State Highway No. 144 thence with said Highway Right of way N. 26 W. 2035 feet to the beginning and containing 72.1 acres.

<u>Parcel 2</u>. Beginning at a stake in Right of way of Ky. State Highway No. 144, and corner to George A. Hager's 2 acres tract, thence with said Hager's line and David Hobbs' line S. 46 W. 823 feet to a stake corner to Hobbs in J.W. Padgett line, thence with said Padgett's line N. 41-30 W. 1525 feet to a post, corner to Fenley, thence with said Fenley's line N 47-45 E. 1245 feet to a stake in Right of way of Ky. State Highway No. 144, thence with said Highway S. 26 E. 1600 feet to the beginning and containing 36.7 acres.

BEING the same property conveyed to Grantors by Deed dated April 25, 1968 and recorded in Deed Book 110, Page 197 in the Office of the Meade County Clerk.

## TRACT 2

BEGINNING at a post in the Northeast right-of-way of Kentucky Highway 144 at the intersection of Kentucky Highway 333 and corner to George Hager; thence with said Hager's line N. 47 degrees 30 minutes E. 1455 feet to a post

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corner to Hager; thence with another of Hager's lines, Gilpin and Richard D. Kueber line S. 75 degrees 45 minutes E. 2870 feet to a stake corner to Boak's line; thence with said Boak's line S. 43 degrees W. 1522 feet to a post corner to Boak's; thence S. 33 degrees 30 minutes E. 136 feet to a stone corner to George Hager; thence with said Hager's line S. 59 degrees 30 minutes W. 1105 feet to a stake; thence N. 57 degrees 50 minutes E. 160 feet to a stake; thence S. 57 degrees 30 minutes W. 495 feet to a post in an old road; thence S. 49 degrees 30 minutes E. 147 feet to a large oak on the Northwest side of a private road; thence with the Northwest side of the private road S. 50 degrees W. 281 feet to a stake corner to Antoinette Burch; thence S. 50 degrees W. 215 feet to a stake in the Northeast right-of-way of Kentucky Highway 144; thence with the curvature of said Highway in a Northwesterly direction 859 feet to a stake; thence with said Highway right-of-way N. 25 degrees W. 1312 feet to the beginning and containing 148.2 acres.

EXCEPTED THEREFROM AND NOT BEING DISCLAIMED by the Disclaimant herein is a portion of the above property consisting of 2.740 acres now known as Lot 3 of Hager Subdivision which is recorded at Plat Cabinet \_\_\_\_\_, Slide \_\_\_\_\_ with the Meade County Clerk

BEING the same property conveyed to Grantors by Deed dated May 4, 1972 and recorded in Deed Book 119, Page 143 in the Office of the Meade County Clerk.

## TRACT 3

Beginning at a post oak on the South side of the Elizabethtown road corner to W.B. Lancaster (now Rhodes) thence S. 49 W. 97-3/5 poles to a stone, thence S. 31 E. 10-3/5 poles to a stone, thence S. 33 W. 33 poles to a stone, thence S. 41 E 144 poles to a stone corner to Charles Jones and J.E. Medley, thence with Medley N. 67 E 100 poles to the center of the Elizabethtown and Brandenburg road, thence with said road N. 22 W. 30 poles, thence N. 17 ½ W. 74 ½ poles to a stone corner to J.E. Medley, thence with his line N. 68 E. 80 poles to a stone, thence N. 22 W. 98 poles to several small white oaks, thence S. 55 W. 21 poles to a hickory, thence N. 35 W. 15 poles to a walnut, thence S. 58 W. 65 1/4 poles to a hickory and red oak, thence N. 56 W. 11 ½ poles to a stone and sassafras, thence S. 56 W. 30 poles to a stone in Lancaster (now Rhodes) line, thence S. 56 E. 11 ½ poles to the beginning and containing 200 acres of land more or less. There is excepted out of said boundary and not sold hereby a certain tract of land containing 7-3/4 acres of land heretofore sold by Mary Cappie Jones to Raymond Jones and wife deed to which is recorded in the

office of the Clerk of the Meade County Court in deed book No. 61 page 359.

BEING the same property conveyed to Grantors by Deed dated February 4, 1950 and recorded in Deed Book 80, Page 407 in the Office of the Meade County Clerk.

# TRACT 4

BEGINNING at right of way of U.S. Highway No. 60 and corner to B.C. Redmon and Eugene Burnett; thence with the Burnett line Southwardly for a distance of 127 yards to point and stake; thence in a Northeasterly direction for a distance of 72 yards to another point and stake; thence Northwardly 92 yards to another point and stake, and intersection with the right of way of U.S. Highway No. 60; thence Westwardly along said Highway No. 60 for a distance of 96 yards and to the point of beginning and containing 1.9 acres of land more or less.

BEING the same property conveyed to Grantors by Deed dated January 7, 1991 and recorded in Deed Book 292, Page 134 in the Office of the Meade County Clerk.

## TRACT 5

Being Tract #12 as shown on plat of Redmon Farm Division recorded in Plat Book 2, page 4, in the office of the County Court of Meade County, Kentucky.

