

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF NORTHERN KENTUCKY)
WATER DISTRICT FOR APPROVAL OF) CASE NO. 2016-00147
THE ISSUANCE OF A CERTIFICATE OF)
CONVENIENCE AND NECESSITY AND)
APPROVAL OF FINANCING FOR)
LATONIA LAKES PROJECT)

APPLICATION FOR APPROVAL OF CONSTRUCTION AND FINANCING

Northern Kentucky Water District (NKWD), by counsel, petitions for an order approving the construction of water main replacements and improvements as described below pursuant to KRS 278.020. Approval of the financing pursuant to KRS 278.300 is also requested.

In support of the application, the following information is provided:

1. NKWD's office address is 2835 Crescent Spring Rd., Erlanger, KY 41018-0640. Its principal officers are listed in its current Annual Report on page 6, which is filed with the Commission as are its prior years Reports and is incorporated by reference.

Its contact officer is:

Lindsey Rechlin, Acting Vice President Finance
2835 Crescent Spring Rd.
Erlanger, KY 41018-0640
(859) 578 9898 Phone
(859) 578-3668 fax
lrechlin@nkywater.org

2. NKWD is a non-profit water district organized under Chapter 74 and has no separate articles of incorporation;

3. A description of NKWD's water system and its property stated at original cost by

accounts is contained in its Annual Report, which is incorporated by reference.

4. NKWD serves retail customers in Kenton, Boone and Campbell Counties and sells water at wholesale to non-affiliated water distribution systems in Kenton, Boone, Pendleton and Campbell Counties.

5. NKWD proposes to construct new facilities as described in Exhibit A. A petition for confidentiality for the Plans and Specifications has been submitted with the Application. This will be a joint project with the Kenton County Fiscal Court as described in Exhibit A, "Project Description". The Latonia Lakes Water Main Replacement Project will replace approximately 13,625 feet of 2" through 6" water main with new 6" and 8" water main along the nineteen streets. No additional customers will be added as a result of this project. The District's participation for the water main construction costs will be \$1,373,973.25.

6. The project will be funded by a SRF Loan Fund B (B15003) with an estimated budget of \$1,500,000 and the District's 2016 Operating Capital Budget Line #15-166E "Latonia Lakes WMR" with an estimated budget of \$356,415. The District's total project budget is \$1,856,415, which includes construction cost, engineering, materials, and contingencies. A summary of the project costs is provided below:

o	Engineering	\$ 99,500.00
o	Contractor's Bid	\$ 1,448,129.00
o	Less KCFC's Participation	\$ (74,155.75)
o	Misc. & Contingencies	<u>\$ 382,941.75</u>
o	Total Project Cost	<u>\$ 1,856,415.00</u>

7. The construction is in the public interest and is required to allow NKWD to continue to provide adequate service to its customers. The project, its cost, need and other details are contained in Exhibit A. The District has received all approvals from the DOW for the Plans and Specifications and funding for these improvements. See Exhibit B.

8. Easements and rights of way have been acquired, see Exhibit B.

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

10. The proposed construction project identified in Exhibit A is scheduled to begin construction in upon PSC approval and the expected in service date is in December, 2016. Board approval of the final bids for the project is included in Exhibit C. The bids were opened March 15, 2016 and are subject to acceptance for 90 days. Therefore, **the bids will expire June 13, 2016.**

11. No new franchises are required. A copy of the DOW letter approving the Plans and Specifications for the proposed improvements is attached as Exhibit B.

12. Construction descriptions are in Exhibit A and Bid Documents. Facts relied on to justify the public need are included in the project descriptions in Exhibit A.

13. Maps of the area showing location of the proposed facilities are in Exhibit A.

14. The construction costs will be funded by as described above.

15. Estimated operating costs for operation and maintenance, depreciation and debt service after construction are shown in Exhibit D.

16. A description of the facilities and operation of the system are in Exhibit A.

17. A full description of the route, location of the project, description of construction and related information is in Exhibit A.

18. The start date for construction is June, 2016 or upon PSC approval. The proposed in-service date is December, 2016. The total estimated cost of construction at completion is referenced in Exhibits A, B and D.

19. CWIP at end of test year is listed in the Annual Report incorporated by reference.

20. Plant retirements are listed in Exhibit B and the Annual Report. No salvage values are included as booked.

21. The use of the funds and need for the facilities is justified based on the engineering report included as Exhibit A

22. No rate adjustment is being proposed.

23. The following information is provided in response to 807 KAR 5:001 (8):

a. Articles of Incorporation – None. NKWD is a statutorily created water district under KRS Chapter 74;

24. The following information is supplied pursuant to 807 KAR 5:001(9):

a. Facts relied upon to show that the application is in the public interest: See Exhibit A.

25. The following information is provided as required by 807 KAR 5:001 (11):

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

b. No stock is to be issued; No bonds are to be issued in this case;

c. There is no refunding or refinancing;

d. The proceeds of the financing are to construct the property described in Exhibit A.

e. The par value, expenses, use of proceeds, interest rates and other information is not applicable because no bonds are being issued at this time.

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

a. There are no trust deeds. All notes, indebtedness and mortgages are included in Exhibit F.

b. Property is to be constructed is described in Exhibit A.

27. The following information is provided pursuant to 807 KAR 5:001(6):

a. No stock is authorized.

b. No stock is issued.

c. There are no stock preferences.

d. Mortgages are listed in Exhibit E.

e. Bonds and related information are listed in Exhibit E.

f. Notes and related information are listed in Exhibit E.

g. Other indebtedness and related information is listed in Exhibit E.

h. No dividends have been paid.

i. Current balance sheet, income statement and debt schedule are attached as Exhibit F.

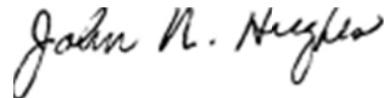
28. USoA plant accounts are included in Exhibit D.

29. Depreciation cost, cost of operation after installation and debt service are in Exhibit D.

30. Copy of notice to State Local Debt Office 807 KAR 5:001(18)(1)(g) is included with Exhibit D

For these reasons, the District requests issuance of an order granting authority to construct and finance the facilities and for any other authorization that may be necessary.

SUBMITTED BY:



John N. Hughes
124 W. Todd St.
Frankfort, KY 40601

Attorney for Northern
Kentucky Water District
jnhughes@johnnhughespsc.com
502 227 7270 Ph.

Section 14(2)	<p>If a corporation, the applicant shall identify in the application the state in which it is incorporated and the date of its incorporation, attest that it is currently in good standing in the state in which it is incorporated, and, if it is not a Kentucky corporation, state whether it is authorized to transact business in Kentucky.</p>	n/a
	<p>If a limited liability company, the applicant shall identify in the application the state in which it is organized and the date on which it was organized, attest that it is in good standing in the state in which it is organized, and, if it is not a Kentucky limited liability company, state whether it is authorized to transact business in Kentucky.</p>	n/a
Section 14(4)	<p>If the applicant is a limited partnership, a certified copy of its limited partnership agreement and all amendments, if any, shall be annexed to the application, or a written statement attesting that its partnership agreement and all amendments have been filed with the commission in a prior proceeding and referencing the case number of the prior proceeding.</p>	n/a
Section 15(2)	<p>(a) The facts relied upon to show that the proposed construction or extension is or will be required by public convenience or necessity.</p>	Applicant
	<p>(b) Copies of franchises or permits, if any, from the proper public authority for the proposed construction or extension, if not previously filed with the commission.</p>	Exhibit B
	<p>(c) A full description of the proposed location, route, or routes of the proposed construction or extension, including a description of the manner in which same will be constructed, and the names of all public utilities, corporations, or persons with whom the proposed construction or extension is likely to compete.</p>	Ex A
	<p>(d)(1) Three (3) copies (one (1) in portable document format on electronic storage medium and two (2) in paper medium) of maps to suitable scale showing the location or route of the proposed construction or extension, as well as the location to scale of like facilities owned by others located anywhere within the map area with adequate identification as to the ownership of the other facilities.</p>	Ex A
	<p>(d)(2) Plans and specifications and drawings of the proposed plant, equipment, and facilities.</p>	Ex A
	<p>(e) The manner in detail in which the applicant proposes to finance the proposed construction or extension.</p>	Ex D
	<p>(f) An estimated annual cost of operation after the proposed facilities are placed into service.</p>	Ex D
KRS 322.340	<p>Engineering plans, specifications, drawings, plats and reports for the proposed construction or extension prepared by a registered engineer, must be signed, sealed, and dated by an engineer registered in Kentucky.</p>	Ex A
Section 14(2)	<p>If applicant is a corporation, the applicant shall identify in the application the state in which it is incorporated and the date of its incorporation, attest that it is currently in good standing in the state in which it is incorporated, and, if it is not a Kentucky corporation, state whether it is</p>	n/a

	authorized to transact business in Kentucky.	
Section 14(3)	If applicant is a limited liability company, the applicant shall identify in the application the state in which it is organized and the date on which it was organized, attest that it is in good standing in the state in which it is organized, and, if it is not a Kentucky limited liability company, state whether it is authorized to transact business in Kentucky.	n/a
Section 14(4)	If applicant is a limited partnership, a certified copy of its limited partnership agreement and all amendments, or a written statement that its partnership agreement and all amendments have been filed with the Commission in a prior proceeding and a reference to the case number of that proceeding.	n/a
KRS 278.300(2)	Application made under oath, and signed on behalf of the utility by its president, or by a vice president, auditor, comptroller or other executive officer having knowledge of the matters set forth and duly designated by the utility.	Application
<u>807 KAR 5:001:</u>		
Section 18(1)	(a) The information required by Section 14 of this administrative regulation	Application
	(b) Description of applicant's property and the field of its operation	
	(b) Statement of original cost of applicant's property and the cost to the applicant, if different.	Application
	(c) If stock issuance:	
	--Description of amount and kinds of stock to be issued.	Application
	--If preferred stock, a description of the preferences.	
	If Bonds or Notes or Other Indebtedness is proposed:	
	--Description of the amount(s).	Application
	--Full description of all terms.	Ex D
	--Interest rates(s).	
	--Whether the debt is to be secured and if so a description of how it is to be secured.	
	(d) Statement of how proceeds are to be used. Show amounts for each type of use (e.g., property, debt refunding, etc.).	Ex A
	(e) If proceeds will be used to acquire, construct, improve, or extend property, provide a detailed description and all contracts.	Ex A
	(f) If proceeds are to refund outstanding obligations, provide:	n/a
	--Statement of the nature and description of obligation	
	--Par value	

	--Amount for which actually sold	
	--Expenses and application of proceeds	
	--Date of obligations	
	--Total amount	
	--Time held	
	--Interest rate	
	--Payee	
	(g) If the applicant is a water district, a copy of the applicant's written notification to the state local debt officer regarding the proposed issuance.	
Section 18(2)	(a) Financial Exhibit (see below)	Ex D
	(b) Copies of all trust deeds or mortgages. If previously filed, state case number.	Ex D
	(c) If Property to be acquired:	
	--Maps and plans of property.	Ex A
	--Detailed estimates by USOA account number.	Ex D
Section 12(1)	(b) For a utility that had less than \$5,000,000 in gross annual revenue in the immediate past calendar year, comply with paragraph (a) of this subsection or cover operations for the twelve (12) month period contained in the utility's most recent annual report on file with the commission, and contain a statement that: 1. Material changes have not occurred since the end of that twelve (12) month period or 2. Identifies all material changes that have occurred since the end of that twelve (12) month period.	
	(a) For a utility that had \$5,000,000 or more in gross annual revenue in the immediate past calendar year, information required by Section 12(2) shall cover operations for a twelve (12) month period, the period ending not more than ninety (90) days prior to the date the application is filed	
Section 12(2)	(a) Amount and types of stock authorized.	n/a
	(b) Amount and types of stock issued and outstanding.	
	(c) Detail of preference terms of preferred stock.	
	(d) Brief description of mortgage:	
	--Date of Execution	
	--Name of Mortgagor	

NORTHERN KENTUCKY
WATER DISTRICT

Case No. 2016-00147

Project

**Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky**

184-0824

Latonia Lakes Water Main Replacement Project
Latonia Lakes, Kenton County, Kentucky
184-0824

Project Description:

The former city of Latonia Lakes, Kenton County, Kentucky was officially dissolved on December 16, 2006 by a general election. The streets, prior to the City closing its' doors, were in need of disparate repair/replacement and some were impassable causing safety concerns. The Kenton County Fiscal Court would not take over the maintenance of the streets until they were brought up to some standards. The Fiscal Court worked with the residences to come up with a plan to help finance a street replacement program for all of the streets located within the old city boundaries of Latonia Lakes, which includes the following streets: Ash Road, Dogwood Road, Elm Road, Fair Valley Road, Forest Road, Hemlock Road, Irving Road, Cedar Road, Grove Road, Jericho Road, Lakeview Road, Maple Road, Oak Road, Twin Lakes Drive, Walnut Road, Birch Road, Club House Drive, Hilltop Drive, & Lakeside Drive.

During the street design process, it was identified that several of the existing water mains would not survive the street and storm sewer construction due to their location. The District has also experienced several water main breaks and leaks on many of the above referenced streets. It was determined to replace all of the existing water mains in conjunction with the street work, due to the extensive street re-building project and the need for coordination between improvements. The water main replacement work was bid jointly with the County's road improvements. Kenton County has plans to start reconstruct of these streets in the summer of 2016.

The Latonia Lakes Water Main Replacement Project will replace approximately 13,625 feet of 2" through 6" water main with new 6" and 8" water main along the nineteen above referenced streets. By coordinating the water main replacement with the County's roadway improvements, the District will see some cost savings on roadway and final restoration.

The Kenton County Fiscal Court received a total of four (4) bids for the combined Street/Water Main Project. The low overall bid, for the street and water main work was \$2,996,000, which was submitted by Eaton Asphalt & Paving Company. The District's portion of the project came in at \$1,448,129.00, which is the highest bid for the water main work. The low bid for the water main portion was \$1,299,817.00, submitted by the second lowest bidder. In these situations, the District has worked with the other entity to split the cost difference (\$148,311.50) equally. The District and the County would kick in an additional \$74,155.75 each, to help cover the difference. This additional cost will be offset by the roadway restoration cost savings. The District's participation for the water main work will be \$1,373,973.25. The Fiscal Court approved this project at its' March 29, 2016 Meeting.

Bids for this project were opened on March 15, 2016 and are subject to acceptance for 90 days. Therefore, the bids will expire on June 13, 2016.

NORTHERN KENTUCKY WATER DISTRICT
Latonia Lakes Water Main Replacement Project
Covington, Kenton County, KY
184-0824

TABLE OF CONTENTS

Project Description

<u>EXHIBIT</u>	<u>TITLE</u>
A	ENGINEERING REPORTS AND INFORMATION (1) Project map (2) Engineer's opinion of probable total construction cost; (3) System Hydraulic Model (4) Plans prepared by Viox & Viox, Inc., titled "Latonia Lakes Street and Water Main Reconstruction, Latonia Lakes area, Kenton County, Kentucky" dated March 2016, sealed by a P.E. (5) Specifications prepared by Viox & Viox, Inc., titled "Latonia Lakes Street and Water Main Reconstruction, Latonia Lakes area, Kenton County, Kentucky" dated March 2016, sealed by a P.E
B	Certified statement from an authorized utility Official confirming: (1) Affidavit (2) Franchises (3) Plan review and permit status (4) Easements and Right-Of-Way status (5) Construction dates and proposed date in service (6) Plant retirements (7) State Debt Officer notification
C	BID INFORMATION Bid tabulation, Engineer's recommendation of award, Board Meeting Minutes.
D	PROJECT FINANCE INFORMATION Customers added and revenue effect, Debt issuance and source of debt, Additional costs and operating and maintenance, USoA plant account, Depreciation cost and debt service after construction, Interlocal Agreement and Exhibit A.
E	Schedule of Mortgages, Bonds, Notes, and other Indebtedness
F	Current Balance Sheet and Income Statement

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

ENGINEERING REPORTS AND INFORMATION

Project Map

Engineer's Opinion of Probable Total Construction Cost

System Hydraulic Model

Plans prepared by Viox & Viox, Inc., titled "Latonia Lakes Street and Water Main Reconstruction, Latonia Lakes area, Kenton County, Kentucky" dated March 2016, sealed by a P.E.

Specifications prepared by Viox & Viox, Inc., titled "Latonia Lakes Street and Water Main Reconstruction, Latonia Lakes area, Kenton County, Kentucky" dated March 2016, sealed by a P.E.

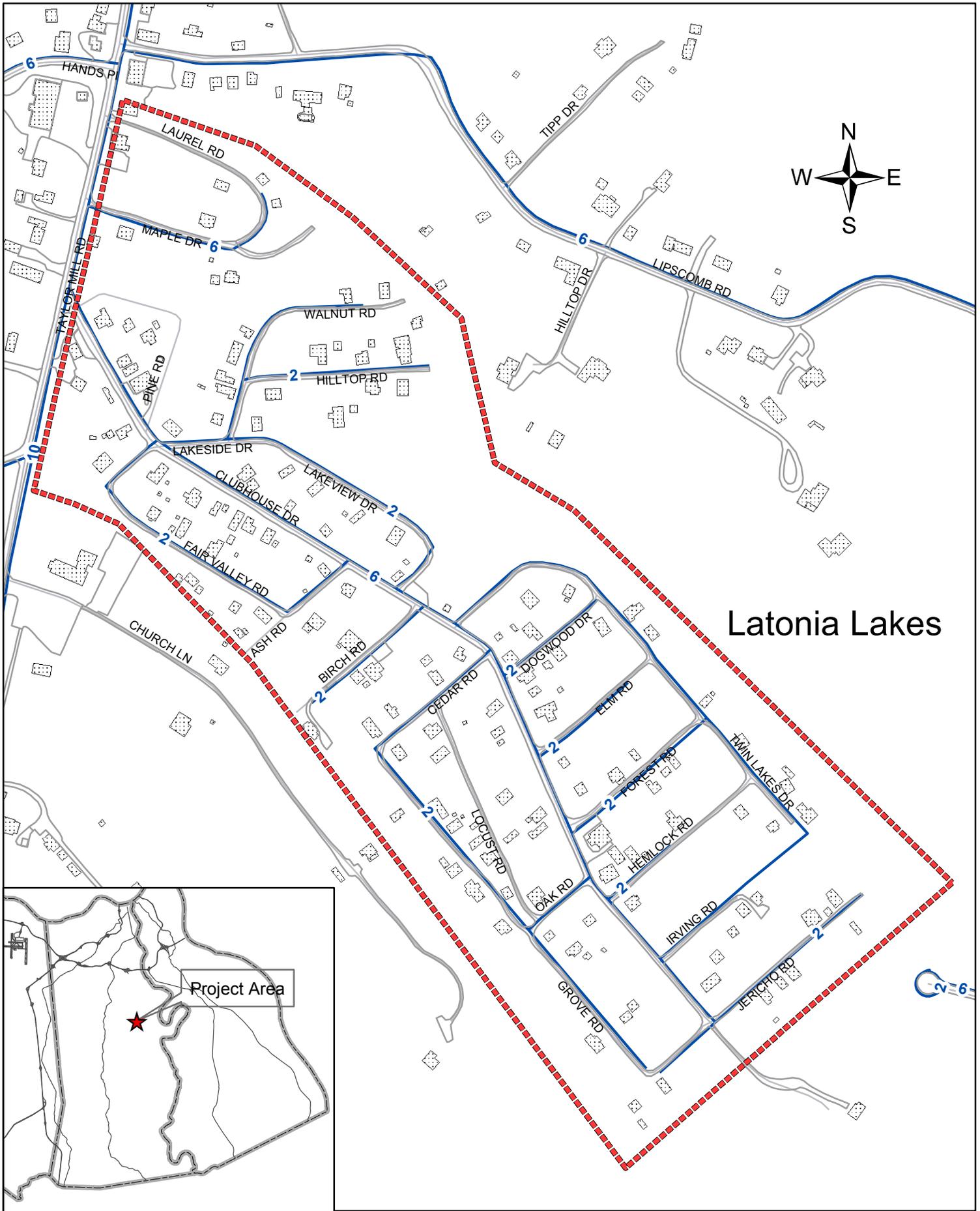
NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

