

416 W. THIRD ST. • P.O. BOX 535 • OWENSBORO, KENTUCKY 42302

270-683-7558 • FAX 270-683-9277

TRANSMITTAL LETTER

	Beth O'Donnell, Executive Director	Date: August 28, 2007	
	Public Service Commission 211 Sower Blvd. Frankfort, KY 40601	RE: West Daviess County Water District PSC Case No. 2007-00339 RECEIVED	
We are	sending you: 🛛 Attached/Enclosed 🗋 Hand Delivered	□ Federal Express □ Faxed AUG 2 9 2007	
The fol	lowing items: Specification Plans Specification Survey Plat Description Drainage Information Statement	ns ☐ Technical Drawing COMMISSION	
Item N	o. Number of Copies	Description	
1	Original + 10 copies	Supplemental Information per Deficiencies Letters dated August 13, 2007 & August 20, 2007	
Transm	 ittal Information Forwarded: For your review/comment For your information For your use For your approval Per your request For signature For your file 	 For your action Approved as submitted Approved as noted Returned for revisions Additional information requested Discuss with me 	

un James R. Riney, PE, PS

Copy: James Rice, PSC Bill Higdon, WDCWD

WEST DAVIESS COUNTY WATER DISTRICT

PSC CASE NO. 2007-00339

Response to Filing Deficiencies Letter dated August 13, 2007 And Letter of Revision dated August 20, 2007

1. 807 KAR 5:001: Section 11(1)(a) A full description of applicant's property.

Applicant proposed to construct a 500,000 gallon elevated steel multi-legged water storage tank. The proposed tank will replace the existing (inadequate capacity) 150,000 elevated water storage tank located at the community of West Louisville, Daviess County, Kentucky. Additional real estate property has been acquired by the District and cleared to accommodate said future tank construction. A modest connector line, approximately 150 linear feet in length, will be routed from the existing tank altitude valve/valve vault to the proposed 500,000 gallon elevated tank located. See Exhibit "A" at pages 10, 11 and 12 of the original application package (dated July 27, 2007) and Construction Plan Sheet No. 1 of 2 from the physical location of the proposed tank within the District system and the community.

The proposed tank will be constructed adjacent to the existing 150,000-gallon tank. The existing tank will be removed at a later date.

The proposed tank is a planned system update. There are no competing public utilities, corporations or persons within the District boundaries offering a potable water network.

2. 807 KAR 5:001: Section 11(1)(a)

Statement of original cost to applicant's property and the cost to the applicant, if different.

See attached statement dated August 28, 2007.

description of how it's secured.

See attached Deviation Request (90-day audit) dated August 10, 2007.

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^{3.} 807 KAR 5:001: Section 11(1)(6)

If Bonds or Notes or Other Indebtedness is proposed: Description of the amounts

<sup>Full description of all items
Interest Rates
Whether the debt is to be</sup> secured and if so a

4. 807 KAR 5:001: Section 9(2)(c)

See Item No. 1 above.

5. 807 KAR 5:001: Section 9(2)(e) The manner in detail, in which it is proposed to finance the new construction or extension.

The District proposes to fund the project by a combination of KIA/CDF Grant funds (\$205,000) and a low interest KIA short-term loan (See attached KIA letter of intent). The short term KIA low interest loan indebtedness will be serviced by a special rate surcharge defined in the original application submittal, as authorized under KRS 74.395. See pages 2 and 3 of the original application submittal for details of Proposed Financing method calculations listing and summary of comparative funding.

6. 807 KAR 5:001: Section 9(2)(f) An estimated cost of operation after the proposed facilities are completed.

See the attached Interest and Depreciation Listing

7. KRS 322.340 Engineer's signature, seal and date as are applicable.

The Engineer in responsible charge will confirm that all applicable documents are properly certified in accord with KRS 322.340.