And being more particularly described as follows:

BEGINNING at a post in the South East Right of Way of US 60 Highway and corner to \_\_\_\_\_\_\_, thence with said US Highway Right of Way N. 70 degrees E. 512 feet to a stake corner to John Palmer, thence with same Palmer's line S. 44 degrees 30' E. 1275 feet to a stake in Ruth D. Gilpin line, thence with said Gilpin's line S 32 degrees 30' W. 1070 feet to a stake in Rev. Thomas J. McDonough line, thence with said McDonough line N. 75 degrees W. 1190 feet to a stake in George Hager line thence with said Hager's line N. 49 degrees 30' E. 920 feet, thence N. 41 degrees W. 495 feet to a stake corner to \_\_\_\_\_\_, thence with said line N. 44 degrees E. 216 feet, thence N. 39 degrees W. 276 feet to the beginning and containing 36.7 acres of land more or less.

BEING the same property conveyed to Grantors by Deed dated July 30, 1970 and recorded in Deed Book 121, Page 285 in the Office of the Meade County Clerk.

### TRACT 6

Beginning at a stake in right of way of Ky. Highway No. 144 and corner to Geo. Hager; thence with said Hager's line S. 50 degrees W. 210 feet to a stake corner to Hager; thence with Hager's line S. 25 degrees E. 210 feet to a stake in right of way of Ky. Highway 333; thence with said highway right of way S. 46 degrees W. 86 feet to a stake corner to Mrs. Eugene Burnett; thence with said Burnett's line N. 41 degrees 30' W. 180 feet to a stake; thence N. 46 degrees E. 373 feet to a stake in right of way of Ky. 144 Highway; thence with said highway right of way S. 26 degrees E. 86 feet to the beginning and containing 1.22 acres.

BEING the same property conveyed to Grantors by Deed dated April 29, 1968 and recorded in Deed Book 110, Page 194 in the Office of the Meade County Clerk.

## TRACT 7

Beginning at a point where Kentucky Highway No. 333, known as the Big Springs Road intersects Kentucky Highway 144, being the Southwest corner of this intersection; thence running South 50 degrees W. 210 feet along Kentucky Highway 333 to a stake; thence N. 25 degrees W. 210 feet to a stake; thence N. 50 degrees E. 210 feet to Kentucky Highway 144; thence S. 25 degrees E. 210 feet along Kentucky Highway 144 and to the point of beginning and containing one (1) acre of ground, more or less.

BEING the same property conveyed to Grantors by Deed dated April 29, 1968 and recorded in Deed Book 110, Page 196 in the Office of the Meade County Clerk.

5. This Disclaimer is made within nine (9) months from the date of death of the

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Decedent on March 4, 2006. The Disclaimant has not accepted any of the Disclaimed

Parcels or any benefits thereof.

6. This Disclaimer is intended to be a qualified disclaimer under Section 2518 of the Internal Revenue Code, and is made pursuant to Kentucky Revised Statute 394.610.

This Disclaimer is being executed with the original being filed with the above 7. Probate Court, and a copy being hand-delivered to the Executrix of the Decedent's Estate who signs below to acknowledge such delivery, and a copy being recorded with the Meade County Clerk.

Signed this <u>294</u>day of November, 2006.

Georgia Hager, Disclaimant

Georgia Hager, Executrix of the Estate of George A. Hager

COMMONWEALTH OF KENTUCKY

COUNTY OF JEFFERSON

Construction All products and and the

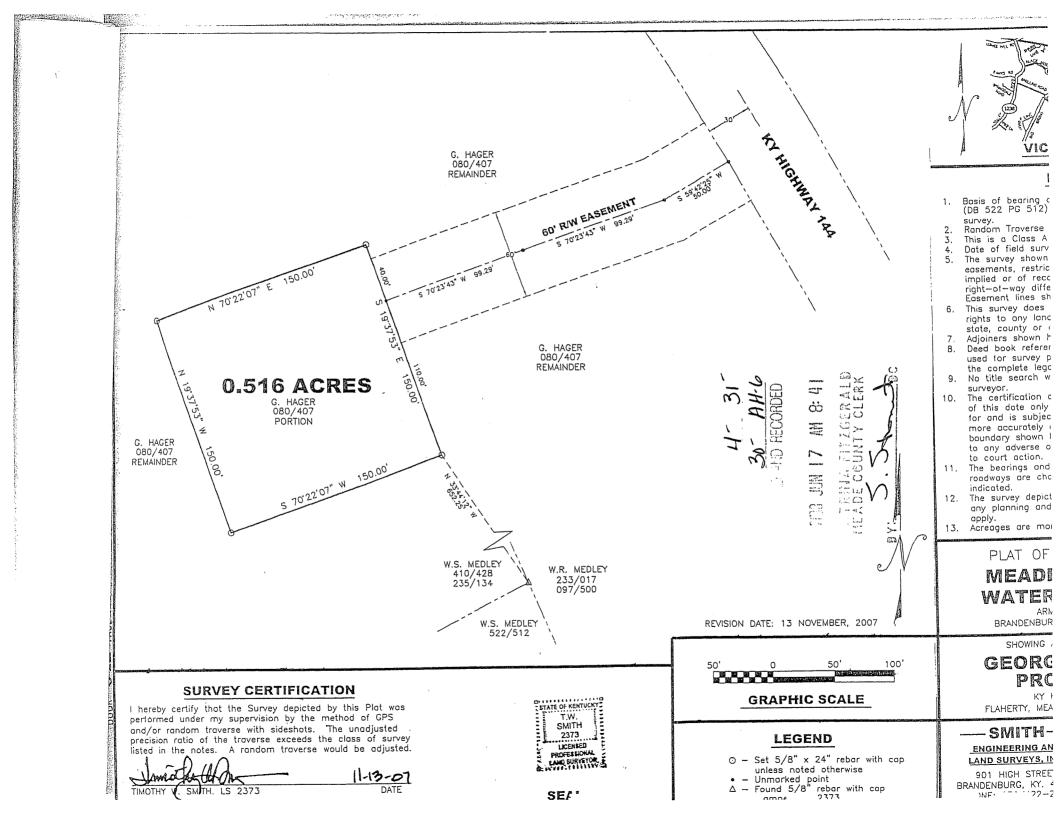
Subscribed, acknowledged and sworn to before me, Notary Public, by Georgia Hager in her individual capacity and as the Executrix of the Estate of George A. Hager, on this the 河岸 day of November, 2006.