Project Map



Latonia Lakes Water Main Replacement Project

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

Engineer's Opinion
Of Probable
Construction Cost



VIOX & VIOX

Civil Engineers, Surveyors, and Landscape Architects

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 859.727.3293
Fax: 859.727.8452
www.vioxinc.com

PRELIMINARY ENGINEER'S ESTIMATE LATONIA LAKES Latonia Lakes, Kenton County, KY 11/25/15



No.	DESCRIPTION	UNIT	EST. QTY	UNIT COST	TOTAL COST
1	6.03 6" C-900 Poly Vinyl Chloride (PVC) (Detail 103, 103a, 104, 104a, 110)	LF	8444	\$50.00	\$422,200.00
2	6.03 8" C-900 Poly Vinyl Chloride (PVC) (Detail 103, 103a, 104, 104a, 110)	LF	4302	\$60.00	\$258,120.00
3	6.03B 6" C-900 Poly Vinyl Chloride (PVC)- RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	160	\$75.00	\$12,000.00
4	7.01 Connect To Ex. 8" Main	EA	3	\$2,750.00	\$8,250.00
5	7.02 8"-6" Tapping Sleeve & Valve	EA	1	\$2,500.00	\$2,500.00
6	8.01 Install Fire Hydrant	EA	20	\$3,800.00	\$76,000.00
7	8.03 Remove Fire Hydrant	EA	9	\$250.00	\$2,250.00
8	9.01 6" Resilient Seated Gate Valves	EA	34	\$1,200.00	\$40,800.00
9	9.01 8" Resilient Seated Gate Valves	EA	22	\$1,500.00	\$33,000.00
10	10.02 Reconnect Service Line and Install Water Meter Setting (3/4")	EA	132	\$975.00	\$128,700.00
11	10.03 Reconnect Copper Service (3/4")	EA	3	\$975.00	\$2,925.00
12	11.04 6" Plug & Block	EA	6	\$400.00	\$2,400.00
13	11.04 8" Plug & Block	EA	1	\$500.00	\$500.00
14	11.05 Air Relief Valves {Materials Supplied By NKWD}	EA	11	\$1,500.00	\$16,500.00
15	11.06 6"x6"x6" Anchoring Tees & Blocks	EA	12	\$525.00	\$6,300.00
16	11.06 8"x8"x6" Anchoring Tees & Blocks	EA	8	\$700.00	\$5,600.00
17	11.06 6"x6"x6" Tees & Blocks	EA	3	\$500.00	\$1,500.00
18	11.06 8"x8"x6" Tees & Blocks	EA	12	\$700.00	\$8,400.00
19	11.06 8"x8"x8" Tees & Blocks	EA	2	\$725.00	\$1,450.00
20	11.09 8"-6" Reducer	EA	5	\$350.00	\$1,750.00
21	11.10 Flushing Device	EA	6	\$500.00	\$3,000.00
22	12.06 Asphaltic Concrete {Trench} {Detail 103a}	SY	2890	\$50.00	\$144,500.00
23	12.11 Concrete Curb	LF	20	\$80.00	\$1,600.00
24	12.12 Concrete Sidewalk	SY	40	\$80.00	\$3,200.00
25	12.13 Gravel Driveway	SY	6400	\$45.00	\$288,000.00
26	12.14 Best Management Practice {SWPPP}	LS	1	\$5,000.00	\$5,000.00
TOTAL ESTIMATED CONTRACTOR					\$1,476,445.00

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

System Hydraulic Model



FIRE FLOW CERTIFICATION

**Latonia Lakes
Water Main Replacement
Kenton County, KY
October 19, 2015**

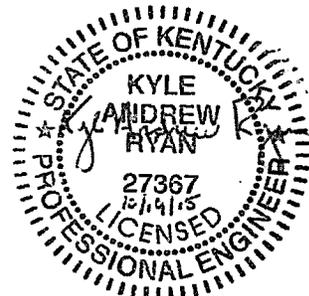
I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate". This certification is based on the information available and is not a guarantee of any precise results.

This certification is based on hydraulic modeling performed using InfoWater, the program available from Innowyze. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of fire hydrants within this development.

Fire flow analyses were made using a hydrant within the subdivision that would provide a representative result that should simulate the results at other hydrants within the system. Minor variations at different hydrants would still provide a flow rate that meets the minimum standard.





HYDRAULIC AND FLUSHING VELOCITY CERTIFICATION

**Latonia Lakes
Water Main Replacement
Kenton County, KY
October 19, 2015**

I certify that the proposed improvements will meet the American Water Works Association Standard C651 standard for flushing velocity in the main meeting 2.5 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100.

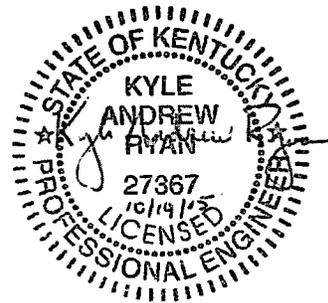
The maximum flow rate that can reliably be supplied to the main and meet 20 psi in the system under maximum hour conditions is 950 gpm. At least 30 psi can be maintained under the peak domestic demand for the 130 customers affected. The peak domestic demand using the D.R. Taylor formula for 130 customers is 114 gpm.

This certification is based on the information available and is not a guarantee of any precise results. Results are based on hydraulic modeling performed using InfoWater, the program available from Innowyze. Supporting documentation and operating conditions are attached and are the basis for this certification.

It should be noted that input data used for modeling is based on available data. Results can change and are dependent on the demand conditions, which can vary at any given time. These values will impact the final results when adjusted. The certification is based on estimated conditions for maximum hour demand conditions and contains many assumptions based on historical data.

With this certification, the Northern Kentucky Water District will permit the construction of the proposed development.

The assumed Hazen-Williams roughness coefficient for all new pipe was 120, which is suitable for ductile iron or PVC. The water level in the Independence Tank was one-half full.



Maximum Hour Run for Potential Customers

Maximum Hour Run, 130 affected Customers = 114 GPM				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1017.6	55.7
J260	3.5	903	1019.3	50.4
J262	3.5	903	1019.3	50.4
10451	3.5	890	1018.2	55.5
10450	3.5	876	1018.2	61.6
10446	3.5	858	1018.2	69.4
10447	3.5	874	1018.2	62.5
10448	3.5	878	1018.2	60.7
10442	3.5	845	1015.7	74.0
J282	3.5	883	1015.7	57.5
10452	3.5	884	1018.2	58.2
10454	3.5	877	1018.2	61.2
10460	3.5	874	1018.2	62.5
10461	3.5	874	1018.2	62.5
10462	3.5	852	1018.2	72.0
10464	3.5	870	1018.2	64.2
10465	3.5	830	1018.2	81.5
10466	3.5	827	1018.1	82.8
10467	3.5	868	1018.2	65.1
10469	3.5	872	1018.2	63.3
10470	3.5	861	1018.2	68.1
10471	3.5	842	1018.2	76.3
10473	3.5	829	1018.2	82.0
J272	3.5	819	1018.2	86.3
J270	3.5	833	1018.2	80.2
J256	3.5	857	1018.2	69.8
J264	3.5	856	1018.2	70.3
J266	3.5	868	1018.2	65.1
J268	3.5	836	1018.2	78.9
J274	3.5	843	1018.2	75.9
J276	3.5	841	1018.2	76.8
J278	3.5	841	1018.2	76.8
J280	3.5	852	1018.1	72.0

Flushing Velocities Under Maximum Hour

*side street mains closed to get 2.5 fps

Clubhouse Drive & Jericho Road (NE Section)

Flushing velocity 2.5 fps for new 8" and 6" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1004	50
J260	3.5	903	1009	46
J262	3.5	903	1009	46
10451	3.5	890	1002	49
10450	3.5	876	1002	55
10446	3.5	858	1002	62
10447	3.5	874	1002	55
10448	3.5	878	1002	54
10442	3.5	845	1003	69
J282	3.5	883	1003	52
10452	3.5	884	999	50
10454	3.5	877	998	52
10460	3.5	874	997	53
10461	3.5	874	996	53
10462	3.5	852	998	63
10464	3.5	870	994	54
10465	3.5	830	1002	74
10466	385.1	827	984	68
10467	3.5	868	993	54
10469	3.5	872	995	53
10470	3.5	861	993	57
10471	3.5	842	992	65
10473	3.5	829	1002	75
J272	3.5	819	1002	79
J270	3.5	833	1002	73
J256	3.5	857	1002	63
J264	3.5	856	997	61
J266	3.5	868	994	54
J268	3.5	836	1002	72
J274	3.5	843	993	65
J276	3.5	841	997	67
J278	3.5	841	997	67
J280	3.5	852	990	60

Pipe Information for flushing velocity at 2.5 fps for new 8" and 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
P437	413	8	478	3.1	120
12033	652	8	440	2.8	120
12035	257	8	437	2.8	120
12038	232	8	430	2.7	120
12045	86	8	416	2.7	120
12048	240	8	413	2.6	120
P439	260	8	409	2.6	120
12050	135	8	406	2.6	120
P453	84	8	402	2.6	120
12055	243	8	399	2.6	120
12057	232	8	392	2.5	120
12056	129	6	389	4.4	120
P469	400	6	385	4.4	120

Lakeview Drive (North of Clubhouse) & Twin Lakes Drive

Flushing velocity 2.5 fps for new 8" pipe (under max hour)

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1005	50
J260	3.5	903	1007	45
J262	3.5	903	1007	45
10451	3.5	890	1005	50
10450	3.5	876	1004	55
10446	3.5	858	1004	63
10447	3.5	874	1004	56
10448	3.5	878	1004	55
10442	3.5	845	1004	69
J282	3.5	883	1004	52
10452	3.5	884	1005	52
10454	3.5	877	1005	55
10460	3.5	874	1005	57
10461	3.5	874	1005	57
10462	3.5	852	1005	66
10464	3.5	870	1005	58
10465	3.5	830	997	72
10466	3.5	827	1005	77
10467	3.5	868	1005	59
10469	3.5	872	1005	58
10470	3.5	861	1005	62
10471	3.5	842	1005	71
10473	3.5	829	998	73
J272	392.0	819	995	76
J270	3.5	833	996	71
J256	3.5	857	1000	62
J264	3.5	856	1005	65
J266	3.5	868	1005	59
J268	3.5	836	999	71
J274	3.5	843	1005	70
J276	3.5	841	1005	71
J278	3.5	841	1005	71
J280	3.5	852	1005	66

Pipe Information for flushing velocity at 2.5 fps for new 8" pipe

Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12031	207	8	423	2.7	120
12034	902	8	409	2.6	120
P457	368	8	406	2.6	120
12047	230	8	402	2.6	120
12053	241	8	399	2.6	120
P459	216	8	395	2.5	120
P461	233	8	392	2.5	120

Lakeside Drive (South of Clubhouse), Fair Valley Rd., & Ash Rd.

Flushing velocity 2.5 fps for new 6" pipe (under max hour)

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1010	52
J260	3.5	903	1007	45
J262	3.5	903	1007	45
10451	3.5	890	1009	51
10450	3.5	876	1009	57
10446	3.5	858	1009	65
10447	3.5	874	1009	58
10448	3.5	878	1009	57
10442	3.5	845	1008	71
J282	3.5	883	1008	54
10452	220.0	884	1003	52
10454	3.5	877	1008	57
10460	3.5	874	1008	58
10461	3.5	874	1008	58
10462	3.5	852	1008	68
10464	3.5	870	1008	60
10465	3.5	830	1008	77
10466	3.5	827	1008	79
10467	3.5	868	1008	61
10469	3.5	872	1008	59
10470	3.5	861	1008	64
10471	3.5	842	1008	72
10473	3.5	829	1008	78
J272	3.5	819	1008	82
J270	3.5	833	1008	76
J256	3.5	857	1008	66
J264	3.5	856	1008	66
J266	3.5	868	1008	61
J268	3.5	836	1008	75
J274	3.5	843	1008	72
J276	3.5	841	1008	72
J278	3.5	841	1008	72
J280	3.5	852	1008	68

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe

Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12037	228	6	227	2.6	120
P449	839	6	220	2.5	120

Birch Road

Flushing velocity 2.5 fps for new 6" pipe (under max hour)

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1010	53
J260	3.5	903	1012	47
J262	3.5	903	1012	47
10451	3.5	890	1011	52
10450	3.5	876	1010	58
10446	3.5	858	1010	66
10447	3.5	874	1010	59
10448	3.5	878	1010	57
10442	3.5	845	1009	71
J282	3.5	883	1009	55
10452	3.5	884	1010	55
10454	3.5	877	1010	58
10460	3.5	874	1010	59
10461	3.5	874	1010	59
10462	220.0	852	1008	68
10464	3.5	870	1010	61
10465	3.5	830	1010	78
10466	3.5	827	1010	79
10467	3.5	868	1010	62
10469	3.5	872	1010	60
10470	3.5	861	1010	65
10471	3.5	842	1010	73
10473	3.5	829	1010	78
J272	3.5	819	1010	83
J270	3.5	833	1010	77
J256	3.5	857	1010	66
J264	3.5	856	1010	67
J266	3.5	868	1010	62
J268	3.5	836	1010	75
J274	3.5	843	1010	72
J276	3.5	841	1010	73
J278	3.5	841	1010	73
J280	3.5	852	1010	69

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12046	350	6	220	2.5	120

Cedar Rd., Grove Rd., & Jericho Rd. (SE Section)

Flushing velocity 2.5 fps for new 6" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1010	53
J260	3.5	903	1012	47
J262	3.5	903	1012	47
10451	3.5	890	1011	52
10450	3.5	876	1010	58
10446	3.5	858	1010	66
10447	3.5	874	1010	59
10448	3.5	878	1010	57
10442	3.5	845	1009	71
J282	3.5	883	1009	55
10452	3.5	884	1010	55
10454	3.5	877	1010	58
10460	3.5	874	1010	59
10461	3.5	874	1010	59
10462	3.5	852	1010	69
10464	3.5	870	1010	61
10465	3.5	830	1010	78
10466	3.5	827	1010	79
10467	3.5	868	1010	62
10469	3.5	872	1010	60
10470	3.5	861	1010	65
10471	3.5	842	1010	73
10473	3.5	829	1010	78
J272	3.5	819	1010	83
J270	3.5	833	1010	77
J256	3.5	857	1010	66
J264	3.5	856	1004	64
J266	3.5	868	1010	62
J268	3.5	836	1010	75
J274	3.5	843	1010	72
J276	3.5	841	1001	69
J278	220.0	841	1000	69
J280	3.5	852	1010	68

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12059	1132	6	227	2.6	120
P451	559	6	223	2.5	120
P467	91	6	220	2.5	120

Dogwood Drive

Flushing velocity 2.5 fps for new 6" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1010	53
J260	3.5	903	1012	47
J262	3.5	903	1012	47
10451	3.5	890	1011	52
10450	3.5	876	1011	58
10446	3.5	858	1011	66
10447	3.5	874	1011	59
10448	3.5	878	1011	57
10442	3.5	845	1009	71
J282	3.5	883	1009	55
10452	3.5	884	1010	55
10454	3.5	877	1010	57
10460	3.5	874	1009	59
10461	3.5	874	1009	58
10462	3.5	852	1010	68
10464	3.5	870	1009	60
10465	3.5	830	1009	78
10466	3.5	827	1009	79
10467	3.5	868	1009	61
10469	3.5	872	1009	59
10470	3.5	861	1009	64
10471	3.5	842	1009	72
10473	3.5	829	1009	78
J272	3.5	819	1009	82
J270	3.5	833	1009	76
J256	3.5	857	1011	67
J264	3.5	856	1009	66
J266	3.5	868	1009	61
J268	220.0	836	1007	74
J274	3.5	843	1009	72
J276	3.5	841	1009	73
J278	3.5	841	1009	73
J280	3.5	852	1009	68

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12044	368	6	220	2.5	120

Elm Road

Flushing velocity 2.5 fps for new 6" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1010	53
J260	3.5	903	1012	47
J262	3.5	903	1012	47
10451	3.5	890	1011	52
10450	3.5	876	1010	58
10446	3.5	858	1010	66
10447	3.5	874	1010	59
10448	3.5	878	1010	57
10442	3.5	845	1009	71
J282	3.5	883	1009	55
10452	3.5	884	1010	55
10454	3.5	877	1010	58
10460	3.5	874	1010	59
10461	3.5	874	1010	59
10462	3.5	852	1010	69
10464	3.5	870	1010	60
10465	3.5	830	1010	78
10466	3.5	827	1010	79
10467	3.5	868	1010	61
10469	3.5	872	1010	60
10470	3.5	861	1010	64
10471	3.5	842	1010	73
10473	220.0	829	1007	77
J272	3.5	819	1010	83
J270	3.5	833	1010	76
J256	3.5	857	1010	66
J264	3.5	856	1010	67
J266	3.5	868	1010	61
J268	3.5	836	1010	75
J274	3.5	843	1010	72
J276	3.5	841	1010	73
J278	3.5	841	1010	73
J280	3.5	852	1010	68

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12060	441	6	220	2.5	120

Forest Road

Flushing velocity 2.5 fps for new 6" pipe (under max hour)

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1010	53
J260	3.5	903	1012	47
J262	3.5	903	1012	47
10451	3.5	890	1011	52
10450	3.5	876	1010	58
10446	3.5	858	1010	66
10447	3.5	874	1010	59
10448	3.5	878	1010	57
10442	3.5	845	1009	71
J282	3.5	883	1009	55
10452	3.5	884	1010	55
10454	3.5	877	1010	58
10460	3.5	874	1010	59
10461	3.5	874	1010	59
10462	3.5	852	1010	69
10464	3.5	870	1009	60
10465	220.0	830	1007	77
10466	3.5	827	1009	79
10467	3.5	868	1009	61
10469	3.5	872	1010	60
10470	3.5	861	1009	64
10471	3.5	842	1009	73
10473	3.5	829	1010	78
J272	3.5	819	1009	83
J270	3.5	833	1009	76
J256	3.5	857	1010	66
J264	3.5	856	1010	67
J266	3.5	868	1009	61
J268	3.5	836	1010	75
J274	3.5	843	1009	72
J276	3.5	841	1009	73
J278	3.5	841	1009	73
J280	3.5	852	1009	68

Pipe information for flushing velocity at 2.5 fps for new 6" pipe

Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12024	515	6	220	2.5	120

Hemlock Road

Flushing velocity 2.5 fps for new 8" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1005	50
J260	3.5	903	1007	45
J262	3.5	903	1007	45
10451	3.5	890	1005	50
10450	3.5	876	1005	56
10446	3.5	858	1005	64
10447	3.5	874	1005	57
10448	3.5	878	1005	55
10442	3.5	845	1004	69
J282	3.5	883	1004	52
10452	3.5	884	1005	52
10454	3.5	877	1004	55
10460	3.5	874	1004	56
10461	3.5	874	1004	56
10462	3.5	852	1004	66
10464	3.5	870	1003	58
10465	3.5	830	1003	75
10466	3.5	827	1002	76
10467	3.5	868	1002	58
10469	3.5	872	1003	57
10470	3.5	861	1002	61
10471	3.5	842	1002	69
10473	3.5	829	1004	76
J272	3.5	819	1000	79
J270	388.5	833	1000	72
J256	3.5	857	1004	64
J264	3.5	856	1003	64
J266	3.5	868	1003	58
J268	3.5	836	1004	73
J274	3.5	843	1002	69
J276	3.5	841	1002	70
J278	3.5	841	1002	70
J280	3.5	852	1002	65

Pipe Information for flushing velocity at 2.5 fps for new 8" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12049	559	8	392	2.5	120