WEST DAVIESS COUNTY WATER DISTRICT

SYSTEM IMPROVEMENTS



AUG 2 9 2007 PUBLIC SETIVICE COMMISSION

PRELIMINARY ENGINEERING REVIEW

1993

PREPARED BY: HALE, RINEY & GILMORE, INC. **416 West Third Street Owensboro, KY** 42301 502/683-7558

B/27/07

WEST DAVIESS COUNTY WATER DISTRICT

Preliminary Engineer's Review

Since first going into operation in August 1969 the West Daviess County Water District has experienced increasing and steady growth, both in terms of numbers of customers served and in terms of total gallons pumped. Growth in terms of the number of customers has averaged 6.2% growth per annum over the past 23 years. Refer to Exhibits 1 thru 3 for graphic illustration of the Districts progressive growth patterns.

The system's customer base is a mixed use of:

- High density urban residential
- Suburban (low density subdivision) residential
- Rural residential
- Farmsteads
- Agricultural/irrigation (seasonal and very unpredictable)
- Very limited commercial use
- Wholesale distribution systems

The highest use category in terms of gallons per month is residential customers; the second highest category is the total monthly flow supplied to wholesale redistribution systems outside the West Daviess service area.

During the District's existence the physical plant growth has expanded primarily through outside efforts and independent funding. Major improvements have occurred primarily through the efforts of those entities requiring the new service. This is a typical growth mechanism used by various types of utilities - those who create the need pay for it. The West Water District has had very limited if any excess funds in past years for major system upgrades. Typical funding has occurred through;

- Subdivision developments
- Grants (C.D.B.G.; local government, etc.)
- Line extensions by private citizens

The District has an outstanding bond debt of \$1,341,585.00 effective December 31, 1992.

Expansion of the district facilities by the above captioned sources has been very beneficial to the District and district customers. System expansion by these methods can; however; be haphazard and piecemeal at times. The following recommendations have been identified as system improvements to be addressed during the next 20 years. Items have been identified by major category and approximate implementation schedule.

1993-2003	Distribution Lines: Line upgrades Loop connectors
1993-2013	Distribution Lines: Line extensions
1998-2003	Storage Tank: Tank replacements
1998-2008	Pump Stations: Pumping facility upgrade Pumping facility additions Trunk line additions

Construction of the above improvements will most 0 effectively be paid for by a short term surcharge to system customers as authorized by KRS 74.395. Initial funding should be in the form of a low interest commercial loan which will ultimately be retired by repayment with the surcharge funds. This is the same procedure implemented successfully for construction of the Utica water storage tank.

1

DISTRIBUTION

Improvement to the distribution lines should consist of the three primary groupings identified earlier (outer loop completions, upgrades, extensions). A comprehensive review of the existing system results in the following minimum needs. Additional items or system extensions may be identified during the more detailed planing/engineering phases to be performed in the future.,

LOOP CONNECTORS

Item	Route	From	<u>To</u>	<u>Size</u>	Length
1	McIntyre Rd.	10580 McIntyre Rd.	Ку. 258	6"	3,325'
2	Ку. 258	McIntyre Road	Curdsville- Delaware Rd.	6"	6,075'
3	Curdsville- Delaware Rd.	Ку. 258	Ку. 500	6"	27,750'
4	Ky. 1554	U.S. 60	Sauer Lane	8"	3,750'*
5	Sauer Lane	Ку. 1554	Murphy Road	8"	15,400'*
6	Fisher Road	Ky. 81	Carter Road	8"	4,800'
7	Carter Road	Fisher Road	Proposed Pump Station near Southtown Blvd.	8"	4,500'
8	U.S. 60	Audubon Elementary School	Benttree Dr. Proposed Pump Station	8"	2,000'
9	Landfill Access Road	Ку. 815	Windy Hollow Road	8"	6,800'
10	Landfill Access Road	Windy Hollow Road	Ку. 554	8"	9,000'
11	Ку. 815	Ку. 56	Landfill Access Road	8"	22,600'
				(6") 8")	106,000' 37,150' 68,850'

*Proposed construction by Daviess County Fiscal Court to Scott Paper Site.

