Rubin & Hays

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

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

PARALEGAL MARY M. EMBRY June 16, 2005

Ms. Elizabeth O'Donnell Executive Director Case 2005-00230 Public Service Commission P.O. Box 615 Frankfort, Kentucky 40602 Jell 1 7 2006

PUBLIC SERVICE COMMISSION

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

Dear Ms. O'Donnell:

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

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

If you need any additional information or documentation, please let us know.

Sincerely,

Rubin & Hays

W. Randall Jones

WRJ:jlm Enclosures

cc: Mr. Bob McGlothlin, BSWD Mr. Mike Maggard, SME

COMMONWEALTH OF KENTUCKY

JUH 1 7 2005

PUBLIC SERVICE

BEFORE THE PUBLIC SERVICE COMMISSION

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In the matter of:

APPLICATION OF THE BIG SANDY WATER DISTRICT FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT AND FINANCE AN IMPROVE-MENTS PROJECT PURSUANT TO KRS 278.020 AND 278.300

Case No. 2005-00230

APPLICATION

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

1. The District's office address is 18200 State Route 3, Catlettsburg, Kentucky 41129.

Its principal officers are listed in its 2004 Annual Report, which is on file with the Commission;

2. The District is a non-profit water district organized under KRS Chapter 74 and has no separate articles of incorporation or by-laws;

3. A description of the District's water system and its property stated at original cost by accounts is contained in its 2004 Annual Report, which is incorporated by reference pursuant to 807 KAR 5:001 Section (5)(5). All required normal financial schedules and other data are in the Annual Report;

4. The water improvements project (the "Project") consists of the construction and installation of 3, 4 and 6-inch waterlines to serve approximately 100 new customers in Lawrence County. A more detailed description of the Project is shown in the bid tabulations;

5. The Project is in the public interest and is providing potable water to needy families in Lawrence County;

6. The total project cost is approximately \$1,593,937.03, as forth in the Final Project Budget attached hereto as **Exhibit "A"**;

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

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

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

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

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

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

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

a. Facts relied upon to show that the Project is in the public interest: The installation of the new waterlines will provide potable water to approximately 100 new customers in Lawrence County. The completion of the Project will have no adverse affect or impact on the existing customers of the District, nor will the Project adversely affect the District's ability to provide adequate water pressure and water supply to its existing and projected future customers located within the District's geographic boundaries.

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

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

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

e. The construction costs will be funded from the proceeds of (i) a Coal Severance Grant in the amount of \$150,000; (ii) a Coal Severance Grant in the amount of \$500,000; (iii) a Kentucky 2020 grant in the amount of \$211,937.03; and (iv) a loan in the amount of \$732,000 from the Kentucky Rural Water Finance Corporation through it's Flexible Term Program (see schedules of Morgan Keegan attached as **Exhibit "D"**);

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

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

a. A general description of the property is contained in the 2004 Annual Report;

b. Financial information relating to the KRWFC Loan is contained in the Schedules referred to in paragraph 12(e) above;

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

d. No property is being acquired in connection with this Project;

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

f. The KRWFC Loan will be repaid out of the revenues of the District's system.

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

a. The District hereby requests and moves for a deviation, pursuant to 807 KAR 5:001, Section 14, from the requirements of 807 KAR 5:001, Section 6, which requires that the financial data filed with the Application be for a twelve (12) month period ending within ninety (90) days of the filing of the application. The District states that there has been no change that is material in nature in the financial condition or operation of the District since December 31, 2004. The financial data filed herewith as **Exhibit "F"** is for the twelve (12) month period ending December 31, 2004. This is the most recent published financial data available. Because the Project has been bid and the District is under a bid-hold period by the Contractors, the District cannot run the risk of delaying the commencement of the Project and losing the favorable bids while more current financial data is compiled;

b. There are no trust deeds or mortgages applicable;

c. Maps and detailed plans are on file with the Commission. Detailed estimate of property acquired by USOA number is account #331 (waterlines and appurtenances)-\$1,271,329.

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

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WHEREFORE, the Applicant, Big Sandy Water District requests that the Public Service Commission of Kentucky grant to the Applicant the following:

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

B. An order approving the financing arrangements, including the loan from the Kentucky Rural Water Finance Corporation in the amount of \$732,000.

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

Big Sandy Water District

By Paule

Rubin & Hays

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

COMMONWEALTH OF KENTUCKY) SS) COUNTY OF BOYD

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

IN TESTIMONY WHEREOF, witness the signature of the undersigned on this June 6, 2005.

Paul Thomas, Chairman

Big Sandy Water District

Subscribed and sworn to before me by Paul Thomas, Chairman of the Big Sandy Water District, on this June 677, 2005.