Irving Road

Flushing velocity 2.5 fps for new 6" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1010	53
J260	3.5	903	1012	47
J262	3.5	903	1012	47
10451	3.5	890	1011	52
10450	3.5	876	1010	58
10446	3.5	858	1010	66
10447	3.5	874	1010	59
10448	3.5	878	1010	57
10442	3.5	845	1009	71
J282	3.5	883	1009	55
10452	3.5	884	1010	55
10454	3.5	877	1010	58
10460	3.5	874	1010	59
10461	3.5	874	1010	59
10462	3.5	852	1010	69
10464	3.5	870	1010	61
10465	3.5	830	1010	78
10466	3.5	827	1009	79
10467	3.5	868	1010	61
10469	3.5	872	1010	60
10470	3.5	861	1009	64
10471	3.5	842	1009	73
10473	3.5	829	1010	78
J272	3.5	819	1010	83
J270	3.5	833	1010	77
J256	3.5	857	1010	66
J264	3.5	856	1010	67
J266	3.5	868	1010	61
J268	3.5	836	1010	75
J274	220.0	843	1008	71
J276	3.5	841	1010	73
J278	3.5	841	1010	73
J280	3.5	852	1009	68

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
P463	288	6	220	2.5	120

Jericho Road (Between Clubhouse and Grove)

Flushing velocity 2.5 fps for new 6" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1011	53
J260	3.5	903	1012	47
J262	3.5	903	1012	47
10451	3.5	890	1011	52
10450	3.5	876	1011	58
10446	3.5	858	1011	66
10447	3.5	874	1011	59
10448	3.5	878	1011	57
10442	3.5	845	1009	71
J282	3.5	883	1009	55
10452	3.5	884	1011	55
10454	3.5	877	1010	58
10460	3.5	874	1010	59
10461	3.5	874	1010	59
10462	3.5	852	1010	69
10464	3.5	870	1010	61
10465	3.5	830	1010	78
10466	3.5	827	1009	79
10467	3.5	868	1010	61
10469	3.5	872	1010	60
10470	3.5	861	1009	64
10471	3.5	842	1009	72
10473	3.5	829	1010	78
J272	3.5	819	1010	83
J270	3.5	833	1010	77
J256	3.5	857	1010	66
J264	3.5	856	1010	67
J266	3.5	868	1010	61
J268	3.5	836	1010	75
J274	3.5	843	1009	72
J276	216.5	841	1008	72
J278	3.5	841	1008	72
J280	3.5	852	1009	68

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
P465	240	6	220	2.5	120

Oak Road

Flushing velocity 2.5 fps for new 6" pipe (under max hour)

ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1010	53
J260	3.5	903	1012	47
J262	3.5	903	1012	47
10451	3.5	890	1011	52
10450	3.5	876	1010	58
10446	3.5	858	1010	66
10447	3.5	874	1010	59
10448	3.5	878	1010	57
10442	3.5	845	1009	71
J282	3.5	883	1009	55
10452	3.5	884	1010	55
10454	3.5	877	1010	58
10460	3.5	874	1010	59
10461	3.5	874	1010	59
10462	3.5	852	1010	69
10464	3.5	870	1010	61
10465	3.5	830	1010	78
10466	3.5	827	1010	79
10467	3.5	868	1010	61
10469	3.5	872	1010	60
10470	3.5	861	1010	64
10471	3.5	842	1010	73
10473	3.5	829	1010	78
J272	3.5	819	1010	83
J270	3.5	833	1010	77
J256	3.5	857	1010	66
J264	220.0	856	1008	66
J266	3.5	868	1010	61
J268	3.5	836	1010	75
J274	3.5	843	1010	72
J276	3.5	841	1010	73
J278	3.5	841	1010	73
J280	3.5	852	1010	68

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
P455	238	6	220	2.5	120

Walnut Road

Flushing velocity 2.5 fps for new 6" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1010	53
J260	3.5	903	1012	47
J262	3.5	903	1012	47
10451	3.5	890	1011	52
10450	3.5	876	1010	58
10446	220.0	858	1006	64
10447	3.5	874	1009	59
10448	3.5	878	1009	57
10442	3.5	845	1009	71
J282	3.5	883	1009	55
10452	3.5	884	1011	55
10454	3.5	877	1010	58
10460	3.5	874	1010	59
10461	3.5	874	1010	59
10462	3.5	852	1010	69
10464	3.5	870	1010	61
10465	3.5	830	1010	78
10466	3.5	827	1010	79
10467	3.5	868	1010	62
10469	3.5	872	1010	60
10470	3.5	861	1010	65
10471	3.5	842	1010	73
10473	3.5	829	1010	79
J272	3.5	819	1010	83
J270	3.5	833	1010	77
J256	3.5	857	1010	66
J264	3.5	856	1010	67
J266	3.5	868	1010	62
J268	3.5	836	1010	76
J274	3.5	843	1010	73
J276	3.5	841	1010	73
J278	3.5	841	1010	73
J280	3.5	852	1010	69

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12030	177	6	227	2.6	120
12028	543	6	220	2.5	120

Hilltop Road

Flushing velocity 2.5 fps for new 6" pipe (under max hour)					
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi	
J254	3.5	889	1010	53	
J260	3.5	903	1012	47	
J262	3.5	903	1012	47	
10451	3.5	890	1011	52	
10450	3.5	876	1010	58	
10446	3.5	858	1009	66	
10447	220.0	874	1006	57	
10448	3.5	878	1009	57	
10442	3.5	845	1009	71	
J282	3.5	883	1009	55	
10452	3.5	884	1011	55	
10454	3.5	877	1010	58	
10460	3.5	874	1010	59	
10461	3.5	874	1010	59	
10462	3.5	852	1010	69	
10464	3.5	870	1010	61	
10465	3.5	830	1010	78	
10466	3.5	827	1010	79	
10467	3.5	868	1010	62	
10469	3.5	872	1010	60	
10470	3.5	861	1010	65	
10471	3.5	842	1010	73	
10473	3.5	829	1010	79	
J272	3.5	819	1010	83	
J270	3.5	833	1010	77	
J256	3.5	857	1010	66	
J264	3.5	856	1010	67	
J266	3.5	868	1010	62	
J268	3.5	836	1010	76	
J274	3.5	843	1010	73	
J276	3.5	841	1010	73	
J278	3.5	841	1010	73	
J280	3.5	852	1010	69	
Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
12027	544	6	220	2.5	120

Maple Drive

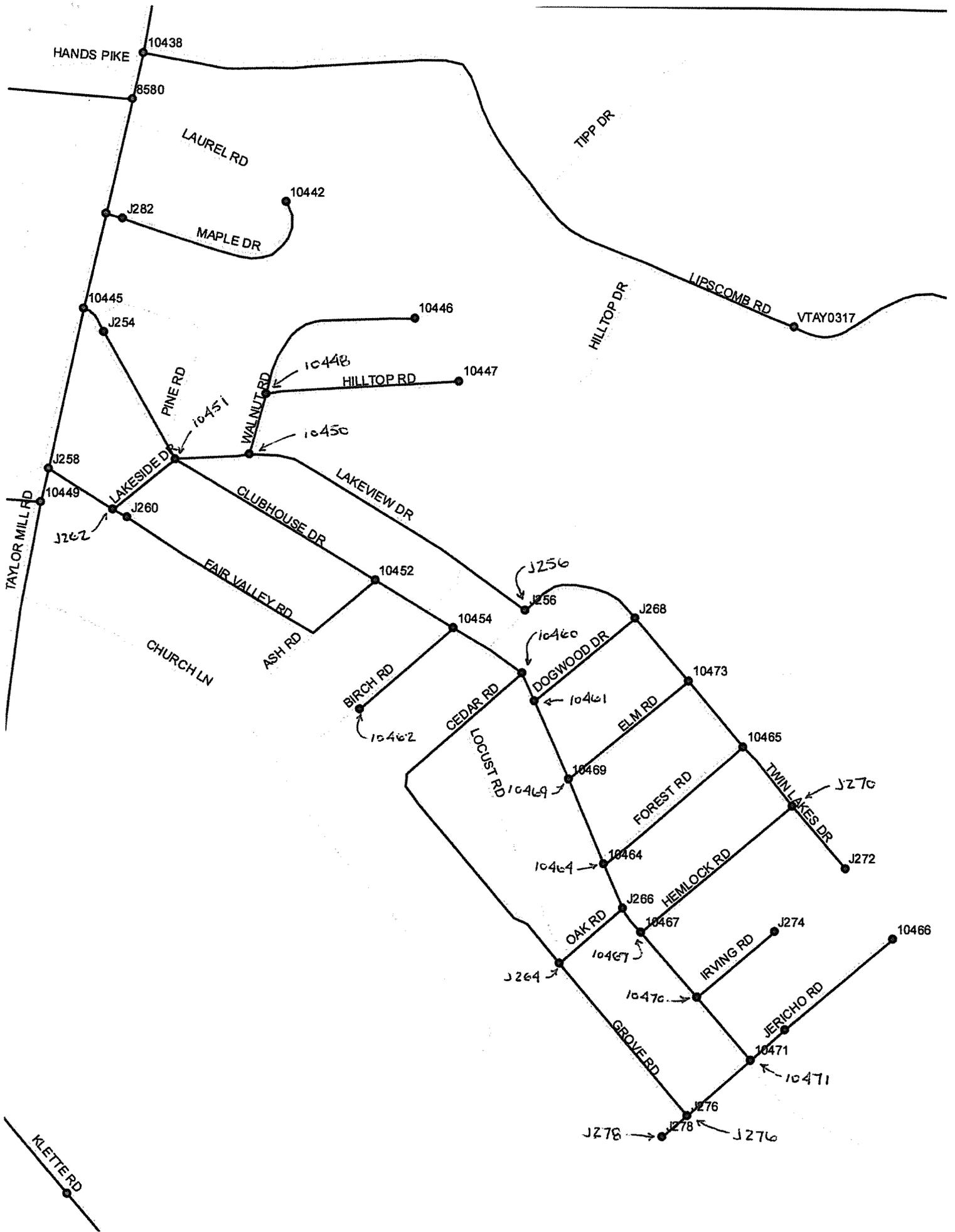
Flushing velocity 2.5 fps for new 6" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	1011	53
J260	3.5	903	1013	48
J262	3.5	903	1013	48
10451	3.5	890	1011	53
10450	3.5	876	1011	59
10446	3.5	858	1011	66
10447	3.5	874	1011	60
10448	3.5	878	1011	58
10442	220.0	845	1005	70
J282	3.5	883	1009	54
10452	3.5	884	1011	55
10454	3.5	877	1011	58
10460	3.5	874	1011	60
10461	3.5	874	1011	60
10462	3.5	852	1011	69
10464	3.5	870	1011	61
10465	3.5	830	1011	79
10466	3.5	827	1011	80
10467	3.5	868	1011	62
10469	3.5	872	1011	60
10470	3.5	861	1011	65
10471	3.5	842	1011	73
10473	3.5	829	1011	79
J272	3.5	819	1011	83
J270	3.5	833	1011	77
J256	3.5	857	1011	67
J264	3.5	856	1011	67
J266	3.5	868	1011	62
J268	3.5	836	1011	76
J274	3.5	843	1011	73
J276	3.5	841	1011	74
J278	3.5	841	1011	74
J280	3.5	852	1011	69

Pipe Information for flushing velocity at 2.5 fps for new 6" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
P471	608	6	220	2.5	120

Maximum Available Flow Under Maximum Hour

Maximum Hour Run, Maximum Available Flow				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J254	3.5	889	988.9	43.3
J260	3.5	903	990.2	37.8
J262	3.5	903	990.2	37.8
10451	3.5	890	986.8	41.9
10450	3.5	876	984.1	46.8
10446	3.5	858	970.0	48.6
10447	950.0	874	927.5	23.2
10448	3.5	878	970.0	39.9
10442	3.5	845	988.6	62.2
J282	3.5	883	988.6	45.8
10452	3.5	884	986.7	44.5
10454	3.5	877	986.2	47.3
10460	3.5	874	985.8	48.5
10461	3.5	874	985.7	48.4
10462	3.5	852	986.2	58.2
10464	3.5	870	985.6	50.1
10465	3.5	830	985.5	67.4
10466	3.5	827	985.5	68.7
10467	3.5	868	985.5	50.9
10469	3.5	872	985.6	49.2
10470	3.5	861	985.5	54.0
10471	3.5	842	985.5	62.2
10473	3.5	829	985.5	67.8
J272	3.5	819	985.5	72.1
J270	3.5	833	985.5	66.1
J256	3.5	857	985.0	55.5
J264	3.5	856	985.6	56.1
J266	3.5	868	985.5	50.9
J268	3.5	836	985.4	64.7
J274	3.5	843	985.5	61.8
J276	3.5	841	985.5	62.6
J278	3.5	841	985.5	62.6
J280	3.5	852	985.5	57.9

<u>Pipe ID</u>	<u>From Node</u>	<u>To Node</u>
P437	J254	10451
12037	J262	10451
P449	J260	10452
12031	10451	10450
12033	10451	10452
12027	10448	10447
12028	10448	10446
12030	10450	10448
12034	10450	J256
P471	J282	10442
12024	10464	10465
12035	10452	10454
12038	10454	10460
12044	10461	J268
12045	10460	10461
12046	10454	10462
12047	J268	10473
12048	10461	10469
12049	10467	J270
12050	10464	J266
12053	10465	10473
12055	10467	10470
12056	10471	J280
12057	10470	10471
12059	10460	J264
12060	10469	10473
P463	10470	J274
P439	10469	10464
P451	J264	J276
P453	J266	10467
P455	J264	J266
P457	J268	J256
P459	J270	10465
P461	J272	J270
P465	J276	10471
P467	J276	J278
P469	J280	10466



NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

Plans titled “Latonia Lakes Street and Water Main
Reconstruction, Latonia Lakes area, Kenton County,
Kentucky” dated March 2016, sealed by a P.E.

And

Specifications titled “Latonia Lakes Street and Water Main
Reconstruction, Latonia Lakes area, Kenton County,
Kentucky” dated March 2016, sealed by a P.E.

See separate attached documents

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

CERTIFIED STATEMENTS

Affidavit

Franchises

Plan Review and Permit Status

Easements and Right-of-Way Status

Construction Dates and Proposed Date In Service

Plant Retirements

State Debt Officer Notification

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

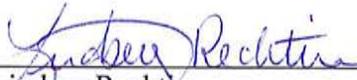
184-0824

Affidavit

AFFIDAVIT

Latonia Lakes Street and Water Main Reconstruction, Latonia Lakes area, Kenton County, Kentucky

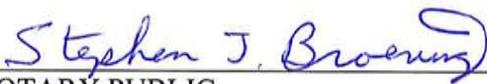
Affiant, Lindsey Rechten, being the first duly sworn, deposes and says that she is the Acting Vice President of Finance of the Northern Kentucky Water District, which she is the Applicant in the proceeding styled above; that she has read the foregoing "Latonia Lakes Street and Water Main Reconstruction, Latonia Lakes area, Covington, Kenton County, Kentucky" Application and knows the contents thereof, and that the same is true of her own knowledge, except as to matters which are therein stated on information or belief, and that is to those matters she believes them to be true.



Lindsey Rechten
Acting Vice President - Finance
Northern Kentucky Water District

Subscribed and sworn to before me in said County to be her act and deed by
Lindsey Rechten, Acting Vice President of Finance of the Northern Kentucky Water
District, this

18th day of April 2016.



NOTARY PUBLIC
Kenton County, Kentucky
My commission expires 2-12-18



NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

Franchises

Plan Review and Permit Status

Easements and Right-of-Way Status

Construction Dates and Proposed Date In Service

Plant Retirements

Franchises required – None

Plan Review and Permit Status - The District has reviewed and approved the plans and specifications prepared by Viox & Viox, Inc., titled “Latonia Lakes Street and Water Main Reconstruction, Latonia Lakes area, Kenton County, Kentucky” dated March 2016, sealed by a P.E.

The District received approval from the Division of Water on December 11, 2015 (see attached letter).

Easements and Right-of-Way Status – One easement will be needed from the Kenton County Fiscal Court for this project and all right-of-way statements have been submitted (permits attached).

Start date of construction – June 2016

Proposed date in service – December 2016

Plant retirements – There are no retirements as a result of this project.

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

PLAN REVIEW AND PERMIT STATUS

Approval Letter from Kentucky Division of Water



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION

DIVISION OF WATER

200 FAIR OAKS LANE, 4TH FLOOR

FRANKFORT, KENTUCKY 40601

www.kentucky.gov

December 11, 2015

Jeff Schuchter
Northern KY Water District
2835 Crescent Springs Rd
Erlanger, KY 41018

RE: Northern KY Water District
AI # 2485, APE20150010
PWSID # 0590220-15-010
Latonia Lakes Water Main Replacements
Campbell County, KY

Dear Mr. Schuchter:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 7,720 LF of 6-inch and 5,750 LF of 8-inch PVC water main replacement. 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 and the following condition:

- All dead end mains shall be equipped with a means to provide flushing at a minimum of 2.5 fps velocity (e.g. sheet 14).

If you have any questions concerning this project, please contact Mr. Abbas Pourghasemi at 502-564-3410 extension 4833.

Sincerely,

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

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

TH:AP

Enclosures

C: Viox & Voix Inc
Kenton/Campbell County Health Department
Public Service Commission
Division of Plumbing

Distribution-Major Construction
Northern KY Water District
Facility Requirements

Activity ID No.:APE20150010

PORT0000000252 (Latonia Lakes WM Replacement) 7,720 LF of 6-inch and 5,750 LF of 8-inch PVC water main replacement.:

Narrative Requirements:

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

Distribution-Major Construction
Northern KY Water District
Facility Requirements

Activity ID No.:APE20150010

PORT0000000252 (Latonia Lakes WM Replacement) 7,720 LF of 6-inch and 5,750 LF of 8-inch PVC water main replacement.:

Narrative Requirements:

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

Distribution-Major Construction
 Northern KY Water District
 Facility Requirements

Activity ID No.:APE20150010

PORT0000000252 (Latonia Lakes WM Replacement) 7,720 LF of 6-inch and 5,750 LF of 8-inch PVC water main replacement.:

Narrative Requirements:

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

Distribution-Major Construction
Northern KY Water District
Facility Requirements

Activity ID No.:APE20150010

PORT0000000252 (Latonia Lakes WM Replacement) 7,720 LF of 6-inch and 5,750 LF of 8-inch PVC water main replacement.:

Narrative Requirements:

Condition No.	Condition
T-35	The open end of an air relief pipe from automatic valves shall be extended to at least one foot above grade and provided with a screened, downward-facing elbow. [Recommended Standards for Water Works 8.5.2.c]
T-36	Discharge piping from air relief valves shall not connect directly to any storm drain, storm sewer, or sanitary sewer. [Recommended Standards for Water Works 8.5.2.d]
T-37	Water pipe shall be constructed with a lateral separation of 10 feet or more from any gravity sanitary or combined sewer measured edge to edge where practical. If not practical a variance may be requested to allow the water pipe to be installed closer to the gravity sanitary or combined sewer provided the water pipe is laid in a separate trench or undisturbed shelf located on one side of the sewer with the bottom of the pipe at least 18 inches above the top of the gravity sanitary or combined sewer pipe. [Drinking Water General Design Criteria IV.3.b]
T-38	Water lines crossing sanitary, combined or storm sewers shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sanitary, combined or storm sewer with preference to the water main located above the sanitary, combined or storm sewer. [Drinking Water General Design Criteria IV.3.c]
T-39	At crossings, one full length of water pipe shall be located so both joints will be as far from the sewer as possible. [Recommended Standards for Water Works 8.8.3.b]
T-40	There shall be no connection between the distribution system and any pipes, pumps, hydrants, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into the system. [Recommended Standards for Water Works 8.10.1]
T-41	Water utilities shall have a cross connection program conforming to 401 KAR 8. [Recommended Standards for Water Works 8.10.1]
T-42	Installed pipe shall be pressure tested and leakage tested in accordance with the appropriate AWWA Standards. [Recommended Standards for Water Works 8.7.6]
T-43	New, cleaned and repaired water mains shall be disinfected in accordance with AWWA Standard C651. The specifications shall include detailed procedures for the adequate flushing, disinfection, and microbiological testing of all water mains. In an emergency or unusual situation, the disinfection procedure shall be discussed with the Division of Water. [Recommended Standards for Water Works 8.7.7]
T-44	A minimum cover of five feet shall be provided over pipe crossing underwater. [Recommended Standards for Water Works 8.9.2]
T-45	Valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves shall be easily accessible, and not subject to flooding for pipes crossing underwater. [Recommended Standards for Water Works 8.9.2.b]

Distribution-Major Construction
Northern KY Water District
Facility Requirements

Activity ID No.:APE20150010

PORT0000000252 (Latonia Lakes WM Replacement) 7,720 LF of 6-inch and 5,750 LF of 8-inch PVC water main replacement.:

Narrative Requirements:

Condition No.	Condition
T 46	Permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples on each side of the valve closest to the supply source for pipes crossing. [Recommended Standards for Water Works 8.9.2.c]

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

State Debt Officer Notification

Northern Kentucky Water District

April 20, 2016

Honorable Sandra K. Dunahoo
Commissioner and State Local Debt Officer
1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601

Re: Northern Kentucky Water District, PSC Case No. 2016-00147
Notice of Intent to Issue Securities

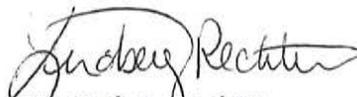
Dear Ms. Dunahoo:

Pursuant to the regulations of the Kentucky Public Service Commission, specifically 807 KAR 5:001: Section 18(1)(g), please be advised that the Northern Kentucky Water District (the "District") hereby notifies the State Local Debt Officer that the District intends on issuing securities in the form of a state revolving loan from the Kentucky Infrastructure Authority (the "KIA") for the purpose of funding the Latonia Lakes Water Main Replacement Project with an estimated budget of \$1,500,000.