LINE EXTENSIONS

Item	Route	From	<u>To</u>	Size	Length
1	Ky. 258	Curdsville- Delaware Rd.	Delaware	6"	6,600
2	Macedonia Rd.	Cleveland Rd.	Hayden Lane	4"	15,000
3	Hayden Lane	Hobbs Road	Macedonia Rd.	6"	2,075
4	Hayden Lane	Macedonia Rd.	Mulligan Rd.	4"	2,450
5	Hobbs Road	Ку. 815	Hayden Lane	6"	12,125
6	Horrell Rd.	Ку. 56	Proposed Tank Site	8"	6,800
7	Horrell Rd.	Proposed Tank Site	Hayden Bridge Road	8"	5,550
8	Nalley Road	Greenbrier Rd.	10900 Nalley Rd.	4"	4,100
9	Ky. No. 279	Griffith Station Road	1605 Ky. 279	4"	3,500
10	Fogle Road	Sauer Lane	1748 Fogle Rd.	6"	12,100
11	Lyddane Bridge Road	900 Lyddane Bridge Road	West Fifth St. Road	4"	1,000
12	W. Fifth St. Road	Lydanne Bridge Road	W. Fifth St. Road	4"	2,200
13	N. Jackson Rd.	Ку. 1207	10775 N. Jackson Road	6"	11,950
14	Jack Bosley Rd.	Ку. 279	760 Jack Bosley Road	4"	2,900
15	Keller Road	Miles Farm Supply	Todd Bridge Rd.	4"	4,000
16	Wayne Bridge Road	Windy Hollow Road	7127 Wayne Bridge Road	4"	3,125

Item	Route	From	<u>To</u>		Size	Length
17	Windy Hollow Road	Windy Hollow Restaurant	5465 Wi Hollow	•	4"	3,400
18	Stanley-Birk City Road	Fogle Road	Ky. 1554	ļ	6"	10,000
19	Marksberry Rd.	Ky. 1207	U.S. 431		6"	16,1200
20	Fitts Road	Marksberry Rd.	Ky. 554		6"	15,1450
21	Ку. 258	McIntyre Road	Smock R	oad	4"	4,330
22	Smock Road	Ку. 258	Pond Riv	ver Rd.	4"	800
23	Pond River Rd.	Smock Road	Curdsvill Delawa	le- are Road	4"	13,400
24	Ку. 456	Ку. 500	10104 K	y. 456	4"	7,000
25	Murphy-Miller Road	9181 Murphy Miller Road	Greenbac	ek Road	4"	6,475
26	Greenback Rd.	3941 Greenback Road	Vanover	Road	4"	1,600
27	Old Lyddane Bridge Road	5400 Old Lyddane Bridge Road	6100 Old Lyddane Road		4"	8,650
28	Wimsatt Road	444 Wimsatt Rd.	U.S. 60		4"	2,600
			Total Total	Length Length Length Length	(4") (6") (8")	185,380 86,530 86,500 12,350

LINE UPGRADE

Item	Route	From	<u>To</u>	Size	Length
1	Ky. 1554	Ky. 56	W. Fifth St. Road	6"	11,600'
2	Ку. 554	Ashbyburg Rd.	Panther Wate Tank	er 8"	1,675'
			Total Length		13,275'

WATER STORAGE TANKS

The three original water storage tanks and the recently completed Utica tank all have an overflow elevation of elevation 615 feet. A single pressure system has served the district well over the past 23 years. Two major changes occurring within the past 18 to 24 months are now indicating the single pressure method of operation should be reviewed for possible modification(s).

