

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF NORTHERN KENTUCKY)	
WATER DISTRICT FOR APPROVAL OF)	CASE NO. 2017-00265
MADISON PIKE 24 INCH HYDRAULIC)	
REDUNDANCY PROJECT (Phase 2))	
FOR ISSUANCE OF A CERTIFICATE)	
OF CONVENIENCE AND NECESSITY)	

APPLICATION FOR APPROVAL OF CONSTRUCTION

Northern Kentucky Water District (NKWD), by counsel, petitions for an order approving the construction the Madison Pike Project as described below pursuant to KRS 278.020.

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 Rechten, Vice President Finance
2835 Crescent Spring Rd.
Erlanger, KY 41018-0640
(859) 578 9898 Phone
(859) 578-3668 fax
lrechten@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. 807 KAR 5:001(17)(1)(a). There have been no material changes to the financial condition of the

District in the last twelve months. 807 KAR 5:001(12)

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. The District's Water Distribution System Master Plan has identified the need for a hydraulic improvement project along Madison Pike from Dudley Road to Hands Pike, which is broken down into three phases. This overall project is designed to improve flows to the Richardson Road Pump Station and southern end of Kenton County and is in anticipation of a future 1080 pump station. This improvement will also help strengthen and improve redundancy to the industrial area along Madison Pike.

The District's Water Distribution System Master Plan has identified the need for a hydraulic improvement project along Madison Pike from Dudley Road to Hands Pike, which is broken down into three phases for design and construction. The first & third phases of the project are complete. Phase 1 was approved in Case No. 2015-00324, order dated November 23, 2015. Phase 3 was completed in December 2016. Because of the size and nature of this phase, it was treated as an ordinary extension project. The cost was \$846,000 funded with internally available cash. The overall project is designed to improve flows to the Richardson Road Pump Station and the southern end of Kenton County and is in anticipation of a future 1080 pump station to replace the existing Richardson Road Pumping Station. It will also help strengthen and improve redundancy to the industrial area along Madison Pike.

This project is known as Phase 2 and involves the construction of approximately 3,215 linear feet of 30-inch Class 50 ductile iron pipe, and 1,435 linear feet of 24-inch Class 50 ductile iron pipe along Madison Pike from Dudley Pike to Rolling Hills Drive in the City of Covington, Kenton County, Kentucky. This project will replace the existing 16-inch water main along Madison Pike between Dudley Pike and Old Madison Pike, which has

experienced numerous water main breaks. Two paper copies of the Plans and Specifications and one PDF copy are provided. A petition for confidentiality for the Plans and Specification is included. 807 KAR 5:001(2)(a)(c)(d).

6. The project will be funded by BAN 2017, PSC Reference No. 178 “Madison Ave. (Pike) between Dudley and Hands Pike”, as part of the 2017 Five-Year Capital Budget with a total budget of \$3,940,000 (Page 29 of the 5-Year Capital Budget). The total project budget for this phase (Phase 2) is \$1,675,000 which includes construction cost, engineering, materials, and contingencies. A summary of the project costs is provided below:

o	Engineering	\$ 89,422.63
o	Contractor’s Bid	\$ 1,270,875.00
o	Misc. & Contingencies	<u>\$ 314,702.37</u>
	Total Project Cost	\$ 1,675,000.00

Because the BAN is temporary financing for fewer than two years, NKWD believes no approval of the financing is necessary. However, if approval pursuant to KRS 278.300 is needed, such approval is requested. 807 KAR 5:001(15)(2)(e).

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.

8. Easements are not required. DOW permits and Rights of Way statements are attached to exhibit B. 807 KAR 5:001(15)(2)(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 December, 2017. Board approval of the final bids for the project is included in Exhibit C. **Bids for this project were opened on June 1, 2017 and are subject to acceptance for 90 days. Therefore, the bids will expire on August 29, 2017.** Bid tabulations are included in Exhibit C.

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 and the Asset Management Program.

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. 807 KAR 5:001(15)(2)(f).