We will file the appropriate documents with your office in accordance with the requirements of KRS 65.117 once the securities are issued.

Very truly yours,

The Northern Kentucky Water District


By: Lindsey Rechtin

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

BID INFORMATION

Bid Tabulation

Engineer's Recommendation of Award

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

Bid Tabulation

**BID TABULATIONS FOR
STREET & WATER MAIN CONSTRUCTION ON
LATONIA LAKES AREA STREETS**



ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	COST
	PART A - STREET CONSTRUCTION												
	STORM SEWER IMPROVEMENTS												
1	Safeload Existing Storm Sewer Pipe	112	CY	\$100.00	\$11,200.00	\$91.00	\$10,192.00	\$155.00	\$17,360.00	\$160.00	\$17,920.00		\$17,920.00
2	Remove Structure	6	EA	\$350.00	\$2,100.00	\$318.00	\$1,908.00	\$715.00	\$4,290.00	\$1,750.00	\$10,500.00		\$10,500.00
3	15" HDPE Storm Sewer (to SD1 Specs.)	1,570	LF	\$69.00	\$108,330.00	\$62.00	\$97,340.00	\$78.75	\$123,637.50	\$130.00	\$204,100.00		\$204,100.00
4	18" HDPE Storm Sewer (to SD1 Specs.)	2,270	LF	\$71.00	\$161,170.00	\$71.00	\$161,170.00	\$91.35	\$207,364.50	\$135.00	\$306,450.00		\$306,450.00
5	24" HDPE Storm Sewer (to SD1 Specs.)	320	LF	\$87.00	\$27,840.00	\$77.25	\$24,720.00	\$92.25	\$29,520.00	\$125.00	\$40,000.00		\$40,000.00
6	4' Dia. Storm Manhole (Standard)	11	EA	\$2,700.00	\$29,700.00	\$2,425.00	\$26,675.00	\$2,200.00	\$24,200.00	\$2,680.00	\$29,480.00		\$29,480.00
7	3'x3' Box	40	EA	\$2,100.00	\$84,000.00	\$1,850.00	\$74,000.00	\$1,920.00	\$76,800.00	\$2,050.00	\$82,000.00		\$82,000.00
8	Small Headwall (12" - .32")	23	EA	\$870.00	\$20,010.00	\$773.00	\$17,779.00	\$1,600.00	\$36,800.00	\$1,700.00	\$39,100.00		\$39,100.00
9	Class III Channel Liner	715	TON	\$52.00	\$37,180.00	\$46.50	\$33,247.50	\$57.25	\$40,933.75	\$53.00	\$37,895.00		\$37,895.00
	STREET IMPROVEMENTS												
	Clearing & Grubbing for Entire Project (Including Water Main Construction)												
10	Main Construction)	1	LS	\$33,220.00	\$33,220.00	\$25,000.00	\$25,000.00	\$150,434.00	\$150,434.00	\$12,000.00	\$12,000.00		\$12,000.00
11	Ditching and Grading	1	LS	\$51,000.00	\$51,000.00	\$35,000.00	\$35,000.00	\$143,825.00	\$143,825.00	\$110,000.00	\$110,000.00		\$110,000.00
12	Milling of Existing Asphalt to Achieve Grade Change for Mix Design (Milling Depth Varies)	450	TON	\$26.00	\$11,700.00	\$20.00	\$9,000.00	\$20.30	\$9,135.00	\$21.35	\$9,607.50		\$9,607.50
13	Provide and Place Asphalt Millings or DGA to Achieve Grade Change for Mix Design	2,800	TON	\$22.00	\$61,600.00	\$22.00	\$61,600.00	\$25.30	\$70,840.00	\$23.45	\$65,660.00		\$65,660.00
14	Roadway Widening per Detail #3B	2,900	SY	\$11.00	\$31,900.00	\$25.00	\$72,500.00	\$23.00	\$66,700.00	\$26.65	\$77,285.00		\$77,285.00
15	Roadway Widening per Detail #3A	1,750	SY	\$25.00	\$43,750.00	\$45.00	\$78,750.00	\$43.50	\$76,125.00	\$48.00	\$84,000.00		\$84,000.00
16	Full Depth Pavement Reclamation (8" Depth)	1,737	SY	\$12.00	\$20,844.00	\$10.50	\$18,238.50	\$9.25	\$16,067.25	\$9.85	\$17,109.45		\$17,109.45
17	Full Depth Pavement Reclamation (10" Depth)	19,910	SY	\$9.00	\$179,190.00	\$11.25	\$223,987.50	\$10.00	\$199,100.00	\$10.65	\$212,041.50		\$212,041.50
18	Full Depth Pavement Reclamation (12" Depth)	3,045	SY	\$13.00	\$39,585.00	\$12.00	\$36,540.00	\$10.95	\$33,342.75	\$11.60	\$35,322.00		\$35,322.00
19	Asphalt Curing Seal (SS-1)	30	TON	\$500.00	\$15,000.00	\$700.00	\$21,000.00	\$715.00	\$21,450.00	\$750.00	\$22,500.00		\$22,500.00
20	Dense Grade Aggregate	1,150	TON	\$24.00	\$27,600.00	\$28.00	\$32,200.00	\$28.25	\$32,487.50	\$29.85	\$34,327.50		\$34,327.50
21	CL-2 Asphalt Base Course 0.75D (PG 64-22)	962	TON	\$66.00	\$63,492.00	\$62.00	\$59,644.00	\$52.05	\$50,072.10	\$66.10	\$63,588.20		\$63,588.20
22	CL-2 Asphalt Surface Course 0.38D (PG 64-22)	800	TON	\$71.00	\$56,800.00	\$68.00	\$54,400.00	\$62.45	\$49,960.00	\$72.50	\$58,000.00		\$58,000.00
22A	CL-2 Asphalt Surface Course 0.50D (PG 76-22)	1,900	TON	\$78.00	\$148,200.00	\$88.00	\$167,200.00	\$69.95	\$132,905.00	\$94.00	\$178,600.00		\$178,600.00
23	Leveling & Wedging of Asphalt or Concrete Driveways to Match Proposed Street Grade	650	TON	\$74.00	\$48,100.00	\$75.00	\$48,750.00	\$75.70	\$49,205.00	\$80.00	\$52,000.00		\$52,000.00
24	Leveling & Wedging of Gravel Driveways to Match Proposed Street Grade (RAP or DGA)	950	TON	\$33.00	\$31,350.00	\$25.00	\$23,750.00	\$30.70	\$29,165.00	\$26.65	\$25,317.50		\$25,317.50

**BID TABULATIONS FOR
STREET & WATER MAIN CONSTRUCTION ON
LATONIA LAKES AREA STREETS**

ITEM NO.	ITEM	QUANTITY	UNIT	EATON ASPHALT PAVING CO. INC.		LEN RIEGLER BLACKTOP		DUDLEY CONSTRUCTION CO. INC.		BRACKNEY INC.	
				UNIT COST	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	COST
EROSION CONTROL											
25	Silt Trap Type B	33	EA	\$260.00	\$8,580.00	\$225.00	\$7,425.00	\$50.00	\$1,650.00	\$435.00	\$14,355.00
26	Silt Trap Type C	40	EA	\$200.00	\$8,000.00	\$150.00	\$6,000.00	\$50.00	\$2,000.00	\$385.00	\$15,400.00
27	Temporary Silt Fence	925	LF	\$2.00	\$1,850.00	\$4.00	\$3,700.00	\$2.00	\$1,850.00	\$4.30	\$3,977.50
28	Erosion Control Blanket	2,800	SY	\$2.50	\$7,000.00	\$1.00	\$2,800.00	\$1.60	\$4,480.00	\$2.60	\$7,280.00
29	Maintenance of Erosion Control BMP's as Outlined in SWPPP Book	1	LS	\$6,100.00	\$6,100.00	\$6,000.00	\$6,000.00	\$4,900.00	\$4,900.00	\$10,000.00	\$10,000.00
MISCELLANEOUS											
30	Maintenance of Traffic	1	LS	\$19,700.00	\$19,700.00	\$8,000.00	\$8,000.00	\$21,800.00	\$21,800.00	\$10,000.00	\$10,000.00
31	Yard Restoration, Seed & Protect	1	LS	\$20,600.00	\$20,600.00	\$42,000.00	\$42,000.00	\$28,375.00	\$28,375.00	\$10,000.00	\$10,000.00
32	Remove, Store & Reinstall Fence	780	LF	\$21.00	\$16,380.00	\$16.00	\$12,480.00	\$17.10	\$13,338.00	\$8.00	\$6,240.00
33	Construction Staking	1	LS	\$23,800.00	\$23,800.00	\$49,000	\$49,000.00	\$52,075.00	\$52,075.00	\$30,000	\$30,000.00
34	Mobilization (5% of Total Bid)	1	LS	\$31,000.00	\$31,000.00	\$143,600	\$143,600.00	\$158,000.00	\$158,000.00	\$177,000	\$177,000.00
35	Demobilization (2% of Total Bid)	1	LS	\$60,000.00	\$60,000.00	\$57,450	\$57,450.00	\$67,000.00	\$67,000.00	\$100,000	\$100,000.00
PART A - STREET CONSTRUCTION SUBTOTAL					\$1,547,871.00		\$1,753,046.50		\$2,047,187.35		\$2,209,056.15
PART B - WATER MAIN CONSTRUCTION											
36	6.03 6" C-900 Poly Vinyl Chloride (PVC) (Detail 103, 103a, 104, 104a, 110)	8683	LF	\$71.00	\$616,493.00	\$63.50	\$551,370.50	\$54.50	\$473,223.50	\$59.50	\$516,638.50
37	6.03 8" C-900 Poly Vinyl Chloride (PVC) (Detail 103, 103a, 104, 104a, 110)	4302	LF	\$73.00	\$314,046.00	\$66.00	\$283,932.00	\$63.30	\$272,316.60	\$72.85	\$313,400.70
38	6.03B 6" C-900 Poly Vinyl Chloride(PVC)- RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	160	LF	\$87.00	\$13,920.00	\$77.25	\$12,360.00	\$47.70	\$7,632.00	\$106.00	\$16,960.00
39	7.01 Connect To Ex. 8" Main	3	EA	\$2,600.00	\$7,800.00	\$2,275.00	\$6,825.00	\$1,331.00	\$3,993.00	\$1,900.00	\$5,700.00
40	7.02 8"-6" Tapping Sleeve & Valve	1	EA	\$4,000.00	\$4,000.00	\$3,605.00	\$3,605.00	\$4,003.00	\$4,003.00	\$4,850.00	\$4,850.00
41	8.01 Install Fire Hydrant	20	EA	\$4,000.00	\$80,000.00	\$3,600.00	\$72,000.00	\$4,250.00	\$85,000.00	\$4,300.00	\$86,000.00
42	8.03 Remove Fire Hydrant	9	EA	\$350.00	\$3,150.00	\$325.00	\$2,925.00	\$815.00	\$7,335.00	\$725.00	\$6,525.00
43	9.01 6" Resilient Seated Gate Valves	34	EA	\$1,000.00	\$34,000.00	\$950.00	\$32,300.00	\$1,030.00	\$35,020.00	\$1,380.00	\$46,920.00

**BID TABULATIONS FOR
STREET & WATER MAIN CONSTRUCTION ON
LATONIA LAKES AREA STREETS**

ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	COST	UNIT COST	COST
	EATON ASPHALT PAVING CO. INC.												
	LEN RIEGLER BLACKTOP												
	DUDLEY CONSTRUCTION CO. INC.												
	BRACKNEY INC.												
44	9.01 8" Resilient Seated Gate Valves	22	EA	\$1,500.00	\$33,000.00	\$1,290.00	\$28,380.00	\$1,410.00	\$31,020.00	\$1,720.00	\$37,840.00		
45	10.02 Reconnect Service Line and Install Water Meter Setting (3/4")	132	EA	\$980.00	\$129,360.00	\$865.00	\$114,180.00	\$1,100.00	\$145,200.00	\$1,350.00	\$178,200.00		
46	10.03 Reconnect Copper Service (3/4")	3	EA	\$980.00	\$2,940.00	\$865.00	\$2,595.00	\$535.00	\$1,605.00	\$2,100.00	\$6,300.00		
47	10.04 Relocate Water Meter	1	EA	\$980.00	\$980.00	\$865.00	\$865.00	\$475.00	\$475.00	\$2,000.00	\$2,000.00		
48	11.04 6" Plug & Block	8	EA	\$470.00	\$3,760.00	\$425.00	\$3,400.00	\$350.00	\$2,800.00	\$750.00	\$6,000.00		
49	11.05 Air Relief Valves{Materials Supplied By NKWD}	12	EA	\$1,000.00	\$12,000.00	\$900.00	\$10,800.00	\$930.00	\$11,160.00	\$1,420.00	\$17,040.00		
50	11.06 6"x6"x6" Anchoring Tees & Blocks	12	EA	\$350.00	\$4,200.00	\$320.00	\$3,840.00	\$530.00	\$6,360.00	\$955.00	\$11,460.00		
51	11.06 8"x8"x6" Anchoring Tees & Blocks	8	EA	\$380.00	\$3,040.00	\$350.00	\$2,800.00	\$615.00	\$4,920.00	\$1,020.00	\$8,160.00		
52	11.07 6"x6"x6" Tees & Blocks	6	EA	\$380.00	\$2,280.00	\$350.00	\$2,100.00	\$530.00	\$3,180.00	\$950.00	\$5,700.00		
53	11.07 8"x8"x6" Tees & Blocks	9	EA	\$400.00	\$3,600.00	\$375.00	\$3,375.00	\$615.00	\$5,535.00	\$1,075.00	\$9,675.00		
54	11.07 8"x8"x8" Tees & Blocks	2	EA	\$400.00	\$800.00	\$400.00	\$800.00	\$700.00	\$1,400.00	\$1,210.00	\$2,420.00		
55	11.09 8"-6" Reducer	5	EA	\$300.00	\$1,500.00	\$275.00	\$1,375.00	\$315.00	\$1,575.00	\$500.00	\$2,500.00		
56	11.10 Flushing Device	6	EA	\$1,200.00	\$7,200.00	\$1,025.00	\$6,150.00	\$695.00	\$4,170.00	\$500.00	\$3,000.00		
57	12.06 Asphaltic Concrete {Trench} {Detail 103a}	2890	SY	\$40.00	\$115,600.00	\$36.00	\$104,040.00	\$36.50	\$105,485.00	\$12.00	\$34,680.00		
58	12.11 Concrete Curb	20	LF	\$47.00	\$940.00	\$50.00	\$1,000.00	\$61.20	\$1,224.00	\$65.00	\$1,300.00		
59	12.12 Concrete Sidewalk	40	SY	\$58.00	\$2,320.00	\$60.00	\$2,400.00	\$66.30	\$2,652.00	\$70.00	\$2,800.00		
60	12.13 Gravel Driveway	6400	SY	\$8.00	\$51,200.00	\$7.25	\$46,400.00	\$19.00	\$121,600.00	\$8.00	\$51,200.00		
	PART B - WATER MAIN CONSTRUCTION SUBTOTAL				\$1,448,129.00		\$1,299,817.50		\$1,338,884.10		\$1,377,269.20		
	PART A - STREET CONSTRUCTION SUBTOTAL				\$1,547,871.00		\$1,753,046.50		\$2,047,187.35		\$2,209,056.15		
	TOTAL CONTRACTOR BID				\$2,996,000.00		\$3,052,864.00		\$3,386,071.45		\$3,586,325.35		

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

Engineer's Recommendation of Award



VIOX & VIOX

Civil Engineers, Surveyors, and Landscape Architects

466 Erlanger Road
Erlanger, Kentucky 41018

Tel: 859.727.3293
Fax: 859.727.8452
www.vioxinc.com

March 16, 2016

Kenton County Public Works
420 Independence Station Road
Independence, KY 41051

ATTN: Mr. Nick Hendrix, P.E.

RE: Latonia Lakes Street & Water Main Construction

Dear Mr. Hendrix:

On Tuesday, March 15, 2016 at 3:00 p.m. local time bids were received on the above referenced project. (Please review the enclosed bid tabulations). At the above date and time, bids were opened and announced aloud.

Bids received were as follows:

	<u>Water Main Construction</u>	<u>Street Construction</u>	<u>Total Contractor Bid</u>
Eaton Asphalt Paving Co. Inc.	\$1,448,129.00	\$1,547,871.00	\$2,996,000.00
Len Riegler Blacktop	\$1,299,817.50	\$1,753,046.50	\$3,052,864.00
Dudley Construction Co. Inc.	\$1,338,884.10	\$2,047,187.35	\$3,386,071.45
Brackney Inc.	\$1,377,269.20	\$2,209,056.15	\$3,586,325.35

Eaton Asphalt Paving Co. Inc. has the lowest and best total contractor bid at \$2,996,000.00.

It is our recommendation that this project be awarded to Eaton Asphalt Paving Co. Inc. in the amount of \$2,996,000.00.

Respectfully submitted,
VIOX & VIOX, INC.

William R. Viox, P.E., P.L.S.

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

Board Meeting Minutes

**Northern Kentucky Water District
Board of Commissioners Meeting
March 17, 2016**

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on March 17, 2016 at the District's facility located at 2835 Crescent Springs Road in Erlanger, Kentucky. All Commissioners were present, except for Commissioner Collins. Also present were Amy Kramer, Kim Clemons, Mary Carol Wagner, Kyle Ryan, Lindsey Rechtin, John Scheben, Jeff Schuchter, Jenna Canafax and Brian Dunham.

Chairperson Macke called the meeting to order at 8:30 a.m., and Lindsey Rechtin led the pledge of allegiance.

The Board recognized and thanked Commissioner Sommerkamp for her years of service as Chairperson of the District.

The Board reviewed correspondence received and articles published since the last regular Board meeting on February 18, 2016.

On motion of Commissioner Wagner, seconded by Commissioner Cunningham, the Commissioners, unanimously approved the minutes for the regular Board meeting held on February 18, 2016.

The Board was provided a copy of the District's check registers, which included the check number, check date, payee, check amount and description of the reason for each payment, detailing the District's expenditures for the period February 1, 2016 through February 29, 2016. On motion of Commissioner Cunningham, seconded by Commissioner Wagner, and after discussion, the Commissioners unanimously approved the expenditures of the District for the month of February 2016.

On motion of Commissioner Spaulding, seconded by Commissioner Sommerkamp, the Commissioners unanimously approved the District's acceptance of the bid by and awarding a contract to CE Power Solutions LLC for High Voltage Maintenance for a three-year period with a total project budget of \$85,800, and authorized staff to execute the appropriate documents.