My Commission expires 3 - 14 - 08

Robert MC Glothlin

Notary Public In and for said County and State

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Big Sandy Water District Phase III Water Line Extension Project - Lawrence County Final Budget SME # 02090 5/18/2005

Description	Project Cost	
Construction (DF Bailey)	\$1,271,329.86	******
Engineering		
Preliminary	\$1,250.00	
Design	\$91,417.48	
Bidding & Negotiating	\$10,924.16	
Construction Engineering	\$16,386.17	
Closeout	\$5,462.08	
Inspection	\$59,101.44	
Other Engineering	\$18,000.00	
Legal & Administration	\$15,000.00	
Contingency	\$105,065.84	
Total Estimated Project Cost	\$1,593,937.03	
Project Funding		
Coal Severance Grant	\$150,000.00	i
Coal Severance Grant	\$500,000.00	
2020 State Grant	\$211,937.03	
KRWA Loan	\$732,000.00	
	A 1 700 007 00	
Total Project Funding	\$1,593,937.03	

********** BSWD elected to eliminate construction line items due to budget constraints

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12/28/04	REVISED
4:00 P.M.	UNITS

BIG SANDY WATER DISTRICT & PAINTSVILLE UTILITIES COMMISSION CONTRACT A/B - WATERLINES AND PUMP STATION SME #02090/02116 BID TABULATION - BID OPENING: DECEMBER 21, 2004, 1:00 P.M. LOCAL TIME

We her ation: Sisler-Maggard Engineering, PLLC repby certify that the above bid tabulations accurately represents bids received, t for noted conjections, and the ands were promptly opened and read. 9 20/

ENGINEER

DAT

Page 1 of 2

PROJECT ENGINEER DATE

TOTAL AMOUNT BID SECTION A & SECTION B

\$1,768,825.00

\$1,846,078.32

\$1,926,961.00

\$1,958,925.00

Certification: Sister-Maggard Engineering, PLLC We hereby certify that the above bid tabulations accurately represents bids received, except for noted corrections, and the bids were promptly opened and read. 48 Pump Station
 49 PrV Valt (Manhine)
 50 Fire Hydraut Assembly w/Gate Valve
 AMOUNT BID (ITEMS No. 35-59) SECTION B

 SECTION B - PAINTSVILLE UTILITIES COMMISSION

 35
 8" W.L. CL. 250 PVC

 36
 6" W.L. CL. 250 PVC

 37
 6" W.L. CL. 200 PVC

 38
 8" Gate Valves

 39
 6" Gate Valves

 40
 Air Release Valves

 41
 Bore & Jack w/6" W.L. (12" steel casing)

 42
 Pavement Replacement (HD)(County Roads)

 43
 Pavement Replacement (HD)(Driveways, parking areas)

 44
 Gravel Surface Replacement

 45
 Concrete Encasement

 46
 Tie new 6" to existing 6"

 47
 Fiberglass Markers

 48
 Tou construct Encasement

2.000 LF 15.330 LF 15.330 LF 15.330 LF 15.330 LF 100 SY 200 SY

\$2,000.00 \$1

11.23 7.36 690.06 690.06 4483.24 4483.24 4483.24 4483.24 4483.24 499.45 107.09 107.09 107.09 107.09 17.12 17.12 107.71 10.07.71 1

D.F. BAILEY 3.2,2460.00 3.12,208.00 112,208.50 4.2349.16 4.2349.16 4.2560.00 1,3256.00 1,3256.00 5,4289.55 1,276.60 9,327.58 32,756.60 10,892.20 10,892.20

10.00 9.50 650.00 4900.00 300.00 300.00 300.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 110.00 20.00 20.00 20.00 110.00 20.00 20.00 110.00 20.0

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 KENNEY, INC.

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 3)
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 3)
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\$800.00 \$6,000.00 \$900.00 \$7,500.00 \$7,500.00 \$5,000.00 \$5,000.00 \$400.00 \$400.00 \$3400.00 \$5,000.00 \$5,000.00

ENGINEER'S ESTIMATE \$12.00 \$24,000.00 \$34,000.00 \$1

C:\Projects\02090\02090-02116\Bid File\[CONTRACT A-B Bid Tab 12-21-04.xls]Sheet1

REVISED UNITS 12/28/04 4:00 P.M. · `,

Page 2 of 2

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02090 (a)



ERNIE FLETCHER GOVERNOR ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

LAJUANA S. WILCHER SECRETARY

DEPARTMENT FOR ENVIRONMENTAL PROTECTION DIVISION OF WATER 14 REILLY ROAD FRANKFORT, KENTUCKY 40601-1190 www.kentucky.gov November 15, 2004

Big Sandy Water District Mr. Bob McGlothlin, Superintendent 18200 State Route 3 Cattletsburg, Kentucky 41129

RE:

E: AgencyID# 33801 APE20040001 DW # 0100944-04-001 Phase III, Contract B Lawrence County, KY

Dear Mr. McGlothlin:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 45,400 ft of 6-inch, 66,799 ft of 4-inch, 158,763 ft of 3-inch and 3,830 ft of 2-inch PVC 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.