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 September, 2017 or upon PSC approval. The proposed in-service date is December, 2017. 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 (14)(2):

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 (17):

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 (18)(2):

a. There are no trust deeds. All notes, indebtedness and mortgages are included in Exhibit E.
b. Property is to be constructed is described in Exhibit A.
c. No property is to be acquired. 807 KAR 5:001(18)(2)(c).

27. The following information is provided pursuant to 807 KAR 5:001(12)(2):

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 are listed in Exhibit E.
f. Notes are listed in Exhibit E.
g. Other indebtedness 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.

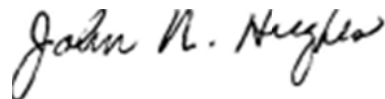
28. USoA plant accounts are included in Exhibit D.

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

30. The State Debt Office has not been notified because no permanent debt is being issued. Notice will be provided when bond financing is approved in a future case.

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

SUBMITTED BY:



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NORTHERN KENTUCKY
WATER DISTRICT

Case No. 2017-00265

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kenton County, Kentucky***

184-0795

NORTHERN KENTUCKY WATER DISTRICT
Proposed 30” & 24” Water Main Replacement Project along Madison
Pike from Dudley Pike to Rolling Hills Drive (Phase 2)
Covington, Kenton County, Kentucky
184-0795

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Project Description

<u>EXHIBIT</u>	<u>TITLE</u>
A	ENGINEERING REPORTS AND INFORMATION (1) 2008 Asset Management Program Update - Project Need (2) Project description (3) Project map (4) Engineer’s opinion of probable total construction cost; (5) System Hydraulic Model (6) Plans prepared by Viox & Viox titled “Proposed 30” & 24” Redundancy Water Main Madison Pike (Phase 2), Dudley Road to Rolling Hills Drive Covington, Kentucky” dated April 1, 2016 (rev.), sealed by a P.E. (7) Specifications prepared by Viox & Viox titled “Proposed 30” & 24” Redundancy Water Main Madison Pike (Phase 2), Dudley Road to Rolling Hills Drive Covington, Kentucky” dated June 2017, 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
C	BID INFORMATION AND BOARD RESOLUTION 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.
E	SCHEDULE OF MORTGAGES, BONDS, NOTES, AND OTHER INDEBTEDNESS
F	CURRENT BALANCE SHEET AND INCOME STATEMENT

NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kenton County, Kentucky***

184-0795

ENGINEERING REPORTS AND INFORMATION

2008 Asset Management Program Update

Project Description

Project Map

Engineer’s Opinion of Probable Total Construction Cost

System Hydraulic Model

Plans prepared by Viox & Viox titled “Proposed 30” & 24” Redundancy Water Main Madison Pike (Phase 2), Dudley Road to Rolling Hills Drive Covington, Kentucky” dated April 1, 2016 (rev.), sealed by a P.E.

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NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kenton County, Kentucky***

184-0795

2008 Asset Management Program Update



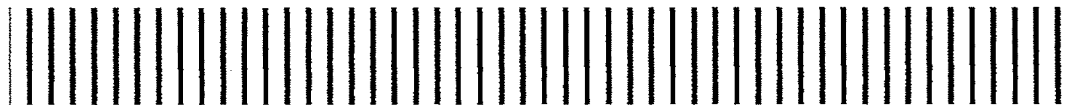
Northern Kentucky Water District

2835 Crescent Springs Rd. • PO Box 18640 • Erlanger, KY 41018-0640

2008 Asset Management Program Update

November 2011

FINAL DRAFT



Report Prepared By:

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4775-011



The Water Division of ARCADIS

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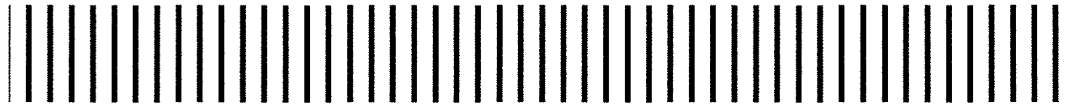
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IV. Identified Needs and Improvements



4.1.6. Project Recommendations

A brief description of all the recommended projects in the 5-Year CIP can be found in Table 4-11 followed by a table of the project costs and projected dates when projects will be needed are presented in Table 4-12. A map of all the recommended improvements is provided as Figure 4-1.