On motion of Commissioner Sommerkamp, seconded by Commissioner Wagner, the Commissioners unanimously authorized the District's acceptance of the bids by and awarding contracts for distribution inventory materials from the vendors listed in the bid summary attached, and authorized staff to execute the appropriate contract documents.

On motion of Commissioner Spaulding, seconded by Commissioner Cunningham, the Commissioners unanimously approved the District's acceptance of the bid by and awarding a contract to Wiseway Supply for the purchase of 3/4 -inch copper and the 1-inch copper service piping, and authorized staff to execute the appropriate contract documents.

On motion of Commissioner Spaulding, seconded by Commissioner Sommerkamp, contingent upon the Kenton County Fiscal Court proceeding with the overall project, the District is authorized to enter into an agreement with Kenton County whereby the District will reimburse Kenton County up to \$1,373,973.25 for the Latonia Lakes Water Main Replacement portion of the project (with a total District project budget of \$1,856,415), and authorized staff to execute the appropriate contract documents consistent with same.

On motion of Commissioner Spaulding, seconded by Commissioner Cunningham, the Commissioners unanimously approved the District's acceptance of the bid by and awarding a contract to Jack Gemmer & Sons, Inc., for the proposed 8-inch Water Main Replacement Project/Fire Protection Upgrade along Winchester Ave. from East 33rd Street to Marathon Petroleum Co., Covington, Kentucky, with a total project budget of \$40,000, and authorized staff to execute the appropriate contract documents.

On motion of Commissioner Sommerkamp, seconded by Commissioner Wagner, the Commissioners unanimously approved the District's increase of the project budget to \$415,000 and accept the base bid from and awarding the contract to Fred A. Nemann Co. for the Fort Thomas Treatment Plant South Reservoir Drainage Project, and authorized staff to execute the appropriate contract documents.

On motion of Commissioner Wagner, seconded by Commissioner Sommerkamp, the Commissioners unanimously approved the District's acceptance of the bid by and awarding a contract to TT Maintenance and Contracting Inc. for the Holton Drive Water Main Replacement with a total project budget of \$255,000, and authorized staff to execute the appropriate contract documents.

On motion of Commissioner Cunningham, seconded by Commissioner Sommerkamp, the Commissioners unanimously approved the District's acceptance of the bid by and awarding a contract to the Fred A. Nemann Company for the East Lakeside Avenue Water Main Replacement Project with a project budget of \$155,000, and authorized staff to execute the appropriate contract documents.

On motion of Commissioner Wagner, seconded by Commissioner Cunningham, the Commissioners unanimously approved the District's acceptance of the engineering services agreement with CT Consultants to design the Blossom Lane Water Main Replacement Project, and authorized staff to execute the appropriate contract documents.

On motion of Commissioner Wagner, seconded by Commissioner Spaulding, the Commissioners unanimously approved the District's acceptance of the engineering services agreement with Erpenbeck Consulting Engineers to design the Echo Hills and Licking Pike Water Main Replacement Project, and authorized staff to execute the appropriate contract documents.

On motion of Commissioner Wagner, seconded by Commissioner Sommerkamp, the Commissioners unanimously approved the District's adoption and authorization of the Resolution prepared by Dinsmore & Shohl, LLP, which approves and authorizes the Assistance

Agreement and authorizes the President and Secretary of the District to execute necessary documents or agreements and to otherwise act on behalf of the District to effect such financing.

The Commissioners reviewed the District's financial reports and Department reports. As part of her report, Ms. Kramer reviewed with the Commissioners the status of on-going projects within the 2015 5-Year Capital Budget, including highlighting that there were no change orders since the last Board meeting and highlighting the expenses incurred to date.

On motion of Commissioner Spaulding, seconded by Commissioner Wagner, the Board unanimously agreed to go into executive session under the provisions of KRS 61.810(1)(c) to discuss pending or proposed litigation against or on behalf of the District and to protect the District's legal interests and strategy in connection with such litigation. The executive session commenced at 10:03 a.m. and ended at 10:59 a.m. The Board then came back into open session.

On motion of Commissioner Wagner, seconded by Commissioner Cunningham, the Board unanimously agreed to go into executive session under the provisions of KRS 61.810(1)(c) to discuss pending or proposed litigation against or on behalf of the District and to protect the District's legal interests and strategy in connection with such litigation. The executive session commenced at 10:59 a.m. and ended at 11:17 a.m.

At 11:05 a.m., Commissioner Spaulding left the meeting.

Other matters of a general nature were discussed.

Chairperson Macke adjourned the meeting at 11:17 a.m.

CHAIRMAN

SECRETARY

0008168.0617432 4837-3983-4416v1

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

PROJECT FINANCE INFORMATION

Customers Added and Revenue Effect

Debt Issuance and Source of Debt

Additional Costs for Operating and Maintenance

USoA Plant Account

Depreciation Cost and Debt Service After Construction

Interlocal Agreement and Exhibit A

Conditional Letter of Commitment

Application for SRF Loan Fund B

Northern Kentucky Water District

Customers Added and Revenue Effect: There are no new customers anticipated.

Debt Issuance and Source of Debt: The project will be funded by a SRF Loan Fund B (B15-003) with an estimated budget of \$1,500,000 and the District's 2016 Operating Capital Budget Line #15-166E "Latonia Lakes WMR" with an estimated budget of \$356,415. The District's total project budget is \$1,856,415, which includes construction cost, engineering, materials, and contingencies. A summary of the project costs is provided below:

○ Engineering	\$ 99,500.00
○ Contractor's Bid	\$ 1,448,129.00
○ Less KCFC's Participation	\$ - (74,155.75)
○ Misc. & Contingencies	\$ <u>382,941.75</u>
Total Project Cost	\$ 1,856,415.00

USoA Accounts: The anticipated amounts for the project cost of \$1,856,415.00 will fall under the following Uniform System of Accounts Codes:

Code 331 "Transmission & Distribution Mains"	\$ 1,553,108
Code 334 "Meter & Meter Installation "	\$ 137,475
Code 335 "Hydrants"	\$ 165,832

Additional Costs and O&M: No additional operating and maintenance costs are anticipated from the project.

Depreciation and Debt Service: Annual depreciation and debt service after construction are as follows:

Depreciation: \$24,850/year over 62.5 years for water mains
\$3,235/year over 42.5 years for meters
\$3,317/year over 50 years for fire hydrants

Annual Debt Service for SRF Loan: \$83,906.00 over 20 years (conventional 0.75% loan).

dl
22.03

INTERLOCAL COOPERATION AGREEMENT

THIS INTERLOCAL COOPERATION AGREEMENT (the "Agreement") is made and entered into on this the 12th day of May, 2015, by and between the Kenton County Fiscal Court (the "County") and Northern Kentucky Water District (the "District"). The County and the District are sometimes individually referred to herein as a "Party" and collectively as the "Parties".

RECITALS

WHEREAS, under the Interlocal Cooperation Act set forth in KRS 65.210 to 65.300, inclusive (the "Act"), any powers, privileges or authority exercised or capable of exercise by a public agency may be exercised jointly with another public agency under an agreement (an "interlocal cooperation agreement") with one another for joint or cooperative action; and

WHEREAS, the Act permits local governmental units to cooperate with other local governmental units and public agencies to make more efficient use of their powers and to provide services and facilities in a manner that is in their best interest and the best interest of the local communities they serve; and

WHEREAS, the District was created under the authority and provisions of KRS Chapter 74, and is a public agency as defined in KRS 65.230, with the authority to acquire, retain, and develop real property for the purpose of constructing, installing, extending, operating, maintaining and repairing water utility lines and related facilities thereto; and

WHEREAS, the Parties desire to work jointly and cooperatively, from time to time, to implement efficient and effective competitive bidding procedures awarding contracts for the joint construction of improvements owned by and/or under the jurisdiction of the County and water utility improvements owned by and/or under the jurisdiction of the District.

NOW, THEREFORE, in consideration of the above recitals and the mutual benefits to be derived by each of the Parties, the Parties hereby agree as follows:

1. Effective Date. This Agreement shall be effective upon approval and execution by the Parties, upon approval of the Attorney General of the Commonwealth of Kentucky as required by KRS 65.260, and the filing of a certified copy of this Agreement with the County Clerk in which the County is located and the Secretary of State of the Commonwealth of Kentucky pursuant to KRS 65.290.

2. Purpose. The purpose and intent of this Agreement is to set forth a mechanism for the County and the District, pursuant to their respective powers, privileges, and authority, to enter into Project Agreements (defined herein), from time to time, to combine their efforts and resources for the construction of improvements to be owned by and/or under the jurisdiction of the County and water utility improvements to be owned by and/or under the jurisdiction of the District.

3. Duration. This Agreement shall remain in effect until **December 31, 2035**, or unless earlier terminated pursuant to Section 8 of this Agreement.

4. County/District Projects. For purposes of this Agreement, a “**County/District Project**” shall mean a project proposed by either Party involving both the construction, installation, relocation, extension, or other modification, of any improvements or related facilities thereto owned, to be owned, or otherwise under the jurisdiction of the County, and any water utility improvements or related facilities thereto owned, to be owned, or otherwise under the jurisdiction of the District. Examples of such a project include, but are not limited to, street replacement projects where water lines / mains needing replacement are located in the same right of way or nearby.

Notwithstanding anything contained in this Agreement to the contrary, it is hereby expressly understood and agreed between the Parties that neither Party shall be obligated to enter into a proposed County/District Project, and that either Party may disapprove of a proposed County/District Project in their sole and absolute discretion, for any reason or no reason at all. If the Parties reach mutual consent and approval of a proposed County/District Project, then the Parties may proceed to prepare plans and specifications, engage in competitive bidding, enter into Project Agreements, and/or engage in any other joint and cooperative action permitted under this Agreement.

5. Plans/Specifications and Competitive Bidding.

(a) Projects Bid by the County. If the County and the District reach mutual consent and approval of a proposed County/District Project, the District may deliver to the County reasonably detailed construction plans and specifications relating to that portion of the County/District Project involving the construction, installation, relocation, extension, or other modification of any water utility improvements or related facilities (“**Water Utility Work**”). The plans and specifications for the Water Utility Work shall be subject to the joint review and approval by both the District and the County.

If the County and the District mutually consent to and approve the Water Utility Work, the County shall issue an Invitation For Bid in connection with any approved County/District Project, which shall include the Water Utility Work as an alternate bid item. In doing so, the County shall comply with all competitive bidding and advertising requirements applicable to the County/District Project, including, without limitation, noting in any public advertisement that the County is advertising the project on its behalf and as agent of the District pursuant to the interlocal cooperation agreement between the County and the District.

If the County receives a bid or bids under any Invitation For Bid that includes the Water Utility Work and that the County is willing to accept, the County shall deliver a full and complete copy of such bid or bids to the District for the District’s review and approval. If the District approves such bid or bids, the District shall notify the County in writing not later than 30 days after District receives a full and complete copy of such bid or bids whether the District is willing to accept such bid or bids. If the District fails to notify the County in writing within the 30 day period, then such failure shall be deemed to be the District’s disapproval of the bid. In that event, the County shall be entitled to accept the bid for that portion of the work that comprises the construction, installation, relocation, extension, or other modification of any County planned improvements or related facilities.

(b) Projects Bid by the District. As an alternative to the provisions contained in Section 5(a) above, if the County and the District reach mutual consent and approval of a proposed County/District Project, the County may deliver to the District reasonably detailed construction plans and specifications relating to that portion of the County/District Project involving the construction, installation, relocation, extension, or other modification of any County planned improvements or related facilities ("**County Work**"). The plans and specifications for the County Work shall be subject to the joint review and approval by both the District and the County.

If the County and the District mutually consent to and approve the County Work, the District shall issue an Invitation For Bid in connection with any approved County/District Project, which shall include the County Work as an alternate bid item. In doing so, the District shall comply with all competitive bidding and advertising requirements applicable to the County/District Project, including, without limitation, noting in any public advertisement that the District is advertising the project on its behalf and as agent of the County pursuant to the interlocal cooperation agreement between the County and the District.

If the District receives a bid or bids under any Invitation For Bid that includes the County Work and that the District is willing to accept, the District shall deliver a full and complete copy of such bid or bids to the County for the County's review and approval. If the County approves such bid or bids, the County shall notify the District in writing not later than 30 days after County receives a full and complete copy of such bid or bids whether the County is willing to accept such bid or bids. If the County fails to notify the District in writing within the 30 day period, then such failure shall be deemed to be the County's disapproval of the bid. In that event, the District shall be entitled to accept the bid for that portion of the work that comprises the construction, installation, relocation, extension, or other modification of any water utility improvements or related facilities.

6. Project Agreements. If the County and District mutually agree to accept any bid that includes the Water Utility Work or the County Work, as the case may be, then County and District shall execute and enter into a project agreement substantially in the form attached hereto as Exhibit A and incorporated herein by reference (each, a "**Project Agreement**"). For purposes of clarification, a Project Agreement will not be substantially in the form attached hereto as Exhibit A if it (a) includes any other person or entity who is not a party to this Agreement or another interlocal cooperation agreement valid under Kentucky law, (b) substantially changes or modifies any of the Parties' rights or obligations under this Agreement, or (c) substantially changes or modifies any services envisioned by this Agreement to be provided by either Party hereunder.

7. Further Acts and Deeds. The County and the District, respectively, hereby represent and warrant to the other that they are authorized to and will execute, acknowledge, and deliver any and all other easements, deeds, documents, certificates, or instruments necessary or required to effectuate this Agreement and the purposes contemplated herein, or to establish the ownership and/or jurisdiction of the County and the District over any improvements constructed pursuant to this Agreement or any Project Agreement.

8. Termination. This Agreement may be terminated by either party upon thirty (30) days written notice to the other; provided, however, such termination shall not be effective until the completion of any pending County/District Project for which a Project Agreement has been executed.

9. Financing. The County and District shall each be responsible for its own administrative expenses that it incurs in undertaking this Agreement, as well as the budgeting therefore. As to the specific County/District Project expenses, the District shall reimburse the County for those expenses related to the Water Utility Work pursuant to Section 5(a) in the manner and to the extent provided for in the Project Agreement, and County shall reimburse the District for those expenses related to any County Work pursuant to Section 5(b) in the manner and to the extent provided for in the Project Agreement, as the case may be. All other County/District Project expenses shall be paid by the County if such project is bid pursuant to Section 5(a), and all other County/District Project expenses shall be paid by the District if such project is bid pursuant to Section 5(b).

10. Administrator. This Agreement between the County and District shall be administered by a board of at least two individuals, one-half of such individuals shall be appointed by the County and the other half appointed by the District. The County and District shall each be entitled to replace its representative(s) on the board from time-to-time upon written notice to the other party.

11. Real and Personal Property. All real or personal property acquired during the course of a County/District Project bid pursuant to Section 5(a) shall belong to the County, and all real or personal property acquired during the course of a County/District Project bid pursuant to Section 5(b) shall belong to the District, until such time as such project is completed. Upon completion, all real and personal property related to the Water Utility Work under Section 5(a) shall be assigned to the District, and all real and personal property related to the County Work under Section 5(b) shall be assigned to the County. All other real and personal property shall remain with the County pursuant to Section 5(a), or shall remain with the District pursuant to Section 5(b), as the case may be.

12. Assignment. Neither the County nor the District shall be permitted to assign their rights or interests under this Agreement.

13. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky.

14. Default. If either Party defaults under this Agreement, and should such default continue for more than thirty (30) days after written notice is given to the defaulting Party from the non-defaulting Party, the non-defaulting Party may terminate this Agreement by delivering written notice of termination to the defaulting Party.

15. Waiver. No delay or omission by either Party to exercise any right shall impair any such right or be a waiver thereof, but any such right may be exercised from time to time and as often as may be deemed expedient by such Party. Any waiver must be in writing and executed by such Party to be effective, and a waiver on one occasion shall be limited to only that

particular occasion.

16. Notices. All notices, demands and requests given or required to be given by either Party hereto to the other Party shall be in writing and shall be deemed to have been properly given if sent by U.S. registered or certified mail, postage prepaid, return receipt requested, personal delivery, or by overnight delivery service, addressed as follows:

To County: Kenton County Fiscal Court
Attn: Judge/Executive Kris Knochelmann
303 Court Street, Suite 205
Covington, Ky. 41011

with a copy to: Kenton County Attorney's Office
Attn: Stacy Tapke
303 Court Street, Room 307
Covington, Kentucky 41011

To District: Northern Kentucky Water District
Attn: Amy Kramer, Acting VP of Eng. Prod. & Dist.
2835 Crescent Springs Road
Erlanger, KY 41018

with a copy to: Frost Brown Todd, LLC
Attn: Brian C. Dunham
7310 Turfway Road
Suite 210
Florence, Kentucky 41042

or to such other address as either Party may from time to time designate by written notice.

17. Interpretation. The titles to the Sections and Paragraphs hereof are for reference only and do not limit in any way the content thereof. Any words herein which are used in one gender shall be read and construed to mean or include the other gender wherever they would so apply. Any words herein which are used in the singular shall be read and construed to mean and to include the plural wherever they would so apply, and vice versa.

18. Complete Agreement; Counterparts. This Agreement, the Exhibits and resulting Project Agreements are the complete agreement of the parties hereto and supersede all previous understandings relating to the subject matter hereof. This Agreement may be amended only by an instrument in writing which explicitly states that it amends this Agreement, and is signed by the party against whom enforcement of the amendment is sought. This Agreement may be executed in several counterparts, each of which shall be regarded as an original and all of which shall constitute but one and the same instrument.

19. Validity. The provisions of this Agreement are severable. If any term, covenant or condition of this Agreement shall be held to be invalid, illegal or unenforceable in any respect, the remainder of this Agreement shall not be invalidated thereby, and this Agreement shall be construed without such provision.

C 5711 PJ 330A

In accordance with KRS 65.260, the Attorney General of the Commonwealth of Kentucky has determined that the above Agreement is in proper form and compatible with the laws of the Commonwealth of Kentucky.

ATTORNEY GENERAL OF THE
COMMONWEALTH OF KENTUCKY

By: *Ryan Halloran*
Assistant Attorney General
Honorable Jack Conway – Attorney General

7/31/2015

This instrument prepared by
and after recording return to:



Brian C. Dunham
Frost Brown Todd, LLC
7310 Turfway Road
Suite 210
Florence, Kentucky 41042
(859) 817-5924
bdunham@fbtlaw.com

Recorded
COVINGTON
Doc type: GABRIELLE SUMME
Book / Page : C - 5711 / 325 6pgs
Doc#: 15 08 10 059 00287
Dt/tm Recorded: 08/18/2015 03:58:10pm
Total fees: 22.00 Tax: 0.00
Clerk name: CATHY DARPEL

Exhibit A

AGREEMENT FOR LATONIA LAKES IMPROVEMENT PROJECT

This Agreement is made and entered this ____ day of April, 2016, by and between the KENTON COUNTY FISCAL COURT, 303 Court Street, Suite 205, Covington, Ky. 41011 (hereinafter, the "County") and the NORTHERN KENTUCKY WATER DISTRICT, 2835 Crescent Springs Road Erlanger, Kentucky 41018 (hereinafter, the "District"). Together, the County and the District shall be referred to herein as the "Parties."

WHEREAS, the Parties previously entered into an Interlocal Cooperation Agreement that envisioned the joint construction of improvements owned by and/or under the jurisdiction of the County and water utility improvements owned by and/or under the jurisdiction of the District (the "ICA"), which ICA is hereby incorporated herein by reference; and

WHEREAS, in furtherance of the ICA, the County plans to reconstruct all of the streets in the old City of Latonia Lakes, Kenton County, Kentucky (hereinafter the "Project") during the period of April 2016 through _____; and

WHEREAS, the District plans to replace the existing water mains throughout the old City of Latonia Lakes, Kenton County, Kentucky with approximately 13,625 feet of 6" and 8" water main in 2016, per the water main replacement plans engineered by Viox & Viox, Inc. and approved by the District (hereinafter the "Water Main Work"); and

WHEREAS, the County is willing to contract for the Water Main Work as part of the Project in the interest of ensuring coordination and efficiency of cost; and

WHEREAS, the Parties desire to memorialize their agreements with respect to this matter in writing;

NOW, THEREFORE, in consideration of the premises, the covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are expressly acknowledged, the County and the District hereby agree as follows:

1. The County shall enter a contract with Eaton Asphalt & Paving Company, Inc. (hereinafter, the "Contractor") for the Project which shall include the completion of the Water Main Work by the Contractor in accordance with the bid submitted by the Contractor and the plans developed by Viox & Viox, Inc. and approved by the District, which bid and plans are incorporated herein by reference. The County shall comply with all procurement requirements for the Project.