If you have any questions concerning this project, please contact Scott Thomson at (502) 564-2225, extension 549.

Sincerely,

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

DSM:JST

Enclosures

C: Lawrence County Health Department Public Service Commission Division of Plumbing

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Subject Item Inventory

Activity ID No.: APE20040001

Subject Item Inventory:

A	Designation	Description
AI0033801		
PORT1	waterline	Install 45,400 ft of 6-inch, 66,799 ft of 4-inch, 158,763 ft of 3-inch and 3,830 ft of 2-inch PVC waterline throughout Lawrence County.

Subject Item Groups:

A	Description	Components
GACTI	GACT1 Install 274,792 feet of PVC waterline throughout	PORT1 Install 45,400 ft of 6-inch, 66,799 ft of 4-inch, 158,763 ft of 3-inch and 3,830 ft of 2-inch PVC waterline
	Lawrence County.	throughout Lawrence County.

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

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GACT1 (Phase Monitoring No. Pa No. Pa N-1 Co Submittal/A Submittal/A Submittal/A Submittal/A Solution No. Co S-1 Co Fe fo fo	GACT1 (Phase III, Contract B) Install 274,792 feet of PV GACT1 (Phase III, Contract B) Install 274,792 feet of PV Monitoring Requirements: Condition No. Parameter No. Parameter No. Condition M-1 Coliform Submittal/Action Requirements: Condition S-1 Coliform S-1 Coliform S-2 Col	Distribution-Major Construction Big Stardy Water District Big Stardy Water District Eaclity Requirements Activity ID No: AFEJ004001 Page 1068 Big Equiferentis: Activity ID No: AFEJ004001 Big Requirements: Activity ID No: AFEJ004001 Big Requirements: Page 1068 Parameter Condition Parameter Condition Parameter Condition Parameter Condition Parameter Condition Parameter Condition Action Requirements: Statistical basis: Instantaneous determined for the new of solution for the new of release and/base and big times, and a dead and and and and and and and and and a
Monitori	ing Requirements:	
No. M-1 Submitts Colifo No. S-1	Parameter Coliform al/Action Requirements: rm: Condition Coliform For new construction projects, th following disinfection and flushi	Condition 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. e distribution system, using the most expedient method, shall submit Coliform test results to the Cabinet: Due immediately ug. [401 KAR 8:150 Section 4(2)]
Condition No. S-2	Condition For proposed changes to the app be implemented without the prio	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 be implemented without the prior written approval of the Cabinet. [401 KAR 8:100 Section 1(8)]

	Distribution-Major Construction Big Sandy Water District Facility Requirements
	Activity ID No.: APE20040001
Submitta	Page 2 of 8 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)]
Narrative	Narrative Requirements:
Additi	Additional Limitations:
Condition No.	Condition
T-I	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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		Activity ID No.: APE20040001
Limitati	Limitation Requirements:	raget 01 o
Condition No.	Parameter	Condition
L-8	Distance	Except when not practical, water lines shall be laid a horizontal Distance >= 10 ft from any existing or proposed sewer. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, water lines may be installed closer to a sewer provided that the water lines shall be laid in a separate trench or on an undisturbed shelf located on one side of the sewer at such an elevation that the bottom of the water line is at least 18 inches above the top of the sewer. [Recommended Standards for Water Works 8.6.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
6- 1	Distance	When water lines and sewers cross, 1) water lines shall be laid such that the bottom of the water line is a vertical Distance >= 18 in above the top of the sewer line, 2) 1 full length of the water pipe shall be located so that both joints of the water pipe will be as far from the sewer as possible, and 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.
L-10	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-11	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-12	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.
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Distribution-Major Construction