2010 My Commission expires: 9 Notary Publi ICDGED AND RECORDED 2006 NOV 30 PM 3: 11 FITZGERALD

THIS INSTRUMENT PREPARED BY:

PERKINS & CARRICO, P.S.C.

David B. Perkins, P.S.C. 2323 Lime Kiln Lane Louisville, KY 40222 (502) 326-5131 p227/hager.disclaimer.test



## ATTACHMENT #6

## CERTIFIED BID TABULATIONS

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## PACKAGE "A" BASE BID - WATER LINES

item			Approx.	Cleary Cons Unit	truction, Inc. Total Item		iley, Inc.	Compa	onstruction ny, Inc.	Gary W. C	lifford Inc.	Hall Cor	ntracting
No.	Description	Unit	Qty	Price	Amount	Unit Price	Total Item	Unit	Total Item	Unit	Total Item	Unit	Total Item
	Mobilization	LS	1	\$10.000.00	\$10,000.00	\$4,742.70	Amount	Price	Amount	Price	Amount	Price	Amount
	Bonds and Insurance	LS	1	\$40,000.00	\$40,000.00		+ 111 IMII U	\$5,000.00	\$5,000.00		\$4,000.00	\$7,900.00	\$7,900.00
	General Conditions	LS	1	\$7,000.00	\$7,000.00						\$25,692.44	\$21,900.00	\$21,900.00
4	10" PVC Water Line (SDR 17)	LF	9280		\$218,544.00	\$22.59	\$12,249.11 \$209,635.20	\$7,500.00	\$7,500.00		\$14,000.00	\$32,200.00	\$32,200.00
5	10" DI Water Line (CL 350)	LF	460	\$38.00		\$35.52			\$214,368.00		\$175,392.00	\$27.00	\$250,560.00
6	8" PVC Water Line (SDR 17)	LF	48000		\$936,000.00	\$16.85				\$38.00		\$35.00	\$16,100.00
7	8" DI Water Line (CL 350)	LF	10	\$54.00	\$540.00	\$10.85		\$17.90	\$859,200.00	\$14.87	\$713,760.00	\$13.20	\$633,600.00
8	8" HDPE Water Line (DR 11)	LF	575	\$42.00	\$24,150.00	\$29.10	\$291.00	\$30.00	\$300.00	\$35.00	\$350.00	\$84.00	\$840.00
9	18" x 0.25" Steel Encasement Pipe (B & J)	LF	120	\$170.00	\$20,400.00	\$179.53	\$44,855.75		\$25,875.00	\$26.00	\$14,950.00	\$21.00	\$12,075.00
10	14" x 0.25" Steel Encasement Pipe (Open Cut)	LF	80	\$61.00	\$4,880.00		\$21,543.60	\$220.00	\$26,400.00	\$242.30	\$29,076.00	\$420.00	\$50,400.00
11	14" x 0.25" Steel Encasement Pipe (B & J)	LF	580	\$130.00	\$75,400.00	\$92.13	\$7,370.40	,	\$6,400.00	\$110.00	\$8,800.00	\$72.00	\$5,760.00
12	10" Gate Valve	EA	5	\$1,560.00	\$7,800.00	\$140.08	\$81,246.40	\$165.00	\$95,700.00		\$133,759.60	\$340.00	
	B" Gate Valve	EA	41	\$1,060.00	\$43,460.00	\$1,657,44	\$8,287.20	\$1,585.00	\$7,925.00	\$2,000.00	\$10,000.00	\$1,600.00	\$8,000.00