Additionally, in order to provide options within the CIPs, multiple approaches were developed to evaluate the timing of projects, and how this timing affects the capital required to fund the AMP throughout the 20-year planning horizon. These approaches are defined below:

Minimum Approach. The minimum approach includes projects required to meet regulations and replace failing critical assets. The minimum approach also includes what is considered to be a minimum amount of funding for maintenance and repairs just to keep the facilities in operation.

Moderate Approach. The moderate approach includes projects required to meet or exceed regulations, replace aging assets at levels below highest level, and improve reliability. The moderate approach also includes funding for what is considered to be an average level of maintenance and repairs for all facilities.

Aggressive Approach. The aggressive approach includes projects required to exceed regulations, replace all categories of aging assets at highest level and significantly improve reliability at the earliest timeframe practical. The aggressive approach also includes adequate funding for maintenance and repairs required for all facilities as well as funding for unanticipated maintenance.

Appendix F contains the results of this analysis for all recommended improvements from 2009-2030.

**Table 4-11.
5-Year CIP Project Description**

Designation	Description
12-08	<p><u>Madison Ave. Parallel 24-inch Main Between Dudley & Hands Pike</u> This project involves constructing a new large transmission water main along Madison Pike from the existing 42-inch at Dudley Pike to Hands Pike. This project is designed to provide additional water to the Richardson Road Pump Station and Hands Pike Pump Station. The District's newest Master Plan identified this as needed improvement.</p>
12-9	<p><u>Orphanage Rd. Parallel 24-inch Main Between Redwood & Valley Plaza</u> This project involves constructing a 24-inch transmission water main along Orphanage Road from the existing 24-inch at Horsebranch Road between Redwood School and Valley Plaza. This project is designed to provide additional water to the 1040 pressure zone. The District's newest Master Plan identified this as needed improvement.</p>
12-10	<p><u>Hands Pike Between KY16 & Edwin</u> The proposed project involves constructing a new 12-inch water main along Hands Pike from Ky. 16 to Edwin Drive, Covington, Kenton County, Kentucky. The length of this project is approx. 2,500 LF. No new right-of-ways of easements will be needed. This project is designed to strengthen and improve the transmission system and local distribution system to meet population growth and commercial development needs. This project is designed to support existing water systems, improve quality, and improve fire protection in the area. The District's Master Plan identified this as a needed hydraulic improvement.</p>
12-11	<p><u>KY 16 Between Hands Pike & Klette Rd</u> The proposed project involves constructing a new 12-inch water main along Ky. 16 from Hands Pike to Klette Road, Covington/Independence, Kenton County, Kentucky. The length of his project is approx. 3,000 LF. No new right-of-ways of easements will be needed. This project is designed to strengthen and improve the transmission system and local distribution system to meet population growth and commercial development needs. This project is designed to support existing water systems, improve water quality, and improve fire protection in the area. The District's Master Plan identified this as a needed hydraulic improvement.</p>
12-15	<p><u>Highland Avenue 12-inch from Kyles Lane to new reg pit near Hanser pit</u> The proposed project involves constructing a new 12-inch water main along Highland Ave. from Kyles Lane to regulator pit at Hanser Drive in Fort Wright, Kenton County, Kentucky. New right-of-ways of easements may be needed. This project is designed to strengthen and improve the transmission system and local distribution system to meet population growth and commercial development needs. This project is designed to support existing water systems, improve water quality, and improve fire protection in the area. The District's Master Plan identified this as a needed hydraulic improvement.</p>