2. The County shall require the following indemnity to be included in its contract with the Contractor for the performance of the Water Main Work component of the Project:

The Contractor shall defend, indemnify and hold harmless the Northern Kentucky Water District and the Northern Kentucky Water District's commissioners, officers, agents and employees from and against any and all claims, demands, investigations, suits, actions, damages, and liabilities of every kind or nature which in any way arise from or are related to (1) the negligence, gross negligence or willful misconduct of the Contractor or the Contractor's employees or subcontractors in performing under the Contract; (2) the failure of the Contractor or the Contractor's employees or subcontractors to comply with federal, state or local laws, ordinances, regulations, orders or other requirements in

performing under the Contract or (3) the breach of or failure to comply with the Contract by the Contractor or the Contractor's employees or subcontractors. This indemnity shall survive the termination of the Contract.

3. The County shall require Contractor to provide a standard one-year warranty on the Water Main Work component of the Project, and the County agrees to cooperate with the District and take such actions that are reasonably necessary to enforce such warranty for the benefit of the District.

4. During the performance of the Water Main Work, the District shall make all payments properly payable for the performance of the Water Main Work up to a total amount of \$1,373,973.25. The District shall make each such payment to the Contractor within 30 days after receiving notice from the County (with attached invoices and other appropriate documentation) that the Contractor has requested payment for a portion of the Water Main Work completed during the preceding billing period.

5. In no event shall the District's financial obligation under this Agreement exceed the total of \$1,373,973.25, unless an increase is approved in writing and executed by the District through a signed change order or another written document.

IN WITNESS WHEREOF, the Parties have executed and entered this Agreement as of the date first above written.

COUNTY OF KENTON, KENTUCKY

NORTHERN KENTUCKY WATER DISTRICT

Judge Executive

President/CEO

County Clerk



Steven L. Beshear
Governor

KENTUCKY INFRASTRUCTURE AUTHORITY
1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601
Phone (502) 573-0260
Fax (502) 573-0157
<http://kia.ky.gov>

John E. Covington III
Executive Director

February 5, 2015

Mr. C. Ronald Lovan, P.E., President/CEO
Northern Kentucky Water District
2835 Crescent Springs Road
Erlanger, KY 41018

KENTUCKY INFRASTRUCTURE AUTHORITY
INFRASTRUCTURE REVOLVING LOAN FUND
CONDITIONAL COMMITMENT LETTER (B15-003)

Dear Mr. Lovan:

The Kentucky Infrastructure Authority ("the Authority") commends your efforts to improve public service facilities in your community. On February 5, 2015, the Authority approved your loan for the Latonia Lakes Water Main Replacement Project, subject to the conditions stated below. The total cost of the project shall not exceed \$1,834,917 of which the Authority loan shall provide \$1,500,000 of the funding. Other anticipated funding for the project is reflected in Attachment A. The final loan amount will be equal to the Authority's portion of estimated project cost applied to the actual project cost. Attachment A incorporated herein by reference fully describes the project.

An Assistance Agreement will be executed between the Authority and the Northern Kentucky Water District upon satisfactory performance of the conditions set forth in this letter. You must meet the conditions in this letter and enter into and Assistance Agreement by February 5, 2016 (twelve months from the date of this letter). A one-time extension of up to six months may be granted for applicants that experience extenuating circumstances. Funds will be available for disbursement only after execution of the Assistance Agreement.

The Assistance Agreement and this commitment shall be subject, but not limited to, the following terms:

1. The Authority project loan shall not exceed \$1,500,000.
2. The loan shall bear interest at the rate of 0.75 percent per annum commencing with the first draw of funds.
3. The loan shall be repaid over a period not to exceed 20 years from the date of the last draw of funds.
4. Interest shall be payable on the amount of actual funds received. The first

payment shall be due on June 1, or December 1, immediately succeeding the date of the initial draw of funds, provided that if such June 1, or December 1, shall be less than three months since the date of the initial draw of funds, then the first interest payment date shall be the June 1, or December 1, which is at least six months from the date of the initial draw of funds. Interest payments will be due each six months thereafter until the loan is repaid.

5. Full principal payments will commence on June 1, or December 1, immediately succeeding the date of the last draw of funds, provided that if such June 1, or December 1, shall be less than three months since the date of the last draw of funds, then the first principal payment date shall be the June 1, or December 1, which is at least six months from the date of the last draw of funds. Full payments will be due each six months thereafter until the loan is repaid.
6. A loan servicing fee of 0.20% of the annual outstanding loan balance shall be payable to the Authority as a part of each interest payment.
7. Loan funds will be disbursed after execution of the Assistance Agreement as project costs are incurred.
8. The Authority requires that an annual financial audit be provided for the life of the loan.
9. The final Assistance Agreement must be approved by ordinance or resolution, as applicable, of the city council or appropriate governing board.

The following is a list of the standard conditions to be satisfied prior to execution of the Assistance Agreement or incorporated in the Assistance Agreement. Any required documentation must be submitted to the party designated.

1. Upon completion of final design of the facilities in the attached project description, favorable approval shall be obtained of such design by all appropriate parties as required by Kentucky statute or administrative regulation.
2. Applicant must provide certification from their legal counsel stating that they have prepared construction specifications in accordance with all applicable state wage rate laws, and that the procurement procedures, including those for construction, land, equipment and professional services that are a part of the project, are in compliance with applicable state and local procurement laws.
3. Documentation of final funding commitments from all parties other than the Authority as reflected in the Attachment A description shall be provided prior to preparation of the Assistance Agreement and disbursement of the loan monies. Rejections of any anticipated project funding or any new sources of funding not reflected in Attachment A shall be immediately reported and may cause this loan to be subject to further consideration.

4. Upon receipt of construction bids a tabulation of such bids and engineer's recommendations on compliance with bid specifications and recommendation for award, shall be forwarded to the Authority for final approval and sizing of this loan and the project.
5. The loan must undergo review by the Capital Projects and Bond Oversight Committee of the Kentucky Legislature prior to the state's execution of the Assistance Agreement. The committee meets monthly on the third Tuesday. Any special conditions listed in Attachment A must be satisfied before the project is presented before the Committee.
6. Any required adjustment in utility service rates shall be adopted by ordinance, municipal order or resolution by the appropriate governing body of the Borrower. Public hearings as required by law shall be held prior to the adoption of the service rate ordinance, order, or resolution. Any required approvals by the Kentucky Public Service Commission shall be obtained.
7. Based on the final "as bid" project budget, the community must provide satisfactory proof, based on then existing conditions, that the revenue projections in the attached descriptions are still obtainable and that the projections of operating expenses have not materially changed. The "as bid" project budget shall be reviewed and approved by your consultant engineer.
8. All easements or purchases of land shall be completed prior to commencement of construction. Certification of all land or easement acquisitions shall be provided to the Authority.
9. Documentation of Clearinghouse Endorsement and Clearinghouse Comments.
10. The Borrower must complete and return the attached "Authorization for Electronic Deposit of Vendor Payment" form to the Authority.
11. Implement the Kentucky Uniform System of Accounting (KUSoA), or an alternative approved by the Authority and assure that rates and charges for services are based upon the cost of providing such service.
12. Final Design Plans in an AutoCAD Drawing File Format (DWG), referenced to the appropriate (North, South or Single) Kentucky State Plane Coordinate System (NAD83-Survey Feet) on a Compact Disc (CD). The recipient shall provide the Authority a digital copy (pdf) of the record drawings from the project within three months of construction completion.

Any special conditions listed below and/or stated in Attachment A must be resolved.

Ronald Lovan, NKWD
February 5, 2015
Page 4

Please inform the Authority of any changes in your financing plan as soon as possible. We wish you every success for this project which will benefit both your community and the Commonwealth as a whole.

Sincerely,

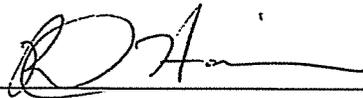


Amanda Yeary
Kentucky Infrastructure Authority

Attachments

cc: Richard Harrison, P.E., Northern Kentucky Water District
Dirk Bedarff, Peck, Shaffer & Williams LLP
State and Local Debt Office, DLG
Borrower File - Northern Kentucky Water District - B15-003

Please sign and return a copy of this letter indicating your acceptance of this commitment and its terms. Also attach the completed "Authorization for Electronic Deposit of Vendor Payment" Form.



Accepted

2-16-2015

Date

Personal or sensitive information was discovered in this filing. At the filer's request this page has been removed. A redacted version of the removed page will be re-filed.

Ldm

4/27/2016

ATTACHMENT A

**Northern Kentucky Water District
B15-003**

EXECUTIVE SUMMARY KENTUCKY INFRASTRUCTURE AUTHORITY FUND B, INFRASTRUCTURE REVOLVING LOAN FUND		Reviewer Date KIA Loan Number WRIS Number	Jeff Abshire February 5, 2015 B15-003 WX21117002	
BORROWER		NORTHERN KENTUCKY WATER DISTRICT KENTON COUNTY		
BRIEF DESCRIPTION This project involves the replacement of approximately 14,000 linear feet of small diameter cast iron water mains in the Latonia Lakes area with larger PVC lines. This will increase hydraulic capacity, reduce water loss from breaks and flushing of the existing unlined pipes, and reduce the number of complaints from discolored water.				
PROJECT FINANCING		PROJECT BUDGET		
Fund B Loan	1,500,000	Eng - Design / Const	RD Fee % 8.1% Actual % 6.4% 109,781	
Local Funds	334,917	Eng - Insp	4.9% 0.6% 10,000	
		Construction	1,568,305	
		Contingency	146,831	
TOTAL	\$1,834,917	TOTAL	\$1,834,917	
REPAYMENT		Rate 0.75%	Est. Annual Payment \$83,906	
	Term 20 Years	1st Payment	6 Mo. after first draw	
PROFESSIONAL SERVICES		Engineer Not procured		
	Bond Counsel	Peck, Shaffer, & Williams, a division of Dinsmore & Shohl, LLP		
PROJECT SCHEDULE		Bid Opening Jan-16		
	Construction Start	May-16		
	Construction Stop	Dec-16		
DEBT PER CUSTOMER		Existing \$3,009		
	Proposed	\$2,917		
OTHER DEBT		See Attached		
OTHER STATE-FUNDED PROJECTS LAST 5 YRS		See Attached		
RESIDENTIAL RATES				
	Current	Users 81,112	Avg. Bill \$36.93 (for 4,000 gallons)	
	Additional	0	\$36.93 (for 4,000 gallons)	
REGIONAL COORDINATION This project is consistent with regional planning recommendations.				
CASHFLOW	Cash Flow Before Debt Service	Debt Service	Cash Flow After Debt Service	Coverage Ratio
Audited 2012	28,151,693	17,076,648	11,075,045	1.6
Audited 2013	28,341,354	17,310,103	11,031,251	1.6
Projected 2014	29,867,820	20,782,130	9,085,690	1.4
Projected 2015	31,171,773	20,777,742	10,394,031	1.5
Projected 2016	32,535,062	21,775,713	10,759,349	1.5
Projected 2017	33,960,276	21,853,514	12,106,762	1.6
Projected 2018	35,450,113	21,716,037	13,734,076	1.6
Projected 2019	37,007,385	21,716,037	15,291,348	1.7

Reviewer: Jeff Abshire
Date: February 5, 2015
Loan Number: B15-003

**KENTUCKY INFRASTRUCTURE AUTHORITY
INFRASTRUCTURE REVOLVING LOAN FUND (FUND "B")
NORTHERN KENTUCKY WATER DISTRICT, KENTON COUNTY
PROJECT REVIEW
WX21117002**

I. PROJECT DESCRIPTION

The Northern Kentucky Water District is requesting a \$1,500,000 Infrastructure Revolving loan for the Latonia Lakes Water Main Replacement Project. The project will replace approximately 14,000 linear feet of small diameter cast iron water mains with larger PVC lines. This will increase hydraulic capacity, reduce water loss from breaks and flushing of the existing unlined pipes, and reduce the number of complaints from discolored water. The project timeline is being accelerated from the District's original replacement plans to accommodate the Kenton County Fiscal Court's anticipated \$2.3 million road maintenance plan for the area. The condition of roadways is so poor that garbage collectors refuse to drive through side streets and ambulances can't reach some homes. Coordination of water main replacements with the roadway improvements should result in a significant restoration cost savings to the District.

Latonia Lakes was incorporated as a city in the mid 1950s and was dissolved in 2006. The area affected by this project has a population of about 300 with 120 residences and 98 active customers.

The District provides service to Campbell and Kenton counties and portions of Boone, Grant and Pendleton counties and is regulated by the Public Service Commission. Wholesale service is provided to the City of Walton and the Bullock Pen and Pendleton County Water Districts.

II. PROJECT BUDGET

	<u>Total</u>
Engineering Fees - Design / Const	109,781
Engineering Fees - Inspection	10,000
Construction	1,568,305
Contingency	146,831
Total	\$ 1,834,917

III. PROJECT FUNDING

	<u>Amount</u>	<u>%</u>
Fund B Loan	\$ 1,500,000	82%
Local Funds	334,917	18%
Total	\$ 1,834,917	100%

IV. KIA DEBT SERVICE

Construction Loan	\$	1,500,000
Interest Rate		0.75%
Loan Term (Years)		20
Estimated Annual Debt Service	\$	80,906
Administrative Fee (0.25%)		3,000
Total Estimated Annual Debt Service	\$	83,906

V. PROJECT SCHEDULE

Bid Opening	January 2016
Construction Start	May 2016
Construction Stop	December 2016

VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

A) Customers

<u>Customers</u>	<u>Current</u>
Residential	76,299
Commercial	4,702
Industrial	111
Total	81,112

B) Rates

	<u>Prior</u>	<u>Prior</u>	<u>Current</u>
Date of Last Rate Increase	01/01/12	01/01/13	01/01/14
Fixed Service Charge (Monthly Billing)	\$13.00	\$13.60	\$14.20
Fixed Service Charge (Quarterly Billing)	26.00	27.20	28.40
First 1,500 Cubic Feet (per hundred CF)	4.02	4.14	4.25
Next 163,500 Cubic Feet (per hundred CF)	3.27	3.40	3.53
Over 165,000 Cubic Feet (per hundred CF)	2.58	2.65	2.72
Cost for 4,000 gallons - Monthly Billing	\$34.50	\$35.74	\$36.93
Percent Increase	6.5%	3.6%	3.3%
Affordability Index (Rate/MHI)	0.7%	0.8%	0.8%
Cost for 4,000 gallons - Quarterly Billing	\$30.16	\$31.20	\$32.19
Percent Increase	11.2%	3.4%	3.2%
Affordability Index (Rate/MHI)	0.7%	0.7%	0.7%

	<u>Prior</u>	<u>Prior</u>	<u>Current</u>
Wholesale Rate	\$3.13	\$3.20	\$3.26
Percent Increase	2.6%	2.1%	2.0%

The district also has a Subdistrict Monthly Surcharge that ranges from \$8.55 to \$36.22 depending on location.

VII. DEMOGRAPHICS

Census data was taken from the American Community Survey 5-Year Estimate 2008-2012. The District provides service to Campbell and Kenton counties and portions of Boone, Grant and Pendleton counties.

<u>County</u>	<u>Population</u>	<u>MHI</u>
Kenton	159,926	\$ 53,900
Campbell	90,119	53,580
Boone	119,406	67,125
Grant	24,683	46,011
Pendleton	14,771	48,761
Total / Weighted MHI	<u>408,905</u>	<u>\$ 57,029</u>

The median household income for the Commonwealth is \$42,610. The District conducted an income survey of the 102 active households in the project area. Eighteen residences are vacant. Eighty-six percent (86 responses) of the households sampled responded with 59 respondents (69%) having an income below \$34,088. The project will qualify for a .75% interest rate based on the MHI survey results for the project area as permitted by 200 KAR 17:010, Section 6, Part 3(f).

<u>Year</u>	<u>Population</u>		<u>Weighted Average Unemployment</u>	
	<u>Counties</u>	<u>% Change</u>	<u>Date</u>	<u>Rate</u>
1980	290,514		June 2004	5.1%
1990	311,259	7.1%	June 2009	10.0%
2000	362,845	16.6%	June 2013	7.0%
2010	408,406	12.6%	June 2014	5.8%
Current	408,905	0.8%		
Cumulative %		41.7%		

VIII. FINANCIAL ANALYSIS (See Exhibit 1)

Financial information was obtained from the audited financial statements for the years ended December 31, 2012 and 2013. Amounts for 2014 are estimated.

HISTORY

Revenues increased 3% from \$49.0 million in 2012 to \$50.5 million in 2014 with rate increases being offset by some volume decline. Operating expenses averaged \$23.8 million each year during the same period. The debt coverage ratio was consistent at 1.6, 1.6, and 1.4 for 2012, 2013 and 2014, respectively.

The balance sheet reflects a current ratio of 2.5 and a debt to equity ratio of 1.5. The number of months of operating expenses in unrestricted cash is 11.0. The District maintains various restricted accounts, primarily related to its bond covenants, and an Improvement, Repair and Replacement Reserve account. This account had a balance of \$12.8 million or 3% of in service fixed assets, at the end of 2013. Capital spending from 2012 through 2014 is projected at \$44 million.

PROJECTIONS

Projections are based on the following assumptions:

- 1) Revenues will increase 4% for inflation (rates) and volume each year
- 2) Expenses will increase 3% for inflation and volume.
- 3) Debt service coverage is 1.6 in 2017 when principal and interest repayments on all outstanding KIA projects begin.

Based on the proforma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

REPLACEMENT RESERVE

The District maintains an "Improvement, Repair and Replacement account to make major repairs and replacements and to pay the cost of construction of additions, extensions and improvements to the water system. During the past three audited years the balance has averaged \$11.6 million. As a percentage of in service fixed assets the balance increased from .9% in 2008 to 3.0% in 2011, 2012 and 2013. Based on the District's current reserve funding practice a reserve will not be required for the proposed loan.

IX. DEBT OBLIGATIONS

	<u>Outstanding</u>	<u>Maturity</u>
Series 2003C Revenue Bonds	10,805,000	2020
Series 2004 Revenue Bonds	7,760,000	2029
Series 2006 Revenue Bonds	23,945,000	2031
Series 2009 Revenue Bonds	25,560,000	2033
Series 2011 Revenue Bonds	29,155,000	2035
Series 2012 Revenue Bonds	53,115,000	2039
Series 2013A Revenue Bonds	26,400,000	2038
Series 2013B Revenue Bonds	24,120,000	2028
Rural Development Loan	1,951,000	2039

	<u>Outstanding</u>	<u>Maturity</u>
Taylor Mill Purchase Financing	750,000	2018
KIA (F06-03)	3,134,219	2028
KIA (F08-07)	3,818,383	2032
KIA (C08-01)	4,384,707	2020
KIA (F09-02)	23,509,066	2033
KIA (F13-012, i/a/o \$8.0M)	0	TBD
KIA (F14-015, i/a/o \$4.0M)	0	TBD
KIA (F15-011, i/a/o \$4.0M)	0	TBD
Deferred Note Payable	100,000	TBD
Total	\$238,507,375	

X. OTHER STATE OR FEDERAL FUNDING IN PAST FIVE YEARS

<u>Project Title</u>	<u>Funding Source</u>	<u>Amount</u>
Unserved and Underserved Projects	HB 608	\$500,000
Pike Street – Bromley	HB 608	300,000
Robbins Street Water Project	HB 608	300,000
Campbell Co. Unserved/Underserved Improvements	HB 608	1,000,000
Campbell Co. System Improvements	HB 608	1,200,000
Campbell Co. Unserved/Underserved Improvements	HB 608	750,000

XI. CONTACTS

Legal Applicant / Project Administrator	
Name	Northern Kentucky Water District
Address	2835 Crescent Springs Road Erlanger, KY 41018
County	Kenton
Authorized Official	Richard Harrison (V.P. of Engineering, Production and Distribution)
Phone	(859) 878-9898
Email	rharr@nkwater.org

Consulting Engineer	
Name	Not procured

XII. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions.