14	B" x 8" Tapping Valve and Sleeve	EA	1	\$1,660.00	\$1,660.00	\$1,095.13	\$44,900.33	\$1,055.00	\$43,255.00	\$1,200.00	\$49,200.00	\$1,000.00	\$41,000.00
15	Connection to Existing Water Line	EA	3	\$2,110.00	\$6,330.00	\$2,659.76	\$2,659.76	\$2,375.00	\$2,375.00	\$3,500.00	\$3,500.00	\$3,000.00	\$3,000.00
16	Fire Hydrant Assembly	EA	4	\$3,120.00	\$12,480.00	\$759.84	\$2,279.52	\$1,200.00	\$3,600.00	\$1,500.00	\$4,500.00	\$4,700.00	\$14,100.00
17	lush Hydrant Assembly	EA	14	\$1,800.00	\$25,200.00	\$3,587.87	\$14,351.48	\$3,112.00	\$12,448.00	\$2,400.00	\$9,600.00	\$3,600.00	\$14,400.00
18	Air-Release Valve	EA	1	\$950.00	\$950.00	\$1,246.06	\$17,444.84	\$2,680.00	\$37,520.00	\$1,900.00	\$26,600.00	\$2,900.00	\$40,600.00
19	Concrete Encasement	LF	58	\$40,00	\$2,320.00	\$793.33	\$793.33	\$875.00	\$875.00	\$900.00	\$900.00	\$1,600.00	\$1,600.00
	Free Bore Driveways	EA	13	\$900.00	\$11,700.00	\$27.92	\$1,619.36	\$45.00	\$2,610.00	\$28.00	\$1,624.00	\$52.00	\$3,016.00
21	French Width Bituminous Pavement	LF	80	\$30.00	\$2,400.00	\$617.65	\$8,029.45	\$1,000.00	\$13,000.00	\$1,100.00	\$14,300.00	\$1,100.00	\$14,300,00
22 0	Concrete Pavement Replacement	LF	10	\$50.00	\$500.00	\$37.73	\$3,018.40	\$55.00	\$4,400.00	\$25.00	\$2,000.00	\$37.00	\$2,960.00
23 F	ull Width Bituminous Pavement Overlay	SY	110	\$20.00		\$38.86	\$388.60	\$82.00	\$820.00	\$38.00	\$380.00	\$120.00	\$1,200.00
	ine Marker	EA	16	\$60.00	\$2,200.00	\$17.65	\$1,941.50	\$38.00	\$4,180.00	\$35.00	\$3,850,00	\$30.00	\$3,300.00
25	ank Site Access Road	LS	1	\$19,500,00	\$960.00	\$100.84	\$1,613.44	\$62.50	\$1,000.00	\$100.00	\$1,600.00	\$250.00	\$4,000.00
26 1	raffic Control	LS		\$5,000.00	\$19,500.00	\$15,931.57	\$15,931.57	\$9,275.00	\$9,275.00	\$35,000.00	\$35,000.00	\$27,000.00	\$27.000.00
	Demobilization	LS	1	\$5,000.00	\$5,000.00	\$23,531.23	\$23,531.23	\$10,000.00	\$10,000.00	\$6,000.00	\$6,000.00	\$12,000,00	\$12,000.00
the state of the s	AMOUNT PACKAGE "A" - BASE BID				\$5,000.00	\$2,371.35	\$2,371.35	\$1,000.00	\$1,000.00	\$4,000.00	\$4,000.00	\$6,000.00	\$6,000.00
Porte Allocater A State Bid			\$1	1,501,854.00	4	\$1,390,011.81	\$1	,423,287.00	\$1	,310,314.04		,425,011.00	