**Table 4-12
Master List of 5-Year CIP Projects 2009 – 2030**

Designation	Location	Project Description	Cost
11-06	Distribution	2011 Coordinated Main Replacement	\$2,500,000
11-07	Distribution	Subdistrict I Surchage	\$257,576
11-08	Technology	IT Improvements - Year 1	\$175,000
12-01	Rossford	1.0 MG Rossford Elevated Storage Tank	\$3,125,000
12-02	MPTP	MPTP PS Suction Piping	\$1,000,000
12-03	Carothers	Carothers Rd. PS Generator	\$386,678
12-04	FTTP	Residuals Handling Upgrade Project - Design & Construction	\$6,500,000
12-05	WQ&P	Annual General Facility R&R - Plants, Tanks, Pump Stations	\$928,000
12-06	Distribution	Burns Rd. Between Persimmon Grove & Flatwoods	\$1,554,000
12-07	Distribution	KY 1280 Between US 27 & Burns Rd.	\$357,000
12-08	Distribution	Madison Ave. Parallel 24" Main Between Dudley & Hands Pike	\$2,132,000
12-09	Distribution	Orphanage Rd. Parallel 24" Main Between Redwood & Valley Plaza	\$1,390,000
12-10	Distribution	Hands Pike Between KY16 & Edwin	\$608,000
12-11	Distribution	KY 16 Between Hands Pike & Klette Rd	\$613,000
12-12	Distribution	Yearly 2012 Distribution System R & R	\$4,000,000
12-13	Distribution	2012 Mains to Unserved Areas	\$250,000
12-14	Distribution	2012 Coordinated Main Replacement	\$2,500,000
12-15	Distribution	Highland Avenue 12" from Kyles Lane to new reg pit near Hanser pit	\$480,000
12-16	Distribution	KY 16 from I-275 to TM Swim Club upgrade 16" with KDOT project	\$450,000
12-17	Distribution	KY 16 from TM Swim Club to TM Standpipe upgrade 16" with KDOT project	\$350,000
12-18	Technology	IT Improvements - Year 2	\$405,000
13-01	FTTP	FTTP Backwash Tank Replacement	\$782,000
13-02	Dudley	Dudley - Install Isolation Valves	\$345,119
13-03	TM TP PS	Taylor Mill PS Pump Replacement (proposed 1, 5, 6 and 2 or 3)	\$3,731,013
13-04	LRPS	LRPS New Generator & Walkbridge Upgrade	\$4,100,000
13-05	FTTP	Improvements to FTTP Flocculation/Sedimentation Basins 2 & 3	\$2,784,000
13-06	WQ&P	Annual General Facility R&R - Plants, Tanks, Pump Stations	\$888,000
13-07	Distribution	Low Gap Rd. Between Tollgate Rd & 8" Dead End	\$375,000
13-08	Distribution	Interconnect 1080 & 1017	\$1,200,000
13-09	Distribution	Yearly 2013 Distribution System R & R	\$4,000,000
13-10	Distribution	2013 Mains to Unserved Areas	\$250,000
13-11	Distribution	2013 Coordinated Main Replacement	\$2,500,000
13-12	Distribution	US 27 24" from Sunset to Martha Lane Collins	\$1,280,000
13-13	Distribution	Independence Rd. Between KY17 & 12" Pipe	\$115,000
13-14	Technology	IT Improvements - Year 3	\$343,000

NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kenton County, Kentucky***

184-0795

Project Description

**Proposed 30" & 24" Water Main Replacement Project
along Madison Pike from Dudley Pike to Rolling Hills Drive (Phase 2)
Covington, Kenton County, Kentucky
184-0795**

Project Description

The District's Water Distribution System Master Plan has identified the need for a hydraulic improvement project along Madison Pike from Dudley Road to Hands Pike, which is broken down into three phases for design and construction. The first & third phases of the project are complete. The overall project is designed to improve flows to the Richardson Road Pump Station and the southern end of Kenton County and is in anticipation of a future 1080 pump station to replace the existing Richardson Road Pumping Station. It will also help strengthen and improve redundancy to the industrial area along Madison Pike.