Big Sandy Water District Facility Requirements

M-1 leaks The presence or absence of leaks monitored by physical testing as needed shall be determined in all types of installed pipe. Pressure testing and leakage testing shall be in accordance with the latest edition of AWWA Standard C600. [Recommended Standards for Water Works 8.5.5] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.	
Page 5 of 8 Limitation Requirements: Parameter Parameter Condition No. Parameter Condition No. Parameter Condition New or relocated water lines shall be throughly disinfected (in accordance with AWW A Standard CoS1) upon completion of construction and before being placed into service. To disinfect the new or relocated lines use chlorine or chlorine compounds in usuch annotations as to produce an initial disinfectant concentration of at lases 10 ppm and a Residual Disinfection with theorogal Hushing and place the lines sinto service if, and only if. Coliform anothoring applicable to the line disinfectant concentration of at lases 10 ppm and a Residual Disinfection = 25 pm at the configure and place the lines sinto service if, and only if. Coliform in monitoring applicable to the line disinfectant concentration of at lases 10 ppm and a Residual Disinfection = 25 pm at the coliform. If the line has new then the disinfectant concentration of at lases 10 ppm and a Residual Disinfection = 25 pm at the coliform. If the line has new then the lines function in the distinfection and the lines and place the lines into service if, and only if. Coliform to the coliform. If the regularized the lines and the disting the complexitient on the disting the complexitient on the disting the complexitient on the disting the contrate of the disting the contrate of S1 file requirement is applicable during the following months: AII Year. Statistical basis: Minimum. L-14 Velocity Each file or the line dine veck sets 1.6.4.01 KAR 8.1.00 Section 1(7)] This requirement is	Condition Condition Condition Condition Condition New or relocated water lines shall be thoroughly disinfected (in accordance with AWWA Standard C651) upon completic onstruction and before being placed into service. To disinfect the new or relocated lines endower or adhome compo- used amounts as to produce an initial disinfectant concentration of at least 30 ppm and a Residual Disinfection onstructing applicable to the line disinfection with through flushing and place the lines into service if, and only if. Coliform in of Coliform is detected, repeat disinfection contained to contain the described process until monitoring does not show the pressence Coliform [401 KAR 81:J0 Section 41], Recommended Standards for Water Works 8.5.6] This requirement is applicable the following months: All Year. Statistical basis: Minimum. Each fire or flush hydrant shall be sized so that Velocity >= 2.5 free can be ablieved in the water main served by the hydrating the following months: All Year. Statistical basis: Minimum. Each fire or flush hydrant shall be sized so that Velocity >= 2.5 free can be ablieved in the water main served by the hydrating the following months: All Year. Statistical basis: Minimum. Confidme [401 KAR 8:100 Section 1(7)] This requirement is applicable the following months: All Year. Statistical basis: Minimum. Condition Conditio
dition Parameter	dition Parameter leaks
	leaks

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	Distribution-Major Construction Big Sandy Water District Facility Requirements
	Activity ID No.: APE20040001 Page 6 of 8
Narrative	Narrative Requirements:
Asbest	Asbestos (Friable):
Condition No.	Condition
T-1	Asbestos (Friable): If the existing water line to be tapped is asbestos concrete, then the contractor shall conform to OSHA regulations governing the handling of hazardous waste during the process of tapping the asbestos concrete line. Pieces of asbestos concrete resulting from the tap shall be double bagged, placed in a rigid container and disposed of in an approved landfill. [401 KAR 8:100 Section 1(7)]
Additi	Additional Limitations:
Condition No.	Condition
T-2	Additional Limitations: Water line installation shall be in accordance with AWWA standards or manufacturer recommendations. [Recommended Standards for Water Works 8.5.1]
Т-3	Additional Limitations: Pipes, fittings, valves and fire hydrants shall conform to the latest standards issued by the AWWA or NSF (if such standards exist). PVC and PE piping used must be certified to ANSI/NSF Standard 61. [Recommended Standards for Water Works 8.0.1]
Т-4	Additional Limitations: At high points in water lines, where air can accumulate, provisions shall be made to remove the air by means of hydrants or air relief valves. Automatic air relief valves shall not be used in situations where manhole or chamber flooding may occur. [Recommended Standards for Water Works 8.4.1]
Т-5	Additional Limitations: All tees, bends, plugs and hydrants shall be provided with reaction blocking, tie rods or joints designed to prevent movement. [Recommended Standards for Water Works 8.5.4]
T-6	Additional Limitations: For lines that dead end, a fire hydrant shall be required at the end of each 6 inch or larger diameter line and a flush hydrant shall be required at the end of each line that is less than 6 inches in diameter. [Recommended Standards for Water Works 8.1.6]
T-7	Additional Limitations: For each fire or flush hydrant, auxiliary valves shall be installed in the hydrant lead pipe. [Recommended Standards for Water Works 8.3.3]