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## PACKAGE "A" BASE BID - WATER LINES

						Southern P	ackhoe, Inc.	Statta Cana					
				Scott & Ritter, Inc. (*)		(**)		Stotts Construction Co., Inc.		Twin States Utilities & Excavation, Inc.			
ltem			Approx.	Unit	Total Item	Unit	Total Item	Unit		<u>}</u>	No. of Concession, Name of Concession, Name of Street, or other	WHF	, Inc.
No.	Description	Unit	Qtv	Price	Amount	Price	Amount		Total Item	Unit	Total Item	Unit	Total Item
. 1	Mobilization	LS	1	\$12,000.00	\$12,000.00	\$8.800.00	\$8,800.00	Price	Amount	Price	Amount	Price	Amount
2	Bonds and Insurance	LS	1	\$20,000.00	\$20,000.00	\$50,000.00	\$50,000.00	\$3,000.00	\$3,000.00		\$5,000.00	\$4,000.00	\$4,000.00
3	General Conditions	LS	1	\$86,250.00	\$86,250.00	\$20,000.00	\$20,000.00	\$5,000.00	\$5,000.00		\$30,000.00	\$26,000.00	\$26,000.00
4	10" PVC Water Line (SDR 17)	LF	9280		\$207,408.00	\$19.50	\$180,960.00	\$3,000.00	\$3,000.00		+-,,,,	\$15,000.00	\$15,000.00
5	10" DI Water Line (CL 350)	LF	460	\$49,40		\$32.00	\$14,720.00	\$18.50	\$171,680.00		\$185,600.00	\$22.90	\$212,512.00
6	8" PVC Water Line (SDR 17)	LF	48000		\$835,200.00	\$17.00	\$14,720.00	\$30.00				\$34.50	
7	8" DI Water Line (CL 350)	LF	10	\$28.95	\$289.50	\$27.00	\$270.00	\$14.30	\$686,400.00		\$768,000.00	\$17.50	\$840,000.00
8	8" HDPE Water Line (DR 11)	LF	575	\$25.80	\$14,835.00	\$40.00	\$23,000.00	\$25.00	\$250.00	\$42.00		\$30.20	\$302.00
9	18" x 0.25" Steel Encasement Pipe (B & J)	LF	120	\$198.20	\$23,784.00	\$169.00	\$20,280.00	\$55.00	\$31,625.00	\$28.00	\$16,100.00	\$28.00	\$16,100.00
10	14" x 0.25" Steel Encasement Pipe (Open Cut)	LF	80	\$143.65	\$11,492.00	\$140.00	\$11,200.00	\$150.00 \$60.00	\$18,000.00	\$162.00		\$165.00	\$19,800.00
11	14" x 0.25" Steel Encasement Pipe (B & J)	LF	580		\$140,128.00	\$145.00	\$84,100.00	the second se	\$4,800.00	\$65.00	\$5,200.00	\$155.00	\$12,400.00
12	10" Gate Valve	EA	5	\$1,275.00	\$6,375.00	\$1,900.00	\$9,500.00	\$120.00 \$1,550.00	\$69,600.00	the second se	\$87,000.00	\$155.00	\$89,900.00
	8" Gate Valve	EA	41	\$835.00	\$34,235.00	\$1,350.00	\$55,350.00	\$1,550.00	\$7,750.00	\$1,412.00	\$7,060.00	\$1,900.00	\$9,500.00
	8" x 8" Tapping Valve and Sleeve	EA	1	\$25.45	.\$25.45	\$2,500.00	\$2,500.00	\$1,600.00	\$45,100.00	\$928.00	\$38,048.00	\$1,300.00	\$53,300.00
15	Connection to Existing Water Line	EA	3	\$975.00	\$2,925.00	\$1,800.00	\$5,400.00	\$300.00	\$1,600.00	\$2,060.00	\$2,060.00	\$2,700.00	\$2,700.00
16	Fire Hydrant Assembly	EA	4	\$3,050.00	\$12,200.00	\$3,500.00	\$14,000.00	\$2,500.00	\$900.00	\$1,900.00	\$5,700.00	\$2,400.00	\$7,200.00
	Flush Hydrant Assembly	EA	14	\$1,410.00	\$19,740,00	\$1,800.00	\$25,200.00	\$1,280.00	\$10,000.00	\$3,000.00	\$12,000.00	\$2,800.00	\$11,200.00
	Air Release Valve	EA	1	\$1,530.00	\$1,530.00	\$750.00	\$750.00	\$700.00	\$17,920.00 \$700.00	\$1,800.00	\$25,200.00	\$1,400.00	\$19,600.00
	Concrete Encasement	LF	58	\$161.70	\$9,378,60	\$20.00	\$1,160.00	\$30.00	\$1,740.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
	Free Bore Driveways	EA	13	\$39.85	\$518.05	\$1,000.00	\$13,000.00	\$800.00	\$10,400.00	\$40.00	\$2,320.00	\$60.00	\$3,480.00
	Trench Width Bituminous Pavement	LF	80	\$30.15	\$2,412.00	\$20.00	\$1,600.00	\$40.00	\$3,200.00	\$1,200.00	\$15,600.00	\$1,140.00	\$14,820.00
22	Concrete Pavement Replacement	LF	10	\$115.35	\$1,153,50	\$50.00	\$500.00	\$30.00		\$30.00	\$2,400.00	\$30.00	\$2,400.00
23	Full Width Bituminous Pavement Overlay	SY	110	\$36.70	\$4,037.00	\$80.00	\$8,800.00	\$70.00	\$300.00	\$50.00	\$500.00	\$30.00	\$300.00
_24	Line Marker	EA	16	\$78.65	\$1,258,40	\$45.00	\$720.00	\$40.00	\$7,700.00	\$90.00	\$9,900.00	\$27.00	\$2,970.00
25	Tank Site Access Road	LS	1	\$21,030.00	\$21,030.00	\$30,000.00	\$30,000,00	\$20,000.00	\$640.00 \$20,000.00	\$45.00	\$720.00	\$40.00	\$640.00
	Traffic Control	LS	1	\$2,305.00	\$2,305.00	\$20,000.00	\$20,000.00	\$1,000.00	\$1,000.00	\$27,000.00	\$27,000.00	\$22,000.00	\$22,000.00
(Account of the	Demobilization	LS	1	\$10,000.00	\$10,000.00	\$5,000.00	\$5,000.00	\$3,000.00	\$3,000.00	\$2,500.00	\$2,500.00	\$3,500.00	\$3,500.00
TOTA	TAL AMOUNT OF PACKAGE "A" BASE BID			\$	,503,233.50		1.422.810.00			\$5,000.00	\$5,000.00	\$4,000.00	\$4,000.00
		l	Ψ.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	۵ 	1,422,010.00	\$1	,139,105.00	\$1	1,291,448.00	\$1	,410,494.00	

(\*) Math error corrected for item #14

(\*\*) Math error corrected for item #5

PKG "A" ALTERNATIVE NO. 1 - KY 144/MIDWAY ROAD (DWG NOS. 21-24)