**NORTHERN KENTUCKY WATER DISTRICT
FINANCIAL SUMMARY (DECEMBER YEAR END)**

	<u>Audited</u> <u>2012</u>	<u>Projected</u> <u>2013</u>	<u>Projected</u> <u>2014</u>	<u>Projected</u> <u>2015</u>	<u>Projected</u> <u>2016</u>	<u>Projected</u> <u>2017</u>	<u>Projected</u> <u>2018</u>	<u>Projected</u> <u>2019</u>
Balance Sheet								
Assets								
Current Assets	31,279,684	34,274,761	35,225,208	36,338,339	37,568,988	38,665,850	39,659,626	40,481,074
Other Assets	388,006,505	386,906,383	392,044,810	393,917,184	393,565,558	392,713,932	393,112,306	394,760,680
Total	419,286,189	421,181,144	427,270,018	430,255,523	431,134,546	431,379,782	432,771,932	435,241,754
Liabilities & Equity								
Current Liabilities	11,413,422	13,738,228	14,057,688	14,569,555	15,078,062	15,493,938	15,556,138	15,619,538
Long Term Liabilities	246,437,952	236,951,900	242,062,256	244,116,301	233,439,139	220,909,201	208,381,363	195,855,725
Total Liabilities	257,851,374	250,690,128	256,119,944	258,685,856	248,517,201	236,403,139	223,937,501	211,475,263
Net Assets	161,434,815	170,491,016	171,150,074	171,569,667	182,617,345	194,976,643	208,834,431	223,766,491
Cash Flow								
Revenues	49,009,681	48,598,030	50,541,951	52,563,628	54,666,173	56,852,820	59,126,933	61,492,010
Operating Expenses	24,384,581	23,227,312	23,924,131	24,641,855	25,381,111	26,142,544	26,926,820	27,734,625
Other Income	3,526,593	2,970,636	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000	3,250,000
Cash Flow Before Debt Service	28,151,693	28,341,354	29,867,820	31,171,773	32,535,062	33,960,276	35,450,113	37,007,385
Debt Service								
Existing Debt Service	17,076,648	17,310,103	20,782,130	20,777,742	21,775,713	21,769,608	21,632,131	21,632,131
Proposed KIA Loan	0	0	0	0	0	83,906	83,906	83,906
Total Debt Service	17,076,648	17,310,103	20,782,130	20,777,742	21,775,713	21,853,514	21,716,037	21,716,037
Cash Flow After Debt Service	11,075,045	11,031,251	9,085,690	10,394,031	10,759,349	12,106,762	13,734,076	15,291,348
Ratios								
Current Ratio	2.7	2.5	2.5	2.5	2.5	2.5	2.5	2.6
Debt to Equity	1.6	1.5	1.5	1.5	1.4	1.2	1.1	0.9
Days Sales in Accounts Receivable	80.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
Months Operating Expenses in Unrestricted Cash	9.3	11.0	11.0	11.0	11.0	11.0	10.9	11.0
Debt Coverage Ratio	1.6	1.6	1.4	1.5	1.5	1.6	1.6	1.7



COMMONWEALTH OF KENTUCKY
STATE REVOLVING FUND – FUND B

Latonia Lakes Water
Main Replacement Project

WX21117002

Northern Kentucky
Water District



An Equal Opportunity Employer M/F/D

Northern Kentucky
Water District

December 8, 2014

Mr. John E. Covington, III
Executive Director
Kentucky Infrastructure Authority
1024 Capital Center Drive, Suite 340
Frankfort, KY 40601

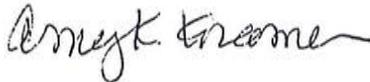
Re: Application for SRF Fund B, Latonia Lakes Water Main Replacement, WX21117002

Dear Mr. Covington:

Please find attached the application for the SRF Loan Fund B, Latonia Lakes Water Main Replacement, WX21117002 *1.2*

Should you have any questions or need additional information, please feel free to contact me at (859) 426-2734. We appreciate your consideration in supporting this project.

Sincerely,



Amy K. Kramer, P.E.
Engineering & Distribution Manager

akk

FUND B & C

LOAN APPLICATION CHECKLIST

- Current application
- Authorizing Resolution (must include successors in title) *see Exhibit N*
- Water/Sewer Rate Ordinances (current and proposed) *see Exhibit O*
- Audit Reports/Financial Statements (Most recent 3 years) *see Exhibit J*
- Project Maps *see Exhibit P*
- Current letter from Clearinghouse *pending*
- Letters of Commitment from other funding sources *Not Applicable*
- Copy of service agreement, if applicable (if project serves more than one community or is being served by another community) *Not Applicable*

- Plans & Specs Approval Letter, if available *pending*
- PSC approval, if applicable and available *pending*

INFRASTRUCTURE REVOLVING LOAN FUND (Fund B) LOAN APPLICATION

I. GENERAL PROJECT SUMMARY

1. **PROJECT TITLE** Latonia Lakes Water Main Replacement Project

PROJECT NUMBER WX 21117002
(WX or SX #)

2. LEGAL APPLICANT

Applicant Name: Northern Kentucky Water District

Street/P.O. Box: 2825 Crescent Springs Rd, P.O. Box 18640

City, State & Zip Code: Erlanger, KY 41018

Telephone: (859) 578-9898

County: Kenton

Contact Person: Richard Harrison, V.P. Engineering, Production & Distribution

3. APPLICATION CONTACT PERSON (Consultant, Area Development District, etc.)

Name: Richard Harrison

Title: V.P. Engineering, Production & Distribution

Firm: Northern Kentucky Water District

Street/P.O. Box: 2835 Crescent Springs Rd, P.O. Box 18640

City, State & Zip Code: Erlanger, KY 41018

Telephone: (859) 578-5458

4. ENGINEERING FIRM

Name: Engineer not procured at this time

Street/P.O. Box: _____

City, State, Zip Code: _____

Telephone: _____

Contact Person: _____

5. BRIEF DESCRIPTION OF PROJECT (Attach project maps)

The proposed 13,625 feet water main replacement projects will eliminate water loss associated with breaks, leaks, and flushing on the unlined cast iron water mains. These streets have experienced a total of 35 breaks/leaks and 7 discolored water complaints. In this area the county is conducting roadway improvements. Coordinating the water main replacement with the roadway improvements should prove as a cost savings to the District with regard to restoration.

6. FINANCING PACKAGE PROPOSED

Source	Amount	Type Loan/Grant	Rate%	Term	Status
Fund B	\$1,500,000	Loan		20	Application
TOTAL	\$1,500,000				

Attach evidence of commitment from other funds.

7. CERTIFICATION

To the best of my knowledge and belief, the information contained in this application is true and correct.

V.P Engineering, Production & Distribution
 Typed Name and Title
 Chief Executive Officer


 Signature

12/8/14
 Date

KENTUCKY INFRASTRUCTURE AUTHORITY
 PROJECT BUDGET
 PROJECT # WX 21117002

Cost Classification	Infrastructure Revolving Loan (Fund B)	Other Funding Source A	Other Funding Source B	Other Funding Source C	Local Funds	Total Project Cost
1 Administrative Expenses (Including Interim Financing)						
2 Legal Expenses						
3 Land, Appraisals, Easements, Right-of-Way						
4 Relocation Expense & Payments						
5 Planning						
6 Engineering Fees - Design		\$109,781				\$109,781
7 Engineering Fees - Construction						
8 Engineering Fees - Inspection						
9 Construction	\$1,500,000	\$68,305				\$1,568,305
10 Equipment						
11 Contingency		\$156,831				\$156,831
12 Other						
Total	\$1,500,000	\$334,917				\$1,834,917
Funding Sources	Amount	Date Committed				
A Northern Kentucky Water District	\$334,917					
B						
C						



Signature

V.P. Engineering, Production & Distribution

Title

12/8/14

Date

Please identify all sources and amounts of Local Funding		Amount
1		
2		
3		

II. GENERAL PROJECT INFORMATION

1. Have business closings or disruptions occurred due to infrastructure inadequacy or failure?

_____ Yes No

If yes, describe.

2. Is the applicable infrastructure system under sanction from any enforcement agency?

_____ Yes No _____ N/A

If yes, describe (include deadlines, fines imposed and whether the project will satisfy sanction order.)

3. Are easements or land acquisition needed for the project?

_____ Yes _____ No Number of Parcels _____

Explain status of each parcel.

Easement needs unknown at this time. Coordination with other utilities and street improvements required to determine if any easements will be needed.

4. If applicant has obtained the necessary land, indicate if by:

_____ Leasehold interest _____ Fee simple title _____ Other (Specify)

5. Have plans and specifications been reviewed and approved by the Division of Water?

_____ Yes No

If no, explain status.

Water main design has not commenced at this time as the street improvements project was recently proposed by the County. Due to poor subsurface conditions below the pavement and the age of the pavement, the streets are in such deteriorated condition that emergency vehicles will not respond to the residences and garbage collectors will not drive down the streets.

6. Does the Public Service Commission have jurisdiction over this project?

Yes _____ No

If yes, describe their role and estimated schedule of review.

A Certificate of Convenience and Necessity and Approval of Financing will be required following the receipt of construction bids. Estimated time for approval following bid opening is 90 days. Estimated bid opening is January 2016.

III. CURRENT INFRASTRUCTURE SYSTEM ANALYSIS

Answer each question as it relates to the system affected by the proposed infrastructure development.

1. Number of existing customers, if any:
Residential 96 Active (plus 20 Inactive)

Business 0

Industrial 0

Total 96

2. System capacity:
Type of system Surface Water Treatment

Design 64 MGD

Current 29 MGD

Peak 49 MGD

Proposed 64 MGD

3. Method of treatment employed. If a new method is proposed, describe.

Conventional preliminary treatment and dual media filters followed by granular activated carbon and ultraviolet and chlorine disinfection at 2 plants.

Conventional preliminary treatment and dual media filters followed by ultraviolet and chlorine disinfection at 1 plant.

4. Operator Certification:
Number of certified operators required for system 9 Plant; 1 Distribution
Level of certification required IV
Number of operators employed by system 16 Plant; 14 Distribution
Are all operators properly certified Yes No

IV. FINANCIAL ANALYSIS

1. Are revenues and expenses for this system accounted for separately from other utility services?

Yes No

If no, explain.

2. Identify all revenues, other than service fees, which are dedicated to the system.

A. See Exhibit A attached

B. _____ \$ _____

C. _____ \$ _____

3. Is there outstanding debt on the system? Yes No

A. Source See Exhibit B attached

B. Principal outstanding _____

C. Annual debt requirement _____

D. Date of final payment _____

Attach a copy of debt service schedule(s). See Exhibit C attached

4. Has a rate study been prepared in anticipation of a rate increase?

Yes No

If yes, attach a copy.

5. Are water or sewer services provided by other communities or districts to this system?

Yes No

Attach copy of service agreements and briefly describe terms.

6. Does this system provide services to other communities or districts?

Yes No

<u>Community/District</u>	<u># of Customers</u>	<u>Amount of Revenue Derived</u>
Pendleton County W.D.	2,241	\$265,556
City of Walton	1,500	\$476,576
Bullock Pen W.D.	6,638	\$537,951

Attach copy of service agreement(s) and briefly describe terms.

See Exhibit D attached

7. Rate structure (attach copy of current rate ordinance).

A. Current	See Exhibit E attached
B. Proposed	See Exhibit E attached
C. Average usage/bill	\$43.56 for 6,000 gallons
D. Date last rate increase/amount of change	January 1, 2014
E. Method of collection of service fees	Bill
F. Percentage rate of collection	95%

G. Do any users provide more than 5% of the service revenue for the system?

_____ Yes X No
If yes, list.

<u>Company</u>	<u>% Service Revenue</u>
_____	_____
_____	_____
_____	_____

8. Compare rates with other providers in your area.

Rates fall into the middle of the area providers. They are higher than some of the metropolitan systems but lower than some of the rural systems. See Exhibit F attached.

9. Operation and Maintenance.

	<u>Year</u>	<u>Cost</u>
A. Annual operation and maintenance costs for last 3 years.		See Exhibit G attached.

B. Estimated total cost after project completion.	<u>2015</u>	<u>\$27,161,761</u>
---	-------------	---------------------

C. Current annual funding requirements for depreciation, and operation and maintenance reserves.

Depreciation of approximately \$9 million per year in rates.

D. Are operation and maintenance payments required by prior bond or ordinance?

_____ Yes X No

If yes, are you in compliance? _____ Yes _____ No
If no, explain.

E. Are operation and maintenance functions assigned to another party?

_____ Yes X No

If yes, provide details of the agreement.

F. Provide a copy of the current operating budget of the system affected by this proposed funding. See Exhibit H attached

10. Tap fee amounts.

- A. Residential \$750.00 for 5/8"
- B. Commercial see Exhibit I attached - tariff
- C. Other see Exhibit I attached - tariff
- D. How collected upon application for service

11. Outline the applicant's plan for producing revenues sufficient to cover debt service and operations.

We are working through refinancing of prior bond issues producing savings to cover debt service and proposing rate case in 2015.

12. List any security available to support the proposed debt, if applicable. This may include liens on mortgages or projected revenues.

Revenues

V. IMPLEMENTATION SCHEDULE

1. Anticipated engineering design time required (including plan review).

10 months _____

2. Anticipated number of contracts. Please list contracts below:

<u>Contract #/Name/Description</u>	<u>Estimated Amount</u>
Engineer To Be Determined	\$109,781

_____ \$ _____
_____ \$ _____

- 3. Anticipated bid advertising date(s). January 7, 2016
- 4. Anticipated bid opening date(s). January 28, 2016
- 5. Anticipated construction start date(s). May 16, 2016
- 6. Anticipated construction completion date(s). December 30, 2016
- 7. Will force account labor be used?

_____ Yes No
If yes, list activities.

- 8. List any construction or bid requirements related to other funding sources, which could affect timely implementation. None

VI. MANAGEMENT CAPACITY

These questions relate to compliance with statutory mandates placed on each type of applicant. Answer each question as appropriate. None

- 1. Audit Requirement.

- A. Is applicant required to have annual audit performed?

Yes _____ No
If no, explain.

- B. Date of last audit completed: March 11, 2014 for year ending 12/31/14

- C. Attach four (4) of the most recent financial statements, current year-to-date unaudited financials and current budget.

See Exhibit J for 2010, 2011, 2012, 2013 audit reports
See Exhibit K for current year-to-date unaudited financials
See Exhibit L for current budget

2. All Other Applicants

- A. Explain designation of responsibility for financial accountability and personnel administration.

Not Applicable _____

- B. Have any public meetings been held on the proposed project or service fee increases in the last six months?

Yes No
 If yes, provide minutes. See Exhibit M attached.

VII. CAPITAL INVESTMENT

Federal/State Funding History.

List all federal and state funding (grant and loan) awarded to the jurisdiction during the last five (5) years for infrastructure or economic development projects.

YEAR	PROJECT	SOURCE	AMOUNT
2010, 2011, 2012	WX21117208 Advanced Treatment	Fund F SRF	\$24,000,000
2013	WX21037003 Kenton & Campbell Co Water Main	Fund F SRF	\$8,000,000
2013	WX21117211 Subdistrict M	RD Loan; RD Grant; CDBG	\$1,733,000; \$6,000,000; \$1,000,000
2014	WX21037004 Campbell Co Water Main Rehab & Treatment Plant	Fund F SRF	\$4,000,000
2015	WX21037006 Campbell & Kenton Co Water Main & Storage Tank	Fund F SRF	\$4,000,000

EXHIBIT A – IV.2.A

REVENUES OTHER THAN SERVICE FEES

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

SCHEDULE OF MORTGAGES, BONDS, NOTES, AND
OTHER INDEBTEDNESS

**Northern Kentucky Water Service District
FmHA Loan \$2,287,000 - 2000**

Attachment 23.01

Year	Maturity Date	Interest Rate	Principal Amount	Amounts Paid	Outstanding
2000			0.00	0.00	0.00
2001			0.00	0.00	0.00
2002			21,000.00	21,000.00	0.00
2003			22,000.00	22,000.00	0.00
2004			24,000.00	24,000.00	0.00
2005			24,000.00	24,000.00	0.00
2006			26,000.00	26,000.00	0.00
2007			27,000.00	27,000.00	0.00
2008			28,000.00	28,000.00	0.00
2009			30,000.00	30,000.00	0.00
2010			31,000.00	31,000.00	0.00
2011			33,000.00	33,000.00	0.00
2012			34,000.00	34,000.00	0.00
2013			36,000.00	36,000.00	0.00
2014			38,000.00	38,000.00	0.00
2015			40,000.00	40,000.00	0.00
2016			42,000.00		42,000.00
2017			44,000.00		44,000.00
2018			46,000.00		46,000.00
2019			49,000.00		49,000.00
2020			51,000.00		51,000.00
2021			54,000.00		54,000.00
2022			56,000.00		56,000.00
2023			59,000.00		59,000.00
2024			62,000.00		62,000.00
2025			65,000.00		65,000.00
2026			68,000.00		68,000.00
2027			72,000.00		72,000.00
2028			75,000.00		75,000.00
2029			79,000.00		79,000.00
2030			83,000.00		83,000.00
2031			87,000.00		87,000.00
2032			92,000.00		92,000.00
2033			96,000.00		96,000.00
2034			102,000.00		102,000.00
2035			107,000.00		107,000.00
2036			112,000.00		112,000.00
2037			118,000.00		118,000.00
2038			124,000.00		124,000.00
2039			130,000.00		130,000.00
Totals			2,287,000.00	414,000.00	1,873,000.00

Northern Kentucky Water Service District			Series 2006A		Attachment 23.02
Bond Issue	9/1/2006	\$29,000,000.00			
Bond	Maturity	Interest	Principal	Amounts	Outstanding
Number	Date	Rate	Amount	Paid	
Registered	2/1/2007	4.000%	300,000.00	300,000.00	0.00
Registered	2/1/2008	4.000%	720,000.00	720,000.00	0.00
Registered	2/1/2009	4.000%	750,000.00	750,000.00	0.00
Registered	2/1/2010	4.000%	775,000.00	775,000.00	0.00
Registered	2/1/2111	4.000%	805,000.00	805,000.00	0.00
Registered	2/1/2012	4.000%	835,000.00	835,000.00	0.00
Registered	2/1/2013	4.000%	870,000.00	870,000.00	0.00
Registered	2/1/2014	4.000%	900,000.00	900,000.00	0.00
Registered	2/1/2015	4.000%	940,000.00	940,000.00	0.00
Registered	2/1/2016	4.000%	980,000.00		980,000.00
Registered	2/1/2017	4.000%	1,020,000.00		1,020,000.00
Registered	2/1/2018	4.000%	970,000.00		970,000.00
Registered	2/1/2019	4.000%	1,010,000.00		1,010,000.00
Registered	2/1/2020	4.125%	1,320,000.00		1,320,000.00
Registered	2/1/2021	4.125%	1,205,000.00		1,205,000.00
Registered	2/1/2022	4.125%	1,255,000.00		1,255,000.00
Registered	2/1/2023	4.125%	1,420,000.00		1,420,000.00
Registered	2/1/2024	4.125%	1,375,000.00		1,375,000.00
Registered	2/1/2025	4.125%	1,440,000.00		1,440,000.00
Registered	2/1/2027	4.250%	3,075,000.00		3,075,000.00
Registered	2/1/2029	4.250%	3,360,000.00		3,360,000.00
Registered	2/1/2031	4.273%	3,675,000.00		3,675,000.00
TOTALS			29,000,000.00	6,895,000.00	22,105,000.00