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Distribution-Major Construction Distribution-Major Construction Big Sandy Water District Big Sandy Water District Facility Requirements Activity Requirements Activity ID No.: AFE20040001 Activity B of 8 Narrative Requirements: Subfluvial Pipe Crossings:	Condition No. Condition	 T-13 Subfluvial Pipe Crossings: For subfluvial Pipe crossings, a floodplain construction permit will not be required pursuant to KRS 151.250 if the following requirements of 401 KAR 4:050 Section 2 are met. 1) No material may be placed in the stream or in the flood plain of the stream to form construction pads, coffer dams, access roads, etc. during construction of pipe crossings. 2) Crossing trenches shall be backfilled as closely as possible to the original contour. 3) All excess material resulting from construction displacement in a crossing trench shall be disposed of outside the flood plain. 4) For erodible channels, there shall be at least 30 inches of backfill on top of all pipe or conduit points in the crossing. 5) For nonerodible channels, pipes or conduits in the crossing shall be encased on all sides by at least 6 inches below the original contour of the channel. [401 KAR 8:100 Section 1(7)] 	 T-14 Subfluvial Pipe Crossings: For subfluvial Pipe crossings greater than 15 feet in width, 1) the pipe shall be of special construction, having flexible, restrained, or welded watertight joints, and 2) valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair. Valves shall a) be easily accessible, b) not be subject to flooding, and c) if closest to the supply source, be in a manhole with permanent taps made on each side of the valve to allow insertion of a small meter to determine leakage and for sampling purposes. [Recommended Standards for Water Works 8.7.2]
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County Type	Laurence wle	County		-	
Name	Phase III, Con	tract B		-	
System Engineer	Big Sandy Wa Joe Sisler Sisler-Maggard 220 E Reynold	d Engineeri			
	Lexington, KY				
Fax	859-271-2978			-	
e-mail				-	
Chk'd by Date on Des	Contraction of the second second second	tt Thomson 9/1/2004		-	
Source	M-mailed, P-Plu	ımbing, F-fil	ed	-	
Certification Remarks Letter Code				- 	
6-in PVC	4-in PVC	3-in PVC	2-in PVC		
45,400	66,799	158,763	3,830		
45,400	66,799	158,763	3,830		
storage tank 4/13/2004-Ta	' Diam.	' feet [.]	OF		
L	Longitudo				
Meldrum Pur		0.115	0.1.1-		
	0 Hp 0 gpm	0 Hp gpm ft TDH 240V 1Ph		size design flows design head power	
	0 gpm			size design flows design head power	
	eceived letter fro		Shared I		visor who

C: Engineer <u>Sisler-Maggard Engineering, PLLC</u> Laurence County H.D. Carter County H.D.

Project No <u>0100944</u> W.O. No. SME #020	<u>.04_001 338(</u>)90	01 APE20040	0001
Fee Amt	na	Code	1-G
Submission Date		24/2004	1-0
Admin NOD Is'ued	. 0//	Rec'vd	
Tech NOD Issued	9/10/2004		11/4/2004
Response Code	11/15/2004	······································	_
A-approved,B-accepted		roved	-
as-built,D-denied,N-no action	1		-
W-withdrawn,X-dead			
Response Date			
Approval			
EPA info.			
		existing hon	nes
Proposed Customers:	63	new custom	ers total
Miles or Ft of Line		274,792	ft
Wells-Cap (gpm)			-
Pump-Cap (gpm)		gpm @ (ft)	TDH
Tanks-Cap (M.G.)		MG	tank)
Plants-Cap (MGD)			-
Projected Demand (MGD)		15,750	gpd
Projected Cost (\$)	\$	79,725	Coal, KIA,loc
Attn:	Bob McGlo	thlin, Superii	ntendent
	606-928-20)75	

9/10/2004-Proposed is the installation of 45,400 ft of 6-inch, 66,799 ft of 4-inch, 158,763 ft of 3-inch and 3,830 ft of 2-inch PVC waterline throughout Lawrence County. 2,234 ft of the 66,799 ft of4-inch PVC will be in Boyd County.

9/10/2004- Sheet 49 lacks valves at tee and line ends abruptly. Master Meter size not detailed on sheet 51. Sheet 67 lacks line size or type. Peak hour appears to only simulate avg day-avg hr of 366 gpm. Pk day-pk hr is estimated between 1,200 & 2,000 gpm. Unable to determine the demands on system during flushing simulations. MM Connections modelled as fixed grades.**NOD'd for deficiencies.**

 $\mathbf{9/24/2004}$ -New plan sheets received. Called & asked status of Hydraulic Info