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ltem				Cleary Cons	struction, Inc.	D. F. Ba	iley, Inc.	Garrison C	onstruction any, Inc.				an a
No.	Deserinting		Approx.	Unit	Total Item	Unit	Total Item		1	Gary W. C	lifford Inc.	Hall Cor	ntracting
	Description Mobilization	Unit	Qty	Price	Amount	Price		Unit	Total Item	Unit	Total Item	Unit	Total Item
		LS	1	\$1,000.00			Amount	Price	Amount	Price	Amount	Price	
	Bonds and Insurance	LS	1	\$4,000.00	+11000100		\$592.84	\$2,000.00	\$2,000.00	\$0.00			Amount
13	General Conditions	LS	1	\$1,000.00		1 1 1 1 0 0	\$5,847.65	\$5,000.00		\$3,675.57	\$0.00	\$1,675.00	
4	8" PVC Water Line (SDR 17)	IF	30		+11000.00	\$2,448.16	\$2,448.16	\$7,500.00			\$3,675.57	\$5,600.00	\$0,000.00
5	6" PVC Water Line (SDR 17)	IF		\$19.00		\$16.85	\$505.50	\$17.90		\$4,000.00	\$4,000.00	\$7,100.00	\$7,100.00
6	6" DI Water Line (CL 350)	EA	13200	\$9.00	\$118,800.00	\$12.06	\$159,192.00			\$14.87	\$446.10	\$62.00	\$1,860.00
7	12" x 0.25" Steel Encasement Pipe (B & J)		640	\$24.00	\$15,360.00	\$23.52	\$15,052.80		\$184,800.00	\$9.86	\$130,152.00	\$11.30	
8	6" Gate Valve	EA	50	\$112.00	\$5,600.00	\$122.45			+	\$24.00	\$15,360.00	\$29.50	4110,100.001
9	B" x 6" Tapping Valve and Sleeve	EA	10	\$710.00	\$7,100.00	\$651.19	\$6,122.50	\$160.00	\$8,000.00	\$218.00	\$10,900.00	\$490.00	
10	Eluctional Hudron ( A	EA	11	\$2,110.00	\$2,110.00		\$6,511.90	\$725.00	\$7,250.00	\$800.00	\$8,000.00		\$24,500.00
11 1	Flushing Hydrant Assembly	EA	4	\$1,800.00		\$2,087.40	\$2,087.40	\$1,935.00	\$1,935.00	\$3,200.00	\$3,200.00	\$1,100.00	+
10	Air Release Valve	EA	1	\$950.00	\$7,200.00	\$1,246.06	\$4,984.24	\$2,680.00	\$10,720.00	\$1,900.00		\$3,400.00	\$3,400.00
12 1	Concrete Encasement	EA	30	the second se	+++++++++++++++++++++++++++++++++++++++	\$793.33	\$793.33	\$875.00	\$875.00		\$7,600.00	\$2,500.00	\$10,000.00
13	ree Bore Driveways	EA		\$40.00	\$1,200.00	\$27.92	\$837.60	\$45.00	\$1,350.00	\$900.00	\$900.00	\$2,300.00	\$2,300.00
	ine Marker	LS		\$900.00	\$900.00	\$617.65	\$617.65	\$1,000.00		\$24.00	\$720.00	\$52.00	\$1,560.00
15 [[	Demobilization		4	\$60.00	\$240.00	\$100.84	\$403.36	\$62.50	\$1,000.00	\$1,100.00	\$1,100.00	\$1,300.00	\$1,300.00
	AMOUNT OF ALTERNATIVE NO. 1	LS	1	\$1,000.00	\$1,000.00	\$237.14	\$237,14		\$250.00	\$100.00	\$400.00	\$230.00	\$920.00
	AMOUNT OF ALTERNATIVE NO. 1				\$167,030.00	and the second se	Circulation and a second s	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$2,100.00	\$2,100.00
					\$101,000.00		\$206,234.07		\$248,857.00		\$187,453.67	the second se	
					2						¢.07, 400.07		\$241,355.00

PKG "A" ALTERNATIVE NO. 1 - KY 144/MIDWAY ROAD (DWG NOS. 21-24)