I. <u>STRIPMINES</u>

Hundreds of acres in the vicinity of the Panther and West Louisville communities have recently been converted from abandoned and unoccupied stripmines to privately owned tracts. These tracts are now becoming the sites for new home construction and mobile home setups. During the stripmining years; from the late 1940's to 1991; homesites and farm sites in those areas continued to decline as the mining operations acquired additional acreage. Portions of those areas were in the higher elevation areas of western Daviess County; typically characteristic of coal bearing topography; and remained at relatively high elevations after reclamation. Due to low density population and the negative effects of mining operations on rural growth, the district's water service into the area was minimal to non-existent during past years.

Both the reclaimed and the unreclaimed areas which were recently sold by the mine operator contain areas which remained at elevations too high for satisfactory service by existing tank elevations.; Water service to the areas by the District is in even more demand today since many of the aquifers in the mining areas were apparently permanently damaged.

Additionally, the unmined areas of the Panther community have seen the number of home sites sustained with some additional homes/trailers added over the years. This area experiences minimum acceptable water pressure at high demand periods.

We recommend a new elevated water storage tank; possibly 500,000 gallon capacity; be constructed to replace the existing 200,000 gallon ground level tank at the Panther Tank site. The tank overflow should be increased to an elevation of at least 640 and an independent pressure zone created for serving the higher areas previously described. An approximate pressure zone area is outlined on the attached district map.

Consideration should also be given to replacement of the small elevated tank located at West Louisville (existing 150,000 gallon tank). An alternate tank site off of Horrell Road is approximately 40 feet higher than the existing site which would reflect an appreciable savings in tank construction costs.

II. SCOTT PAPER

Construction of the Scott Paper project was initiated this year as previously predicted. The development of outlots and satellite operations at the plant site itself were not previously anticipated nor specifically discussed. The water district has recently been contacted to provide service to the proposed outlot complex. In order to accommodate this additional water demand we recommend an eight inch trunk line be extended to the site via Sauer Lane.

Additionally, the existing 300,000 gallon ground level tank located at Bon Harbor Hills should be reviewed for possible replacement by a 500,000 gallon elevated storage tank. Previous system experience and hydraulic analysis indicates the 90 foot high tank has limited water turnover. Substantial subgrade settlement has occurred under the tank bottom requiring grout stabilization of the tank floor. The bottom 12" of the tank sidewalls have experienced obvious distortion due to the settlement.

Ultimately, the U.S. 60-Stanley-Newman area may need to become an independent pressure zone supplied by a new pump station off of the O.M.U. distribution system. Implementation of a separate zone depends upon the ultimate industrial development/water demand at the Scott site as well as a detailed analysis of the water system. Division of an existing water distribution system into smaller individual pressure zones is normally a more expensive and less desirable method of operation. This alternative is cautiously listed as a future alternative in the event of a major change in the Stanley/Newman service area resulting in a major demand area which cannot otherwise be addressed by the existing system. In the event such an industrial demand occurs in said area replacement of the Bon Harbor tank should also be investigated.

PUMPING STATIONS

Peak demands on the existing water distribution system are approaching maximum pumping capacities during summer months. Unless the two McLean County wholesale customers (i.e. North McLean County Water District and Beech Grove Water System, Inc.) discontinue receiving water from the West Daviess County system and connect to the recently upgraded and expanded City of Calhoun water distribution system additional pumping capacity will be required for the West Daviess District. Currently the combined water consumption of the two out-of-county wholesale customers averages between 20 and 25 percent of the West District's total annual usage.

The 1991-92 contract negotiations with O.M.U. resulted in specifying two future connection points to the City of Owensboro water supply system by the West District. The points identified in the final contract agreement are:

1.) Carter Road in the vicinity of Southtown Blvd.