This project is known as Phase 2 and involves the construction of approximately 3,215 linear feet of 30-inch Class 50 ductile iron pipe, and 1,435 linear feet of 24-inch Class 50 ductile iron pipe along Madison Pike from Dudley Pike to Rolling Hills Drive in the City of Covington, Kenton County, Kentucky. This project will replace the existing 16-inch water main along Madison Pike between Dudley Pike and Old Madison Pike, which has experienced numerous water main breaks.

Bids for this project were opened on June 1, 2017 and are subject to acceptance for 90 days. Therefore, the bids will expire on August 29, 2017.

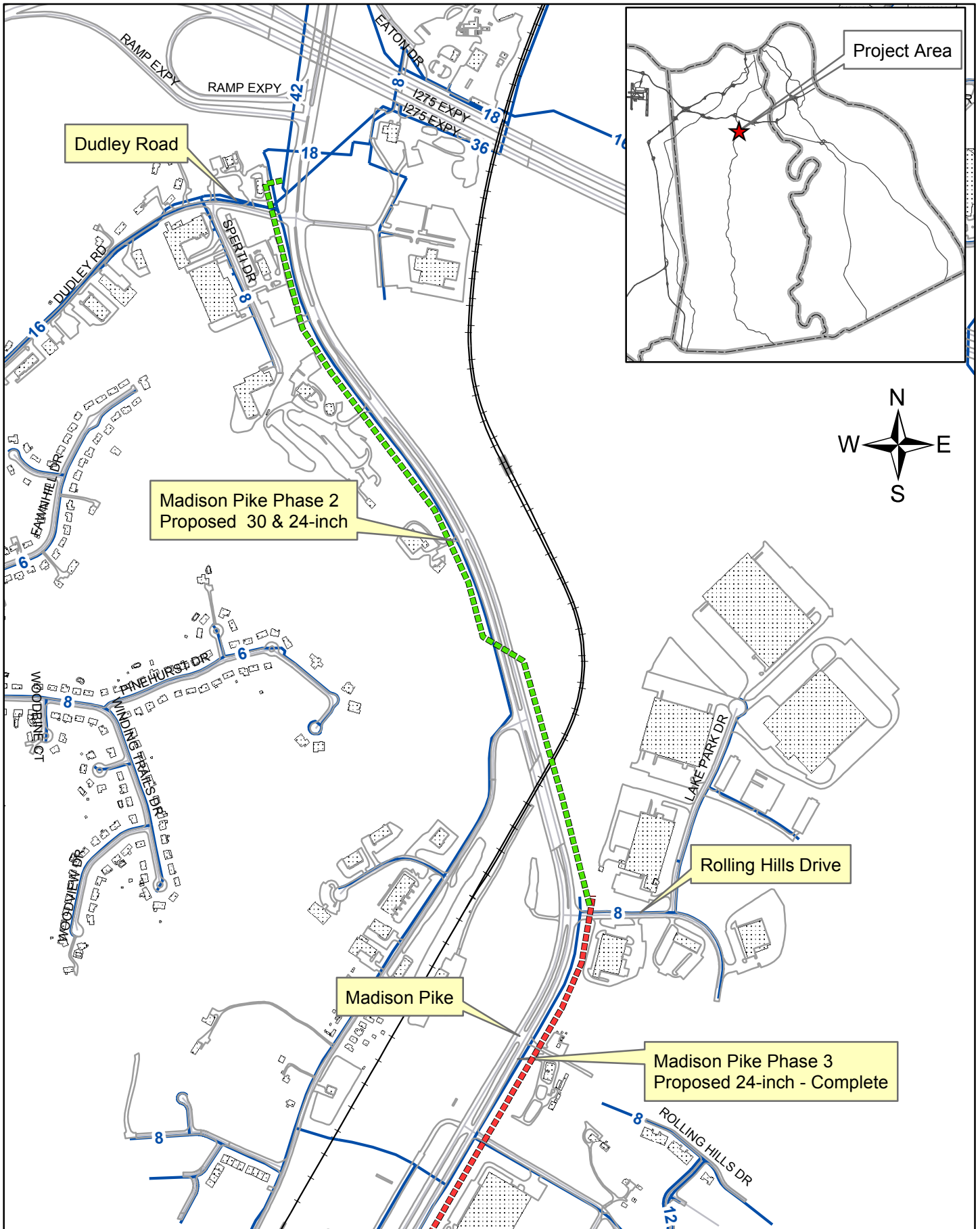
NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kenton County, Kentucky***