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Item		Approx.	Scott & F Unit	Ritter, Inc. Total Item		ackhoe, Inc.	Stotts Cons In	truction Co., ic.	Twin State Excavat	s Utilities & ion, Inc.	WHE	, Inc.
No. Description	Unit	Qty	Price	Amount	Unit Price	Total Item Amount	' Unit	Total Item	Unit	Total Item	Unit	Total Item
2 Bonds and Insurance	LS	1	\$3,500.00	\$3,500.00		\$5,000.00	Price	Amount	Price	Amount	Price	Amount
3 General Conditions	LS	1	\$4,800.00		\$30,000.00	\$30,000.00	\$1,000.00	\$1,000.00	\$5,000.00	\$5,000.00	\$3,000,00	\$3,000.00
4 8" PVC Water Line (SDR 17)	LS	1	\$22,000.00	\$22,000.00	\$5,000.00	\$5,000.00			\$8,000.00	\$8,000.00	\$6,000.00	\$6,000.00
5 6" PVC Water Line (SDR 17)	LF	30	\$25.00	\$750.00	\$15.00	\$450.00		\$2,000.00	\$2,500.00	\$2,500.00	\$3,000.00	\$3,000.00
6 [6" DI Water Line (CL 350)	LF	13200	\$21.00	\$277,200.00		\$184,800.00	411100	\$429.00	\$16.00	\$480.00	\$17.50	\$525.00
7 12" x 0.25" Steel Encasement Pipe (B & J)	EA	640	\$42.00	\$26,880.00	\$24.00			\$139,920.00	\$10.00		\$12.00	\$158,400.00
8 6" Gate Valve	EA EA	50	\$200.00	\$10,000.00	\$140.00	\$7,000.00	\$100.00	\$14,400.00 \$5,000.00	\$21.00	\$13,440.00	\$23.00	\$14,720.00
9 8" x 6" Tapping Valve and Sleeve	EA	10	\$700.00	\$7,000.00	\$700.00	\$7,000.00	\$780.00		\$100.00	\$5,000.00	\$130.00	\$6,500.00
10 Flushing Hydrant Assembly			\$2,150.00	\$2,150.00	\$2,500.00	\$2,500.00	\$1,400.00		\$600.00	\$6,000.00	\$800.00	\$8,000.00
11 Air Release Valve	EA	4	\$1,410.00		\$1,800.00	\$7,200.00	\$1,280.00	\$5,120.00	\$1,600.00	\$1,600.00	\$2,700.00	\$2.700.00
12 Concrete Encasement	EA	30	\$1,530.00	\$1,530.00	\$750.00	\$750.00	\$700.00	\$700.00	\$1,800.00 \$1,000.00	\$7,200.00	\$1,400.00	\$5,600.00
13 Free Bore Driveways	EA		\$161.70	\$4,851.00	\$20.00	\$600.00	\$30.00	\$900.00	\$40.00	\$1,000.00	\$1,000.00	\$1,000.00
14 Line Marker	LS		\$3,985.00	\$3,985.00	\$1,000.00	\$1,000.00	\$800.00	\$800.00	\$1,200.00	\$1,200.00	\$60.00	\$1,800.00
15 Demobilization	LS		\$75.00 \$3,000.00	\$300.00	\$45.00	\$180.00	\$40.00	\$160.00	\$45.00	\$1,200.00 \$180.00	\$1,140.00	\$1,140.00
OTAL AMOUNT OF ALTERNATIVE NO. 1		' ' -		\$3,000.00	\$2,500.00	\$2,500.00	\$1,000.00	\$1,000.00	\$5,000.00	\$5,000.00	\$40.00	\$160.00
				\$373,586.00		\$269,340.00		\$182,629.00		the second s	\$3,000.00	\$3,000.00
										\$189,800.00		\$215,545.00

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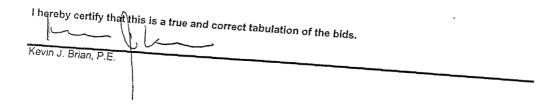
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## BID PACKAGE "B" - STORAGE TANK

ltem				Caldwell Tanks, Inc.		Phoenix Fal Erecto	pricators and rs, Inc.
No.	Description	Unit	Approx.	Unit	Total Item	Unit	Total Item
1	Mobilization		Qty	Price	Amount	Price	Amount
2	Bonds and Insurance	LS	1	\$40,000.00			\$15,000.0
3	General Conditions	LS	1	\$5,000.00	+0,000,00		
4	Tank Foundation	LS		\$3,000.00	++1000.00		\$10,000.0
5	Tank Erection	LS		\$120,000.00			\$116,000.00
6	Tank Painting	LS					\$928,605.00
7	Altitude Valve Vault	LS		\$136,200.00			\$116,000.00
8	Electrical Telemetry	LS		\$30,000.00	\$30,000.00	\$25,000.00	\$25,000.00
9	Tank Site Work	LS		\$52,500.00	\$52,500.00	\$91,000.00	\$91,000.00
	Demobilization	1.5		\$4,000.00 \$20,000.00	\$4,000.00	\$47,500.00	\$47,500.00
ΟΤΑ	L AMOUNT OF BID PACKAGE "B" -	STORAGET	ANK	and the second	\$20,000.00	\$4,000.00	\$4,000.00
		STORAGE T.	AINE	\$	1,181,300.00	\$	1,358,105.00