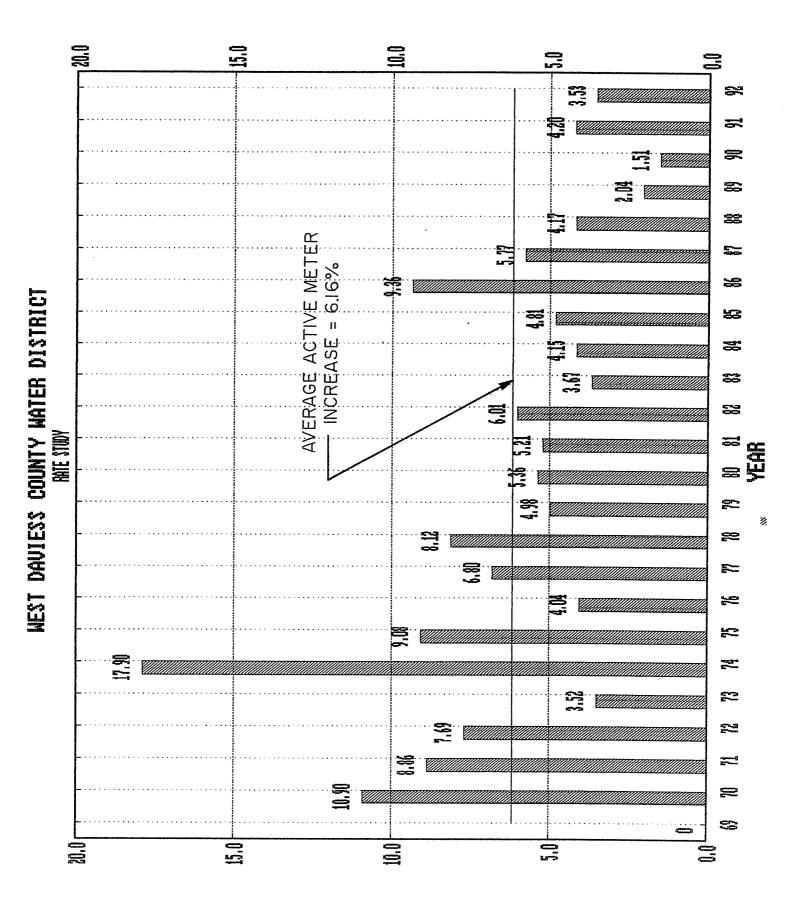
2.) U.S. 60 West in the vicinity of Lakewood Subdivision

The Carter Road supply point should be considered the priority for new pump station construction. This supply point is particularly important in development of an isolated pressure zone previously outlined for improved service to the West Louisville-Panther area.

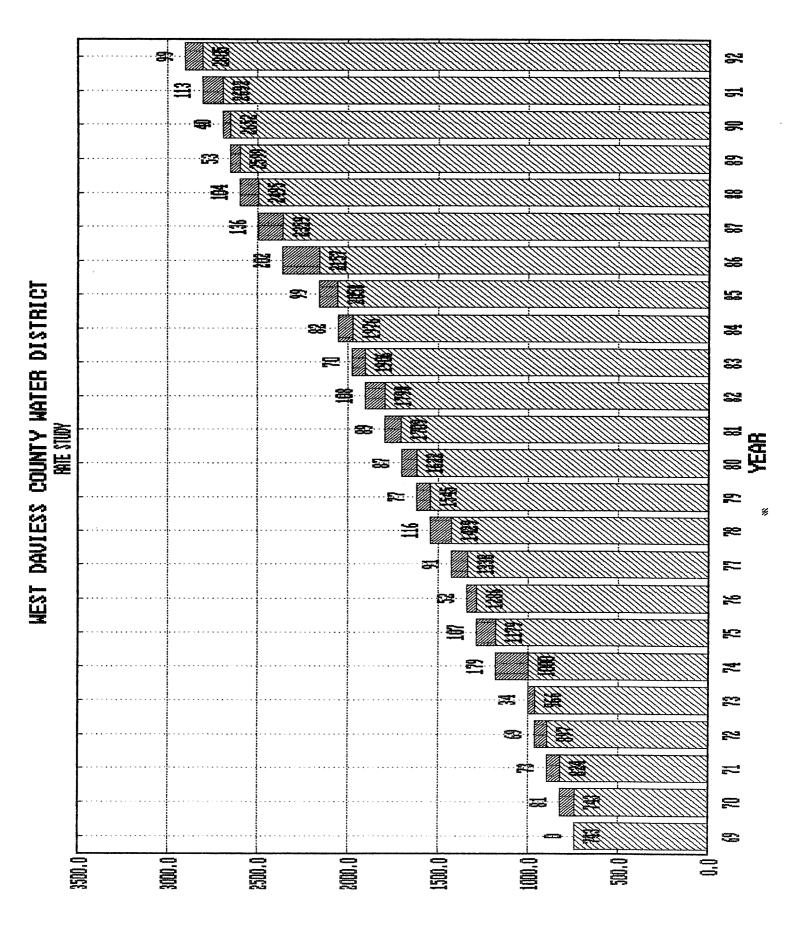
Construction of a new pumping station and trunk line could provide a major benefit to the West District system; particularly if the McLean County wholesale customers continue to secure water supply from the West District. The new connection point should Also benefit the O.M.U. system by distributing the major pumping withdrawal points for the West District more evenly to three existing O.M.U. water storage tanks instead of just two tanks as is currently the case. Under this scenario the primary pumping station located along Parrish Avenue; which was built at the time of the original system; will experience a reduction in operating hours.