184-0795

Project Map



Madison Pike 30 & 24-Inch Water Main - Ph. 2

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky*

184-0795

Engineer’s Opinion
Of Probable
Construction Cost

**PRELIMINARY ENGINEER'S ESTIMATE
MADISON AVE. -PH 2**

{Dudley Pike to Rolling Hills Drive}

Kenton County, KY

ITEM No.	DESCRIPTION	4/07/2016 UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT COST TOTAL	TOTAL COST
1	6.01 16" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	40	\$140.00	\$5,600.00
2	6.01 20" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	10	\$175.00	\$1,750.00
3	6.01 24" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	576	\$150.00	\$86,400.00
4	6.01 30" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	2624	\$240.00	\$629,760.00
5	6.02B 16" Class 50 Ductile Iron Pipe - RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	20	\$175.00	\$3,500.00
6	6.02B 24" Class 50 Ductile Iron Pipe - RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	859	\$180.00	\$154,620.00
7	6.02B 30" Class 50 Ductile Iron Pipe - RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	591	\$288.00	\$170,208.00
8	6.04 36" Steel Casing Pipe By Bore & Jack {0.500 Min. Wall Thickness- KDOT Spec's}	LF	65	\$770.00	\$50,050.00
9	6.04 36" Steel Casing Pipe By Bore & Jack {0.500 Min. Wall Thickness- RAILROAD Spec's}	LF	71	\$770.00	\$54,670.00
10	7.01 Connect to Ex. 20" Main	EA	1	\$7,000.00	\$7,000.00
11	7.01 Connect To Ex. 24" Main	EA	1	\$8,000.00	\$8,000.00
12	8.01 Install Fire Hydrant {HIGH PRESSURE}	EA	1	\$3,900.00	\$3,900.00
13	9.01 16" Resilient Seated Gate Valves	EA	5	\$15,000.00	\$75,000.00
14	9.01 24" Resilient Seated Gate Valves	EA	4	\$18,000.00	\$72,000.00
15	9.01 30" Resilient Seated Gate Valves	EA	1	\$35,100.00	\$35,100.00
16	Bedding & Backfill Per Thelen {See Details 131040E-1 & 131040E-2}	LF	60	\$250.00	\$15,000.00
17	11.05 Air Relief Valves-2" {Materials Supplied By NKWD}	EA	5	\$1,800.00	\$9,000.00
18	11.06 24"x24"x6" Anchoring Tees & Blocks	EA	1	\$3,900.00	\$3,900.00
19	11.06 30"x30"x6" Anchoring Tees & Blocks	EA	1	\$3,900.00	\$3,900.00
20	11.07 16"x16"x16" Tee & Block {Cut Into Ex. 16" Main}	EA	2	\$4,000.00	\$8,000.00
21	11.07 30"x30"x16" Tee & Block	EA	1	\$6,500.00	\$6,500.00
22	11.07 24"x24"x16" Restrained Tee & Block	EA	1	\$2,800.00	\$2,800.00
23	11.04 24"-20" Reducer	EA	1	\$2,200.00	\$2,200.00
24	11.04 30"-24" Reducer	EA	2	\$3,500.00	\$7,000.00
25	11.10 Flushing Device	EA	1	\$1,000.00	\$1,000.00
26	11.11 Test Tap	EA	1	\$1,000.00	\$1,000.00
27	12.05 Asphaltic Concrete Milling & Paving {Detail 103a} {KDOT Spec's}	SY	285	\$50.00	\$14,250.00
28	12.06 Asphaltic Concrete {Trench} {Detail 103a}	SY	1810	\$80.00	\$144,800.00