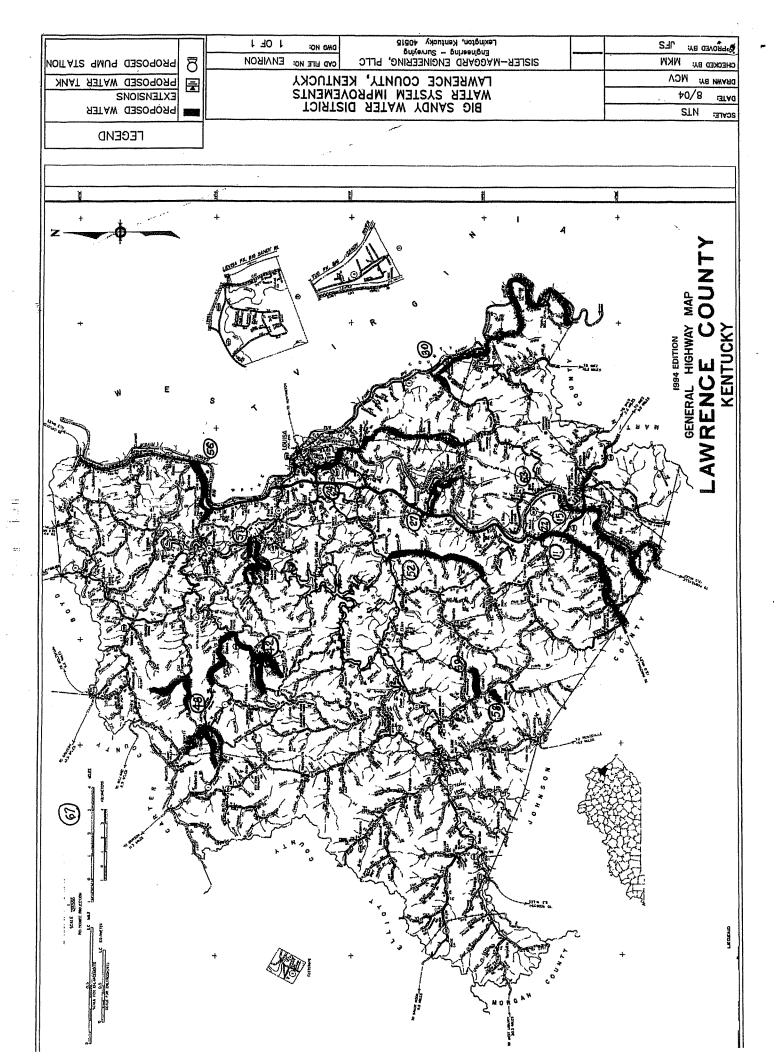
10/5/2004-Deman totals received, but they fall well short of MOR data which suggested a peak hour of 1,300 gpm. 674 gpm Modelled

10/28/2004-Met with Engineer to discuss a consistent method of submittals. Engineer agreed to provide a narrative to explain the discrepencies in the submittal and minimum requirements.

-	gal	-	12-in PVC	12
66,645	gal	45,400	6-in PVC	6
43,581	gal	66,799	4-in PVC	4
58,264	gal	158,763	3-in PVC	3
 625	gal	3,830	2-in PVC	2
169,115	gal	274,792	Total footage of pipe	

10.74 days retention

Hydraulic	Sys	Minimum	demand on
Summary	Demand=	pressure	proposed
Flushing	gpm	36 psi	250 gpm
Peak hour	3000 gpm	69 psi	gpm
Static at high poir	nt gpm	psi	gpm



\$732,000

Big Sandy Water District Kentucky Rural Water Finance Corporation Flexible Term Finance Program

Sources & Uses

Dated 10/01/2004	Delivered 10/19/2004
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SOURCES OF FUNDS Par Amount of Bonds	\$732,000.00
Accrued Interest from 10/01/2004 to 10/19/2004	1,466.88
TOTAL SOURCES	\$733,466.88
USES OF FUNDS	7,969.24
Original Issue Discount (OID)	
Total Underwriter's Discount (0.719%)	5,260.26
Costs of Issuance	15,029.00
Gross Bond Insurance Premium (31.5 bp)	3,711.66
Deposit to Debt Service Fund	1,466.88
Deposit to Project Construction Fund	700,000.00
Rounding Amount	29.84
TOTAL USES	\$733,466.88