Northern Kentucky Water Service District			Series 2009		Attachment 23.03
Bond Issue	01/06/09	\$29,290,000.00			
Bond	Maturity	Interest	Principal	Amounts	Outstanding
Number	Date	Rate	Amount	Paid	
Registered	2/1/2009	3.750%	1,000,000.00	1,000,000.00	0.00
Registered	2/1/2010	3.750%	645,000.00	645,000.00	0.00
Registered	2/1/2011	3.750%	670,000.00	670,000.00	0.00
Registered	2/1/2012	3.750%	695,000.00	695,000.00	0.00
Registered	2/1/2013	3.750%	720,000.00	720,000.00	0.00
Registered	2/1/2014	4.000%	750,000.00	750,000.00	0.00
Registered	2/1/2015	4.125%	780,000.00	780,000.00	0.00
Registered	2/1/2016	4.250%	815,000.00		815,000.00
Registered	2/1/2017	4.750%	850,000.00		850,000.00
Registered	2/1/2018	5.000%	895,000.00		895,000.00
Registered	2/1/2019	5.000%	940,000.00		940,000.00
Registered	2/1/2020	5.125%	990,000.00		990,000.00
Registered	2/1/2021	5.250%	1,040,000.00		1,040,000.00
Registered	2/1/2022	5.375%	1,100,000.00		1,100,000.00
Registered	2/1/2023	5.500%	1,160,000.00		1,160,000.00
Registered	2/1/2024	5.700%	1,225,000.00		1,225,000.00
Registered	2/1/2025	5.775%	1,300,000.00		1,300,000.00
Registered	2/1/2027	5.750%	1,375,000.00		1,375,000.00
Registered	2/1/2029	6.000%	1,460,000.00		1,460,000.00
Registered	2/1/2031	6.000%	1,550,000.00		1,550,000.00
Registered	2/1/2029	6.000%	1,645,000.00		1,645,000.00
Registered	2/1/2030	6.000%	1,745,000.00		1,745,000.00
Registered	2/1/2031	6.000%	1,855,000.00		1,855,000.00
Registered	2/1/2032	6.500%	1,975,000.00		1,975,000.00
Registered	2/1/2033	6.500%	2,110,000.00		2,110,000.00
TOTALS			29,290,000.00	5,260,000.00	24,030,000.00

Northern Kentucky Water Service District			Series 2011		Attachment 23.04
Bond Issue	05/31/11	\$30,830,000.00			
Bond Number	Maturity Date	Interest Rate	Principal Amount	Amounts Paid	Outstanding
Registered	2/1/2012	3.000%	825,000.00	825,000.00	0.00
Registered	2/1/2013	3.000%	850,000.00	850,000.00	0.00
Registered	2/1/2014	3.000%	875,000.00	875,000.00	0.00
Registered	2/1/2015	3.000%	900,000.00	900,000.00	0.00
Registered	2/1/2016	3.000%	930,000.00		930,000.00
Registered	2/1/2017	3.000%	960,000.00		960,000.00
Registered	2/1/2018	3.000%	985,000.00		985,000.00
Registered	2/1/2019	3.000%	1,015,000.00		1,015,000.00
Registered	2/1/2020	4.000%	1,055,000.00		1,055,000.00
Registered	2/1/2021	4.000%	1,095,000.00		1,095,000.00
Registered	2/1/2022	4.000%	1,140,000.00		1,140,000.00
Registered	2/1/2023	4.000%	1,185,000.00		1,185,000.00
Registered	2/1/2024	4.000%	1,235,000.00		1,235,000.00
Registered	2/1/2025	4.000%	1,285,000.00		1,285,000.00
Registered	2/1/2027	4.125%	1,340,000.00		1,340,000.00
Registered	2/1/2029	4.250%	1,395,000.00		1,395,000.00
Registered	2/1/2031	4.250%	1,460,000.00		1,460,000.00
Registered	2/1/2029	4.250%	1,520,000.00		1,520,000.00
Registered	2/1/2030	4.500%	1,590,000.00		1,590,000.00
Registered	2/1/2031	4.500%	1,660,000.00		1,660,000.00
Registered	2/1/2032	5.000%	3,580,000.00		3,580,000.00
Registered	2/1/2033	5.000%	3,950,000.00		3,950,000.00
TOTALS			30,830,000.00	3,450,000.00	27,380,000.00

Northern Kentucky Water Service District			Series 2012		Attachment 23.05
Bond Issue	06/21/12	\$54,840,000.00			
Bond	Maturity	Interest	Principal	Amounts	Outstanding
Number	Date	Rate	Amount	Paid	
Registered	2/1/2013	4.000%	1,725,000.00	1,725,000.00	0.00
Registered	2/1/2014	4.000%	1,800,000.00	1,800,000.00	0.00
Registered	2/1/2015	4.000%	1,875,000.00	1,875,000.00	0.00
Registered	2/1/2016	4.000%	1,960,000.00		1,960,000.00
Registered	2/1/2017	5.000%	2,530,000.00		2,530,000.00
Registered	2/1/2018	5.000%	3,475,000.00		3,475,000.00
Registered	2/1/2019	5.000%	3,650,000.00		3,650,000.00
Registered	2/1/2020	5.000%	4,150,000.00		4,150,000.00
Registered	2/1/2021	5.000%	4,365,000.00		4,365,000.00
Registered	2/1/2022	5.000%	4,590,000.00		4,590,000.00
Registered	2/1/2023	5.000%	4,720,000.00		4,720,000.00
Registered	2/1/2024	5.000%	4,970,000.00		4,970,000.00
Registered	2/1/2025	5.000%	5,220,000.00		5,220,000.00
Registered	2/1/2026	5.000%	5,495,000.00		5,495,000.00
Registered	2/1/2027	5.000%	4,315,000.00		4,315,000.00
TOTALS			54,840,000.00	5,400,000.00	49,440,000.00

Northern Kentucky Water Service District			Series 2013A		Attachment 23.06
Bond Issue	01/27/13	\$26,400,000.00			
Bond	Maturity	Interest	Principal	Amounts	Outstanding
Number	Date	Rate	Amount	Paid	
Registered	2/1/2014	2.000%	615,000.00	615,000.00	0.00
Registered	2/1/2015	2.000%	630,000.00	630,000.00	0.00
Registered	2/1/2016	3.000%	645,000.00		645,000.00
Registered	2/1/2017	3.000%	665,000.00		665,000.00
Registered	2/1/2018	4.000%	685,000.00		685,000.00
Registered	2/1/2019	5.000%	720,000.00		720,000.00
Registered	2/1/2020	5.000%	755,000.00		755,000.00
Registered	2/1/2021	5.000%	795,000.00		795,000.00
Registered	2/1/2022	5.000%	835,000.00		835,000.00
Registered	2/1/2023	5.000%	880,000.00		880,000.00
Registered	2/1/2024	5.000%	925,000.00		925,000.00
Registered	2/1/2025	5.000%	970,000.00		970,000.00
Registered	2/1/2026	5.000%	1,020,000.00		1,020,000.00
Registered	2/1/2027	4.000%	1,070,000.00		1,070,000.00
Registered	2/1/2028	4.000%	1,110,000.00		1,110,000.00
Registered	2/1/2029	4.000%	1,155,000.00		1,155,000.00
Registered	2/1/2030	4.000%	1,205,000.00		1,205,000.00
Registered	2/1/2031	4.125%	1,255,000.00		1,255,000.00
Registered	2/1/2032	4.500%	2,680,000.00		2,680,000.00
Registered	2/1/2033	4.250%	1,430,000.00		1,430,000.00
Registered	2/1/2034	4.125%	1,490,000.00		1,490,000.00
Registered	2/1/2035	4.125%	1,555,000.00		1,555,000.00
Registered	2/1/2036	4.250%	1,620,000.00		1,620,000.00
Registered	2/1/2037	4.250%	1,690,000.00		1,690,000.00
TOTALS			26,400,000.00	1,245,000.00	25,155,000.00

Northern Kentucky Water Service District			2013B		Attachment 23.07
Bond Issue	06/21/12	\$24,120,000.00			
Bond Number	Maturity Date	Interest Rate	Principal Amount	Amounts Paid	Outstanding
Registered	2/1/2014	5.000%	2,000,000.00	2,000,000.00	0.00
Registered	2/1/2015	5.000%	1,920,000.00	1,920,000.00	0.00
Registered	2/1/2016	5.000%	2,020,000.00		2,020,000.00
Registered	2/1/2017	5.000%	1,645,000.00		1,645,000.00
Registered	2/1/2018	5.000%	1,170,000.00		1,170,000.00
Registered	2/1/2019	5.000%	1,230,000.00		1,230,000.00
Registered	2/1/2020	5.000%	1,295,000.00		1,295,000.00
Registered	2/1/2021	5.000%	1,355,000.00		1,355,000.00
Registered	2/1/2022	5.000%	1,430,000.00		1,430,000.00
Registered	2/1/2023	5.000%	1,500,000.00		1,500,000.00
Registered	2/1/2024	4.000%	1,570,000.00		1,570,000.00
Registered	2/1/2025	4.000%	1,635,000.00		1,635,000.00
Registered	2/1/2026	4.000%	1,700,000.00		1,700,000.00
Registered	2/1/2027	5.000%	1,780,000.00		1,780,000.00
Registered	2/1/2028	5.000%	1,870,000.00		1,870,000.00
TOTALS			24,120,000.00	3,920,000.00	20,200,000.00

Northern Kentucky Water Service District			2014B		Attachment 23.08
Bond Issue	12/23/14	\$15,805,000.00			
Bond Number	Maturity Date	Interest Rate	Principal Amount	Amounts Paid	Outstanding
Registered	2/1/2015	5.000%	2,000,000.00	2,000,000.00	0.00
Registered	2/1/2016	5.000%	1,850,000.00		1,850,000.00
Registered	2/1/2017	5.000%	1,940,000.00		1,940,000.00
Registered	2/1/2018	5.000%	1,880,000.00		1,880,000.00
Registered	2/1/2019	5.000%	1,980,000.00		1,980,000.00
Registered	2/1/2020	5.000%	1,505,000.00		1,505,000.00
Registered	2/1/2021	5.000%	440,000.00		440,000.00
Registered	2/1/2022	5.000%	465,000.00		465,000.00
Registered	2/1/2023	3.000%	485,000.00		485,000.00
Registered	2/1/2024	3.000%	495,000.00		495,000.00
Registered	2/1/2025	4.000%	515,000.00		515,000.00
Registered	2/1/2026	4.000%	540,000.00		540,000.00
Registered	2/1/2027	3.000%	550,000.00		550,000.00
Registered	2/1/2028	3.000%	570,000.00		570,000.00
Registered	2/1/2029	3.125%	590,000.00		590,000.00
TOTALS			15,805,000.00	2,000,000.00	13,805,000.00

Northern Kentucky Water District
 Long Term Debt

Effective February 1, 2016

Description of Obligation	Issue Date	Mature Date	Interest Expense for Year Rate	Interest Expense for Year Amount	Principal Balance Effective February 1, 2016
Notes Payable Taylor Mill	March 2004	2018	0%	-	225,000
KIA F06-03 MPTP Project	June 2008	2028	3%	94,214	2,778,045
KIA F08-07 Various	June 2009	2029	1%	44,666	3,449,668
KIA C08-01 AMR Project	June 2009	2019	3%	120,930	3,174,424
KIA F09-02 GAC MPTP & FTTP	June 2010	2030	2%	481,743	21,495,741
KIA F13-012	N/A	N/A	2%	40,296	4,176,704
Total Long Term Debt				781,848	35,299,582

Northern Kentucky Water District
Bonds

Effective February 1, 2016

Bond Numbers	Par Value of Actual Issue	Cash Realized on Actual Issue	Par Val of Amt. Held by or for Respondent	Actually Outstanding Effective February 1, 2016	Interest During Year Accrued	Interest During Year Actually Paid
Bond 1997	11,225,000.00	11,131,694	-	-	-	-
Bond 1998	11,355,000.00	11,141,619	-	-	-	-
USDA 2000	2,287,000.00	2,287,000	-	1,873,000	94,150	94,650
Bond 2001A	16,325,000.00	15,835,250	-	-	-	-
Bond 2002A	45,485,000.00	44,121,624	-	-	-	-
Bond 2002B	10,575,000.00	10,525,204	-	-	-	-
Bond 2003A	1,615,000.00	1,583,553	-	-	-	-
Bond 2003B	30,270,000.00	30,068,115	-	-	-	-
Bond 2003C	23,790,000.00	23,532,357	-	-	-	-
Bond 2004	10,455,000.00	10,195,116	-	-	-	-
Bond 2006	29,000,000.00	28,736,444	-	22,105,000	924,088	942,888
Bond 2009	29,290,000.00	27,430,236	-	24,030,000	1,379,488	1,395,575
Bond 2011	30,830,000.00	28,862,016	-	27,380,000	1,160,462	1,173,962
Bond 2012	54,840,000.00	-	-	49,440,000	2,452,400	2,489,900
Bond 2013A	26,400,000.00	25,807,113	-	25,155,000	1,092,725	1,099,026
Bond 2013B	24,120,000.00	-	-	20,200,000	960,950	1,008,950
Bond 2014B	15,805,000.00	-	-	13,805,000	626,637	390,020
Total	373,667,000.00	271,257,341	-	183,988,000	8,690,900	8,594,971

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Latonia Lakes Street and Water Main
Reconstruction Latonia Lakes Area, Kenton
County, Kentucky*

184-0824

CURRENT BALANCE SHEET AND
INCOME STATEMENT



Balance Sheet
As of March 31, 2016

	Assets	2016	2015
Current Assets			
Cash and Cash Equivalents		\$19,008,234	\$21,402,839
Investments		\$1,177,298	\$0
Accounts Receivable			
Customers		\$4,464,235	\$4,657,751
Unbilled Customers		\$5,900,000	\$5,900,000
Other		\$180,537	\$67,463
Assessments Receivable		\$123,785	\$117,464
Inventory Supplies for New Installation and Maintenance, at Cost		\$1,603,743	\$1,515,295
Prepaid Expenses		\$686,438	\$642,284
		\$33,144,270	\$34,303,096
Restricted Assets			
Bond Proceeds Fund		\$3,120,578	\$4,675,775
Debt Service Reserve Account		\$18,435,034	\$18,283,851
Debt Service Account		\$8,763,631	\$7,861,711
Improvement, Repair, & Replacement		\$1,926,451	\$3,242,282
		\$32,245,694	\$34,063,619
Noncurrent Assets			
Capital Assets:			
Land, System, Buildings, and Equipment		\$447,328,370	\$438,826,076
Construction in Progress		\$29,243,589	\$25,085,047
		\$476,571,959	\$463,911,123
Total Capital Assets before Accumulated Depreciation		\$476,571,959	\$463,911,123
Less: Accumulated Depreciation		(\$133,879,155)	(\$123,966,257)
		\$342,692,804	\$339,944,866
Total Capital Assets Net of Accumulated Depreciation		\$342,692,804	\$339,944,866
		\$342,692,804	\$339,944,866
Total Noncurrent Assets		\$342,692,804	\$339,944,866
		\$408,082,768	\$408,311,581
Total Assets		\$408,082,768	\$408,311,581
Deferred Outflows of Resources:			
Contributions subsequent to the measurement date, Changes in assumptions and other changes		\$2,343,773	\$0
		\$2,343,773	\$0
Total Assets & Deferred Outflows of Resources		\$410,426,541	\$408,311,581



Balance Sheet
As of March 31, 2016

Liabilities and Net Position	2016	2015
Current Liabilities		
Bond Indebtedness	\$9,652,000	\$9,240,000
Notes Payable	\$2,042,254	\$2,001,015
Accounts Payable	\$2,268,905	\$2,099,944
Accrued Payroll & Liabilities	\$437,445	\$212,246
Other Accrued Liabilities	\$217,423	\$213,312
Customer Deposits	\$982,311	\$736,630
	<u>\$15,600,338</u>	<u>\$14,503,147</u>
Current Liabilities From Restricted Assets		
Accounts Payable	\$958,991	\$628,708
Accrued Interest Payable	\$1,646,644	\$1,728,386
	<u>\$2,605,635</u>	<u>\$2,357,094</u>
Long Term Debt		
Long Term Portion of Bonded Indebtedness	\$165,136,000	\$174,788,000
Bond Anticipation Notes Payable	\$0	\$0
Notes Payable	\$33,107,204	\$32,518,062
Note Payable-Taylor Mill Purchase	\$225,000	\$400,000
Deferred Note Payable	\$100,000	\$100,000
	<u>\$198,568,204</u>	<u>\$207,806,062</u>
Other Noncurrent Liabilities		
Miscellaneous Deferred Charges	\$4,095,281	\$4,259,203
	<u>\$4,095,281</u>	<u>\$4,259,203</u>
Net Pension Liability	<u>\$14,819,690</u>	<u>\$0</u>
Total Liabilities	<u>\$235,689,148</u>	<u>\$228,925,506</u>
Deferred Inflows of Resources		
Differences between Projected and Actual Earnings on Pension Plan	\$0	\$0
	<u>\$0</u>	<u>\$0</u>
Total Deferred Inflows of Resources	<u>\$0</u>	<u>\$0</u>
Retained Earnings	<u>\$174,737,393</u>	<u>\$179,386,075</u>
Total Liabilities, Deferred Inflows of Resources, and Retained Earnings	<u>\$410,426,541</u>	<u>\$408,311,581</u>



**Income and Expenses Report-Detail
For the Three Months ending March 31, 2016**

	March 2016	March 2015	March Budget	Variance Over (Under)	YTD 2016	YTD 2015	YTD Budget	Variance Over (Under)
Operating Income								
Water Sales	\$5,011,655	\$4,952,563	\$5,299,903	-5.4%	\$11,571,203	\$11,448,761	\$12,145,626	-4.7%
Forfeited Discounts	\$76,908	\$66,360	\$68,019	13.1%	\$206,385	\$211,931	\$197,229	4.6%
Rents from Water Property	\$39,775	\$53,022	\$43,000	-7.5%	\$108,363	\$149,507	\$128,000	-15.3%
Other Water Revenues	\$22,860	\$24,505	\$23,400	-2.3%	\$71,320	\$71,415	\$64,320	10.9%
Total Operating Income	\$5,151,198	\$5,096,450	\$5,434,322	-5.2%	\$11,957,271	\$11,881,614	\$12,535,175	-4.6%
Non Operating Income								
Interest Income	\$77,659	\$59,569	\$60,000	29.4%	\$183,909	\$191,517	\$189,000	-2.7%
Miscellaneous	\$16,713	\$13,991	\$13,753	21.5%	\$29,967	\$24,304	\$24,262	23.5%
Total Non Operating Income	\$94,372	\$73,560	\$73,753	28.0%	\$213,876	\$215,821	\$213,262	0.3%
Total Income	\$5,245,570	\$5,170,010	\$5,508,075	-4.8%	\$12,171,147	\$12,097,435	\$12,748,437	-4.5%
O&M Expenses								
Source of Supply, Water								
Treatment, Pumping, & Storage	\$910,707	\$877,535	\$1,041,714	-12.6%	\$2,657,790	\$2,698,265	\$3,219,639	-17.5%
Engineering & Distribution	\$586,272	\$502,801	\$548,309	6.9%	\$1,641,196	\$1,744,442	\$1,769,675	-7.3%
Customer Service	\$259,685	\$236,484	\$258,502	0.5%	\$802,818	\$818,757	\$860,982	-6.8%
Administration	\$255,111	\$295,287	\$341,417	-25.3%	\$815,170	\$880,873	\$949,368	-14.1%
Total O&M Expenses	\$2,011,775	\$1,912,107	\$2,189,942	-8.1%	\$5,916,974	\$6,142,337	\$6,799,664	-13.0%
Transfer to Debt Service	\$1,750,000	\$1,750,000	\$1,750,000	0.0%	\$5,250,000	\$5,250,000	\$5,250,000	0.0%
Total Expenses	\$3,761,775	\$3,662,107	\$3,939,942	-4.5%	\$11,166,974	\$11,392,337	\$12,049,664	-7.3%
Avail. to Transfer to Oper. Capital	\$1,483,795	\$1,507,903	\$1,568,133	-5.4%	\$1,004,173	\$705,098	\$698,773	43.7%