**PRELIMINARY ENGINEER'S ESTIMATE
MADISON AVE. -PH 2**

{Dudley Pike to Rolling Hills Drive}

Kenton County, KY

ITEM No.	DESCRIPTION	4/07/2016 UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT COST TOTAL	TOTAL COST
29	12.08 Shoulder Restoration - <i>Gravel</i> { <i>KDOT Spec's</i> }	SY	245	\$60.00	\$14,700.00
30	12.08 Shoulder Restoration - <i>Blacktop</i> { <i>KDOT Spec's</i> }	SY	2555	\$120.00	\$306,600.00
31	Bituminous Drive Restoration	SY	95	\$60.00	\$5,700.00
32	Stream Bank Restoration	LS	1	\$3,000.00	\$3,000.00
33	Striping	LS	1	\$1,000.00	\$1,000.00
34	Cathodic Management & Inspection	LS	1	\$106,640.00	\$106,640.00
35	12.14 Best Management Practice { SWPPP }	LS	1	\$20,000.00	\$20,000.00
TOTAL ESTIMATED CONTRACTOR					\$ 2,034,548.00

NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kenton County, Kentucky***

184-0795

System Hydraulic Model

Northern Kentucky Water District

August 10, 2016

Division of Water
Drinking Water Branch
200 Fair Oaks Lane
Fourth Floor
Frankfort, KY 40601

Re: Madison Pike 30" and 24" Redundancy Water Main Phase 2, Covington, Kenton Co., KY

To Whom It May Concern:

This is to indicate that the above referenced project was initiated by the Northern Kentucky Water District. The project has been reviewed by the District and the necessary water for domestic use is available and will be supplied under normal conditions, and the District shall accept maintenance of this project.

The District cannot approve this project under Agreed Order No. DWO 06008 since the water main is greater than 12" in diameter.

If there are questions, please do not hesitate to contact me at 859-426-2713.

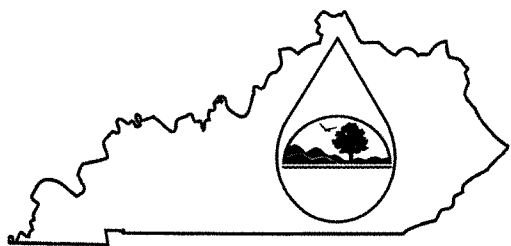
Thank you,



Kyle Ryan
Engineering Supervisor

cc: file

Enclosed: Form DW-1
U.S.G.S. 7 ½ minute topographic map
Hydraulic Analysis
2 Sets of Full Size Plans
CD containing PDFs of plans



Commonwealth of Kentucky
 Energy and Environment Cabinet
Division of Water

**Construction Application
 For Drinking Water Distribution**

See the instructions for more information about selected portions of this checklist.

Questions on completing this checklist? Contact the Water Infrastructure Branch at 502/564-3410 or visit our website at <http://www.water.ky.gov/dw> for more information.

I. Construction Project Information

Project Name: Madison Pike 30" & 24" Redundancy Water Main Phase 2

Project County: Kenton Estimated Project Cost: \$ 2,113,730

Project Latitude/Longitude (DMS): 39° 00' 58.287"N / 84° 31' 45.7962"W

11 Digit Hydrologic Unit Code (HUC): 00

Is this a federally funded project:

DWSRF

SPAP

Other: No

If yes, has an Environmental Information Document been reviewed and approved? N/A

If the project has been submitted to the State Clearinghouse for review, provide the SAI number: N/A

Identify all other funding sources: NKWD

Does the project contain any of the following:

Booster Pump Stations

Water Storage Tanks

Waterlines

Waterline Material	Waterline Size	Linear Feet
Ductile Iron	16"	72
Ductile Iron	24"	1,273
Ductile Iron	30"	3,377

Provide a brief description of the work to be performed for waterlines less than 10,000 linear feet. All other distribution projects should be accompanied by a DETAILED project description. Construction of a 30" and 24" ductile iron water main along Madison Pike, from Dudley Road to Rolling Hills Drive in Northern Kenton County.