TOT	'AL	USES

Series 2004 D | Big Sandy Water District | 10/ 1/2004 | 9:15 AM



Big Sandy Water District

Kentucky Rural Water Finance Corporation

Flexible Term Finance Program

Debt Service Schedule

Part 1 of 2

Date	Principal	Coupon	Interest	Total P+I
02/01/2005	25,000.00	3.120%	9,979.97	34,979.97
08/01/2005		•	14,579.95	14,579.95
	29,000.00	3.120%	14,579.95	43,579.95
02/01/2006	29,000.00		14,127.55	14,127.55
08/01/2006	20,000.00	3.120%	14,127.55	34,127.55
02/01/2007	20,000.00		13,815.55	13,815.55
08/01/2007	20,000.00	3.220%	13,815.55	33,815.55
02/01/2008	20,000.00		13,493.55	13,493.55
08/01/2008	23,000.00	3.370%	13,493.55	36,493.55
02/01/2009	23,000.00	5.57070	13,106.00	13,106.00
08/01/2009	22,000,00	3.370%	13,106.00	36,106.00
02/01/2010	23,000.00	5.57070	12,718.45	12,718.45
08/01/2010	-	3.370%	12,718.45	35,718.45
02/01/2011	23,000.00	3.370%	12,330.90	12,330.90
08/01/2011	-	-	12,330.90	36,330.90
02/01/2012	24,000.00	3.500%	11,910.90	11,910.90
08/01/2012	-	-	11,910.90	36,910.90
02/01/2013	25,000.00	3.620%	11,458.40	11,458.40
08/01/2013	-	-	11,458.40	35,458.40
02/01/2014	24,000.00	4.120%	10,964.00	10,964.00
08/01/2014	-		10,964.00	36,964.00
02/01/2015	26,000.00	4.120%		10,428.40
08/01/2015	-	-	10,428.40	37,428.40
02/01/2016	27,000.00	4.120%	10,428.40	9,872.20
08/01/2016	-	-	9,872.20	36,872.20
02/01/2017	27,000.00	4.120%	9,872.20	9,316.00
08/01/2017	-	-	9,316.00	37,316.00
02/01/2018	28,000.00	4.120%	9,316.00	8,739.20
08/01/2018	-	-	8,739.20	31,739.20
02/01/2019	23,000.00	4.120%	8,739.20	•
08/01/2019	-		8,265.40	8,265.40
02/01/2020	25,000.00	4.120%	8,265.40	33,265.40
08/01/2020	-	-	7,750.40	7,750.40
02/01/2021	25,000.00	4.250%	7,750.40	32,750.40
08/01/2021	-	-	7,219.15	7,219.15
02/01/2022	31,000.00	4.250%	7,219.15	38,219.15
08/01/2022	· · · · · · · · · · · · · · · · ·		6,560.40	6,560.40
02/01/2023	33,000.00	4.620%	6,560.40	39,560.40
08/01/2023		-	5,798.10	5,798.10
02/01/2024	35,000.00	4.620%	5,798.10	40,798.10
02/01/2024		-	4,989.60	4,989.60
the ready apples reader and it was the reader of the time to prove the provided of	38,000.00	4.620%	4,989.60	42,989.60
02/01/2025	-		4,111.80	4,111.80
08/01/2025	40,000.00	4.620%	4,111.80	44,111.80
02/01/2026 08/01/2026	40,000.00		3,187.80	3,187.8

Series 2004 D | Big Sandy Water District | 10/ 1/2004 | 9:15 AM

Morgan Keegan & Co., Inc. Kentucky Public Finance

\$732,000

Big Sandy Water District Kentucky Rural Water Finance Corporation Flexible Term Finance Program

Debt Service Schedule

Part 2 of 2

Date	_ /	Principal	Coupon	Interest	Total P+I
		4.620%	3,187.80	45,187.80	
02/01/2027	42,000.00	4.02076	2,217.60	2,217.60	
08/01/2027	-	4.620%	2,217.60	46,217.60	
02/01/2028	44,000.00	4.02078	1,201.20	1,201.20	
08/01/2028	-	4.620%	1,201.20	53,201.20	
02/01/2029	52,000.00	4.02070	#44C 204 07	\$1,178,304.97	
Total	\$732,000.00		\$446,304.97	\$1,170,501.2	

Yield Statistics

	1,497.00
	\$10,214.00
Bond Year Dollars	
Average Life	
Average Coupon	n parameter e la parameter construction de la c
	4.4990647%
Net Interest Cost (NIC)	4.5193739%
True Interest Cost (TIC)	4.2824437%
Bond Yield for Arbitrage Purposes	4.8572045%
All Inclusive Cost (AIC)	
IRS Form 8038	4.5471260%
	13.753 Years
Weighted Average Maturity	

Series 2004 D | Big Sandy Water District | 10/ 1/2004 | 9:15 AM

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BIG SANDY WATER DISTRICT ESTIMATED ANNUAL REVENUE PHASE III (02090)				
ASSUMPTIONS: 1.) 101 CUSTOMERS 2.) \$27.14 AVG MONTHLY BILL				
CALCULATION: (101 CUSTOMERS)(\$27.14/MONTH-AVG)(12 MONTHS/YR)	Based on 3,900 gallons			
TOTAL REVENUE: \$32,893	\$32,893.68/YR			

BIG SANDY WATER DISTRICT O & M COST ESTIMATE FOR PUMP STATIONS PHASE III (02090)

SID GAP PUMP STATION
ASSUMPTIONS: 1.) POWER = \$0.12 PER KW-HR 2.) 2 TOTAL PUMPS @ 1/2 OPERATION & 10 HP 3.) PUMPS ONLY OPERATE 12 HRS PER DAY 4.) EFFICIENCY OF EACH PUMP IS CONSIDERED TO 80 PERCENT 5.) 1 HP = 0.75 KW-HRS
CALCULATION: (2 PUMPS)(1/2 OPERATION)(10 HP)(0.75 KW-HRS/HP)(12 HRS/DAY)(365 DAYS/YR)(\$0.12/KW-HR) 0.8 EFFICIENCY
ESTIMATED O & M COST \$3,153.60/YR
Total Estimated usage ((101 customers) X 3900 gallons/month)) = 393,900 gal/month Total estimated O & M COST/ 1000 gallons =\$0.42/1000 gallons Therefore total estimated annual O&M cost =\$0.42 X 393.9 gallons = \$165.44 X 12 months 1,985.25/YR TOTAL ESTIMATED O & M COST 5,138.85/YR