The original pump station has been in service since 1969 with no major repair required for either of the two pumps. This is a tremendous testimony for both the quality of the original equipment and the quality of the operating practices which have been implemented over the past 23 years. The pump motors and pump assembly/impellers should be checked and upgraded accordingly. Additional pump installation or pump upgrading would be warranted at this facility if McLean County continued to be supplied by the West District or the Carter Road pumping station was not implemented on a timely basis.



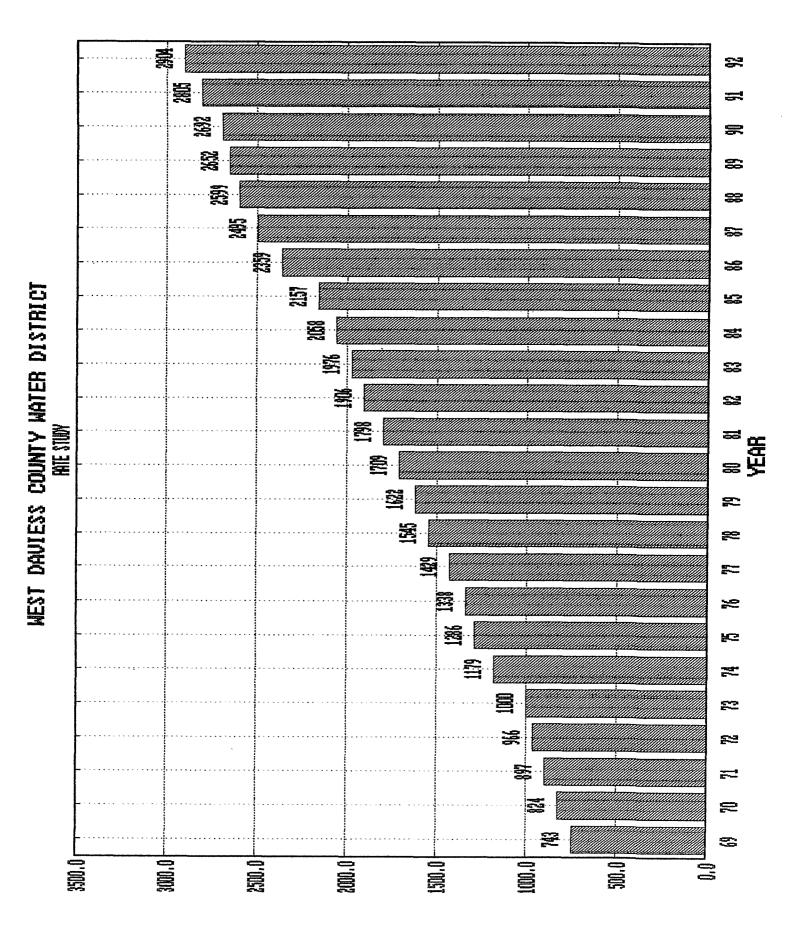


BERCENT INCREASE IN ACTIVE METERS



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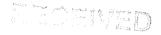
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WEST DAVIESS COUNTY WATER DISTRICT

3400 Bittel Rd Owensboro, KY 42301 Phone : (270) 685-5594 Fax : (270) 683-6324



AUG 29 2007 PUBLIC SERVICE COMMISSION

West Louisville Community 500,000 Gallon Elevated Welded Steel Water Storage Tank

SUPPLEMENTAL DATA

PSC CASE No. 2007-00339 KIA No. WX21059022 SAI No. KY200611141439

1. 807 KAR 5:001 Section 14

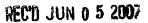
DEVIATION REQUEST:

The West Daviess County Water District has not drafted and/or published formal financial statements since those dated 12/31/06. There has been no material change in the District's financial position since said financial statements were issued.

The above information is true and correct to the best of my knowledge, information and belief.

William G. Higdon, Manager

<u>8 · 10 · 2007</u> Date





KENTUCKY INFRASTRUCTURE AUTHORITY

Ernie Fletcher Governor

July 2, 2007

1024 Capital Center Drive, Suite 340 Frankfort, Kentucky 40601 Phone (502) 573-0260 Fax (502) 573-0157 http://kia.ky.gov Jody E. Hughes Executive Director

AUG 2 9 2007 PUBLIC SELVICE COMMISSION

A. M. Thompson, Chairman West Daviess County Water District 3400 Bittell Road Owensboro, Kentucky 42301

RE: West Daviess County Water District Pending Fund C Project WX210591022 - 500,000 Gallon Elevated Water Tank

Dear Chairman Thompson:

Your drinking water system improvement project is eligible for funding from the Kentucky Infrastructure Authority ("the Authority") through the Governmental Agencies Loan Fund ("Fund C"). As you know there are several tasks that you must perform before your loan request will be considered for a binding commitment. However, due to your need to secure other funds and the availability of Fund C loan funds at this time, the Authority is willing to set aside approximately \$1,000,000 for this project for a period of twelve (12) months from this date or July 2, 2008.

This should give you and other funding agencies comfort that if you complete all loan requirements, the funds will be available for your project. The city must now complete the following:

- Completion of the Design/Bidding Phase: This phase consists of submittal of the plans and specifications to Division of Water (DOW) and the loan application including three years of audits to the Authority. Once these items are approved, you may take bids. You will advise the Authority of your bid opening and they will review the bid tabs and the revised budget. If acceptable, the project is ready for board review.
- 2. Binding Commitment: Authority staff will perform a credit analysis to determine the interest rate and the ability of the applicant to repay the loan. A recommendation will be presented to the board for their consideration. The board will approve or deny the project.



Chairman Thompson Page Two July 2, 2007

We urge you to work with your engineer to complete the tasks above so that your request may reach the board for review at the earliest practical time. Please let us know if you have questions about the process.

Governmental agencies such as municipalities, counties, districts, authorities or other political subdivisions of the Commonwealth with populations of 10,000 or less may apply for a short-term planning loan, design loan or combination planning/design loan with a maximum repayment term of five years. Applications will be accepted for 100% of estimated planing costs and 50% of estimated design costs. The planning/design loan can be rolled over into a long-term construction loan with a repayment term of twenty years and the remaining eligible engineering costs associated with design may be financed through the construction loan. Please advise if you are interested in this interim financing program.

Please be advised that this is **not** a binding commitment. It is a guarantee that funding will be available for your project if you can complete the required action within 12 months.