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Bid Package "A" Water Lines	Clean C		Meade County Phase VII - Water Line Meade County BID OPENING: July 1 BID SUMMARY	s and Storage Tank		
Base Bid	Cleary Construction, Inc	D. F. Bailey, Inc.	Garrison Construction			
Alternative No. 1	\$1,501,854.00		Company, Inc.	Gary W. Clifford, Inc.	Hell o	
Total Bid Pkg. "A"	\$167,030.00	\$206,234.07	\$1,423,287.00	\$1,310,314.04	Hall Contracting	Scott & Ritter, Inc.
Bid Package "A"	\$1,668,884.00		\$248,857.00		\$1,425,011.00	\$1,503,233.50
Water Lines	Southern Backhoe, Inc.	\$1,596,245.88 Stotts Construction Co.,	\$1,672,144.00	\$187,453.67	\$241,355.00	
Base Bid		Inc.	VIGLES UTILITIES 2	\$1,497,767.71	\$1,666,366.00	\$373,586.00
Alternative No. 1	\$1,422,810.00	\$1,139,105.00	Excavation, Inc.	WHF, Inc.		\$1,876,819.50
Total Bid Pkg. "A"	\$269,340.00	\$182,629.00	\$1,291,448.00	\$1,410,494.00		
	\$1,692,150.00	\$1,321,734.00	\$189,800.00	\$215,545.00		
Bid Package "B"	1		\$1,481,248.00	\$1,626,039.00		
Storage Tank	Caldwell Tanks, Inc.	Phoenix Fabricators and		11000		
Total	\$1,181,300.00	Erectors, Inc. \$1,358,105.00				



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## ATTACHMENT #7

# SUMMARY OF PROJECT COSTS

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## SUMMARY OF PROJECT COSTS PHASE VII –WATER LINES AND STORAGE TANK

Category	Amount
Administrative Expenses	\$5,000
Legal Expenses	5,000
Land, Easements	5,000
Engineering Fees	142,935
Engineering Fees – Inspection and Other	86,814
Engineering Fees – Other	10,000
Construction	2,503,034
Contingency	125,000
Total	\$2,882,783



## ATTACHMENT #8

## MCWD RESOLUTION FOR ACCEPTANCE OF BIDS

## Meade County Water District

1003 Armory Place Brandenburg, KY 40108

Telephone: (270) 422-5006

mcwatjb@bbtel.com

Fax: (270) 422-5068

Minutes for the special called meeting of the Meade County Water District Water Board August 13, 2008

Meeting was brought to order by Mr. Cornett at 11:00 am.

### **PRESENT:**

Meade Co. Water District Personnel: Doug Cornett (Chairman), Jon Whitfield (Treasurer), Keith Boothe (Commissioner), Joe Bartley (General Manager), Tim Osborne (Field Supervisor)

Guests: Larry See, Meade Co. Messenger; Kevin Brian and Bob Sturdivant of Quest Engineers, Inc.

**PUBLIC SESSION:** No Public Session

SECRETARY'S REPORT:

None Presented

FINANCIAL REPORT:

None Presented

### **BUSINESS:**

Mr. Bartley presented contract proposal with City of Brandenburg for the purchase of water. Motion was made by Mr. Boothe to accept contract as presented. The motion was seconded by Mr. Whitfield. Motion passed unanimously.

Kevin Brian, Quest Engineers reported that Stotts Construction, of Columbia, KY was low bidder on the Phase VII "A" water lines and "A" water lines Alternative No. 1 project at a bid of \$1,321,734. Mr. Brian also reported that Caldwell Tank was low bidder on "B" Storage Tank at a bid of \$1,181,300. Mr. Brian reported that all bid submittals were in good order and that both Stotts and Caldwell are excellent companies.

Bob Sturdivant, Quest Engineers reported on the financing of the project. With bids, administrative and related cost the total project costs:

"A" Water Lines Base Bid & "B" Storage Tank	\$2,691,155
"A" Water Lines Base Bid with Alternative #1 & "B" Storage Tank	\$2,882,784

Mr. Sturdivant reported that funding commitments through HB 380-2007, HB 380-424N-2007 and HB 608-2008 was \$1,979,000. A shortfall of \$712,155 on "A" Water Lines Base Bids & "B" Storage Tank and a shortfall of \$903,784 with "A" Water Lines Base Bids with Alternative #1 & "B" Storage Tank.

Mr. Sturdivant reported that the KIA has informed grant holders (MCWD) that the State may not sell the bonds required to award the 2008 grants until January of 2009 at the earliest or July 2009 at the latest. This means that the MCWD will have to obtain interim financing for the grant amount of \$1,449,000 for a period of one year. The most expedient and affordable option to accomplish this is to use the KIA Fund "F" as the interim financing tool. MCWD has been approved for the KIA Fund "F" loan for \$1,900,000. When the grant funds become available, that portion of the loan can be paid off with no penalty. The MCWD would pay interest only on the principal payments on the long term note because the note does not become payable until one year after construction is complete. The challenge is that the MCWD would not use the entire \$1,449,000 loan, before the bonds are sold and the HB-608 money becomes available. Bottom line is the MCWD would borrow the shortfall amount of either \$712,155 or \$903,784, depending on what construction plan it uses at an interest rate of 3.2. The other interim plan looked at was with Kentucky Rural Water Finance. Their interest rate was 4.5%.

Motion by Mr. Whitfield that "A" Water Lined Base Bid with Alternative #1 be awarded to Stott's Construction, pending PSC approval, in the amount of \$1,321,734 and that Package "B" Storage Tank be awarded to Caldwell, pending PSC approval, in the amount of \$1,181,300. The motion was seconded by Mr. Boothe. Motion passed unanimously.

With no further items on the agenda, Mr. Boothe made the motion to adjourn the meeting, Mr. Whitfield seconded. Motion passed unanimously. Meeting ended at approximately 12:30pm.

The next regular scheduled meeting is August 19, 2008 at 7:00pm.