BIG SANDY WATER DISTRICT Statement of Net Assets Proprietary Funds December 31, 2004

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ASSETS

Current Assets Cash and cash equivalents- unrestricted Cash and cash equivalents- restricted Investments - restricted Accounts receivable Inventory Prepaid insurance	\$281,342 318,102 740,735 153,227 48,260 <u>16,223</u>
Total Current Assets	<u>1,557,889</u>
Noncurrent Assets Capital assets: Plant, equipment and lines Less accumulated depreciation	13,674,189 <u>3,402,840</u>
Total Noncurrent Assets	10,271,349
Total Assets	\$ <u>11,829,238</u>
LIABILITIES	
Current Liabilities Accrued expenses Bonds payable Payable from restricted assets	\$49,951 58,000 <u>66,339</u>
Total Current Liabilities	174,290
Noncurrent Liabilities Bonds payable	<u>4,258,000</u>
Total Liabilities	4,432,290
NET ASSETS	
Invested in capital assets, net of related debt Restricted net assets Unrestricted net assets	5,955,349 930,081 <u>511.518</u>
Total Net Assets	<u>\$7,396,948</u>

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

BIG SANDY WATER DISTRICT Statement of Revenues, Expenses, and Changes in Fund Net Assets Proprietary Funds For the year ended December 31, 2004

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Operating Revenues User fees	\$1,452,551
Miscellaneous	24,516
Tap fee revenue	<u>95,845</u>
Tap lee levelae	
Total Operating Revenues	<u>1,572,912</u>
Operating Expenses	
Source of supply - operations	414,577
Transmission and distribution - operations	294,693
Transmission and distribution - maintenance	60,988
Customer accounts expense	12,887
Administrative and general	481,212
Taxes other than income	<u>28,097</u>
	1 202 454
Total Operating Expenses	<u>1,292,454</u>
Operating Income (Loss)	<u>280, 458</u>
Nonoperating Revenues (Expenses)	
Conital grants	1,394,738
Capital grants Unrealized gain on investments	36,495
Interest expense	(214,448)
Interest income	7,155
Net Nonoperating Revenues (Expenses)	<u>1,223,940</u>
Net Income (Loss)	<u>1,504,398</u>
Tetel reteasets beginning	<u>5,998,583</u>
Total net assets- beginning	
Depreciation charged to grants	(106,033)
Total net assets- ending	\$ <u>7,396,948</u>

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

BIG SANDY WATER DISTRICT Statement of Cash Flows Proprietary Fund Type For the year ended June 30, 2004

Operating revenues	\$1,556,927 1,081,144)
Net Cash provided (used) by operating activities	475,783
CASH FLOWS FROM INVESTING ACTIVITIES: Interest earned Customer deposits Unrealized gain on investments	7,155 3,835 <u>36,495</u>
Net Cash provided by investing activities	<u>47,485</u>
CASH FLOWS FROM CAPITAL AND FINANCING ACTIVITIES: Bond payments New notes Purchase of assets Interest paid Capital grants	(268,091) 732,000 (1,604,049) (206,464) <u>1,394,738</u>
Net Cash used in capital and financing activities	48,134
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS - A	571,402
CASH AND CASH EQUIVALENTS- BEGINNING OF THE YEAR - A	768,777
CASH AND CASH EQUIVALENTS- END OF THE YEAR - A	\$ <u>1,340,179</u>
RECONCILIATION OF NET INCOME CASH PROVIDED BY OPERATING ACT Net Operating Income Adjustments to Reconcile Net Income to net Cash Provided by Operating	TVITIES: \$280,458
Activities: (Increase) in prepaid Depreciation (Increase) in accounts receivable Increase in accounts payable Decrease in inventory	(712) 200,389 (15,985) 1,299 10,334
Net cash provided by operating activities	\$ <u>475,783</u>

A - includes investments

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

ISIONS	DATE	02090	PHASE III WATER DISTRIBUTION SYSTEM EXTENSIONS
		cad file no. DISTRIBIII drawn by TCB	BIG SANDY WATER DISTRICT
		CHECKED BY MKM APPROVED BY JFS DATE 6/03	SISLER-MAGGARD ENGINEERING, PLLC ENGINEERING • SURVEYING 220 E. REYNOLDS ROAD, SUITE A3 LEXINGTON, KY. 40517 Telephone (859) 271-2978 Fax (859) 271-5670

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