If we can be of any assistance please call me or Sandy Williams.

Sincerely,

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Executive Director

c: Mr. William Higdon, General Manager, West Daviess County Water District Mr. Jim Riney, P.E., HRG, PLLC

WEST DAVIESS COUNTY WATER DISTRICT 3400 Bittel Road Owensboro, KY 42301 (270) 685-5594 FAX (270) 683-6324

August 28, 2007

To : Public Service Commission

RE : Response to Filing Deficiencies Case No. 2007-00339 AUG 2 9 2007 Port loc 2 9 2007 Gold Doc 2 9 200

RECENT

This letter is in response to the filing deficiencies noted in the Public Service Commission's letter dated August 13, 2007. We submit the following :

- All property owned by the District is recorded by the original cost to construct / purchase the property. For a detailed description of the District's property, see listing in the District's Annual Report submitted to the Public Service Commission for fiscal year ended December 31, 2006.
- The District will finance the construction of the tank by a combination of a \$ 205,000.00 grant from the Kentucky Infrastructure Authority and a low interest loan (Fund C) from the Kentucky Infrastructure Authority for a term of five (5) years at an annual interest rate of 3% in the amount of \$ 1,000,000.00.
- The District does not anticipate any cost of operation (such as painting or any other maintenance item) with regard to the proposed facility once the tank is constructed for a substantial length of time. However, the District will incur the 3% annual interest rate on the loan balance until paid off. Additionally, depreciation expense will be recorded after the tank is constructed using the straight line method for a term of 40 years.

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

Sincerely,

Keeth Kranpe

Keith Krampe Office Manager



KENTUCKY INFRASTRUCTURE AUTHORITY

Ernie Fletcher Governor 1024 Capital Center Drive, Suite 340 Frankfort, Kentucky 40601 Phone (502) 573-0260 Fax (502) 573-0157 http://kia.ky.gov Jody E. Hughes Executive Director

July 2, 2007

A. M. Thompson, Chairman West Daviess County Water District 3400 Bittell Road Owensboro, Kentucky 42301

RE: West Daviess County Water District Pending Fund C Project WX210591022 - 500,000 Gallon Elevated Water Tank

Dear Chairman Thompson:

Your drinking water system improvement project is eligible for funding from the Kentucky Infrastructure Authority ("the Authority") through the Governmental Agencies Loan Fund ("Fund C"). As you know there are several tasks that you must perform before your loan request will be considered for a binding commitment. However, due to your need to secure other funds and the availability of Fund C loan funds at this time, the Authority is willing to set aside approximately \$1,000,000 for this project for a period of twelve (12) months from this date or July 2, 2008.

This should give you and other funding agencies comfort that if you complete all loan requirements, the funds will be available for your project. The city must now complete the following:

- 1. Completion of the Design/Bidding Phase: This phase consists of submittal of the plans and specifications to Division of Water (DOW) and the loan application including three years of audits to the Authority. Once these items are approved, you may take bids. You will advise the Authority of your bid opening and they will review the bid tabs and the revised budget. If acceptable, the project is ready for board review.
- 2. Binding Commitment: Authority staff will perform a credit analysis to determine the interest rate and the ability of the applicant to repay the loan. A recommendation will be presented to the board for their consideration. The board will approve or deny the project.



Chairman Thompson Page Two July 2, 2007

We urge you to work with your engineer to complete the tasks above so that your request may reach the board for review at the earliest practical time. Please let us know if you have questions about the process.

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Please be advised that this is **not** a binding commitment. It is a guarantee that funding will be available for your project if you can complete the required action within 12 months.

If we can be of any assistance please call me or Sandy Williams.

Sincerely,

5/1-1c Jody E. Hughes

Executive Director

c: Mr. William Higdon, General Manager, West Daviess County Water District Mr. Jim Riney, P.E., HRG, PLLC