Identify how the sanitary wastewater produced as a result of this project will be handled:

- Sanitary Sewer WWTP: Sanitation District No. 1
- Septic Tank
- Other: _____

II. Utility Information

Utility Name: Northern Kentucky Water District PWSID: 0590220
 Street Address: 2835 Crescent Springs Road County: Kenton
 City, State, Zip: Erlanger, KY, 41018
 Phone: 859-578-9898 Fax: 859-578-7893 Email: kryan@nkywater.org

If another utility will serve any portion of the proposed project, provide the name and PWSID No.

Utility Name: _____ PWSID No. _____

If the utility serving the project purchases water from another utility, provide the name and PWSID No. and purchase contract amount.

Utility Name: _____ PWSID No. _____ Purchase Contract Amount: _____

Utility Name: _____ PWSID No. _____ Purchase Contract Amount: _____

Utility Name: _____ PWSID No. _____ Purchase Contract Amount: _____

Is the system currently under any type of waterline or sewer sanctions? No

If yes, submit an exception request and attach supporting documentation to justify its approval.

III. Design Considerations

A. Plans and Specifications

Plans and specifications shall comply with 401 KAR 8:100 and “Recommended Standards for Water Works” (Ten States’ Standards). All plans must contain a P.E. seal, signature and date of signature with at least one set having an original seal and signature.

Plans and specifications submittals shall meet one of the following options:

- At least **two** printed sets of detailed plans (**no larger than 24” X 36”**) and a PDF copy of the plans and specifications on CD/DVD. The PDF copy shall contain a PE seal, signature and date. The plans on the CD/DVD shall be in a folder named “Engineering Plans” and the specifications manual shall be in a folder named “Specifications”.
(preferred)
- At least **2** printed sets of detailed plans (**one shall be no larger than 24” X 36” and the other set shall be 11” X 17”**) and **one** printed copy of the specifications manual.

B. Design Engineer

Name: James H. Viox, III, P.E., PLS Firm: Viox & Viox

Street Address: 466 Erlanger Road

City, State, Zip: Erlanger, KY 41018

Phone #: 859-727-3293 Fax #: 859-727-8452 Email: metingher@vioxinc.com

Design Capacities

Identify the number of new connections and the projected average daily demand: No new connections

Identify the number of existing residents, and their projected water demand, that may be served as a result of this project:

4 existing Customers/ 58.8 GPM

Identify the number of connections in the service area: 81,000

Other Information to be Submitted with the Project

- 1. Provide a copy of the U.S.G.S. 7 ½ minute topographic map with the location(s) of the proposed project.
- 2. If the project includes a new or upgraded pump station(s), provide the pump sizing calculations and the proposed pump's characteristics curve along with the efficiency, horsepower and NPSHR data. Also, identify each pump station's locations coordinates (DMS).
- 3. If the project proposes the addition of storage tanks, provide engineering calculations which demonstrates a complete fill and drain cycle every 72 hours. Also, identify each storage tank's location coordinates (DMS).
- 4. Provide engineering calculations or an electronic model demonstrating the availability of 30 psig in the waterline under peak demand conditions.
- 5. Provide engineering calculations or an electronic model that demonstrates if the proposed waterlines are capable of a 2.5 ft/sec flow velocity and show associated residual system pressures.
- 6. Provide a signed letter of acceptance from the utility, which states that the utility has reviewed and approved the plans and specifications and agrees to serve the proposed project upon completion. If another utility will own, operate and maintain any portion of this project provide an acceptance letter from that utility as well.
- 7. If the utility is a purchaser and the project demand is over 10,000 gallons per day or the utility has exceeded 85% of its purchase contract, provide a valid acceptance letter from the seller.
- 8. If the project will provide water service to existing residences, provide the names and addresses of all existing residences to be served by the project, if known.
- 9. If the project is funded by a State Revolving Fund Loan (SRF) provide a completed SRF Plans and Specifications Checklist along with 1 complete printed copy of the project specifications.

IV. Environmental Benefits

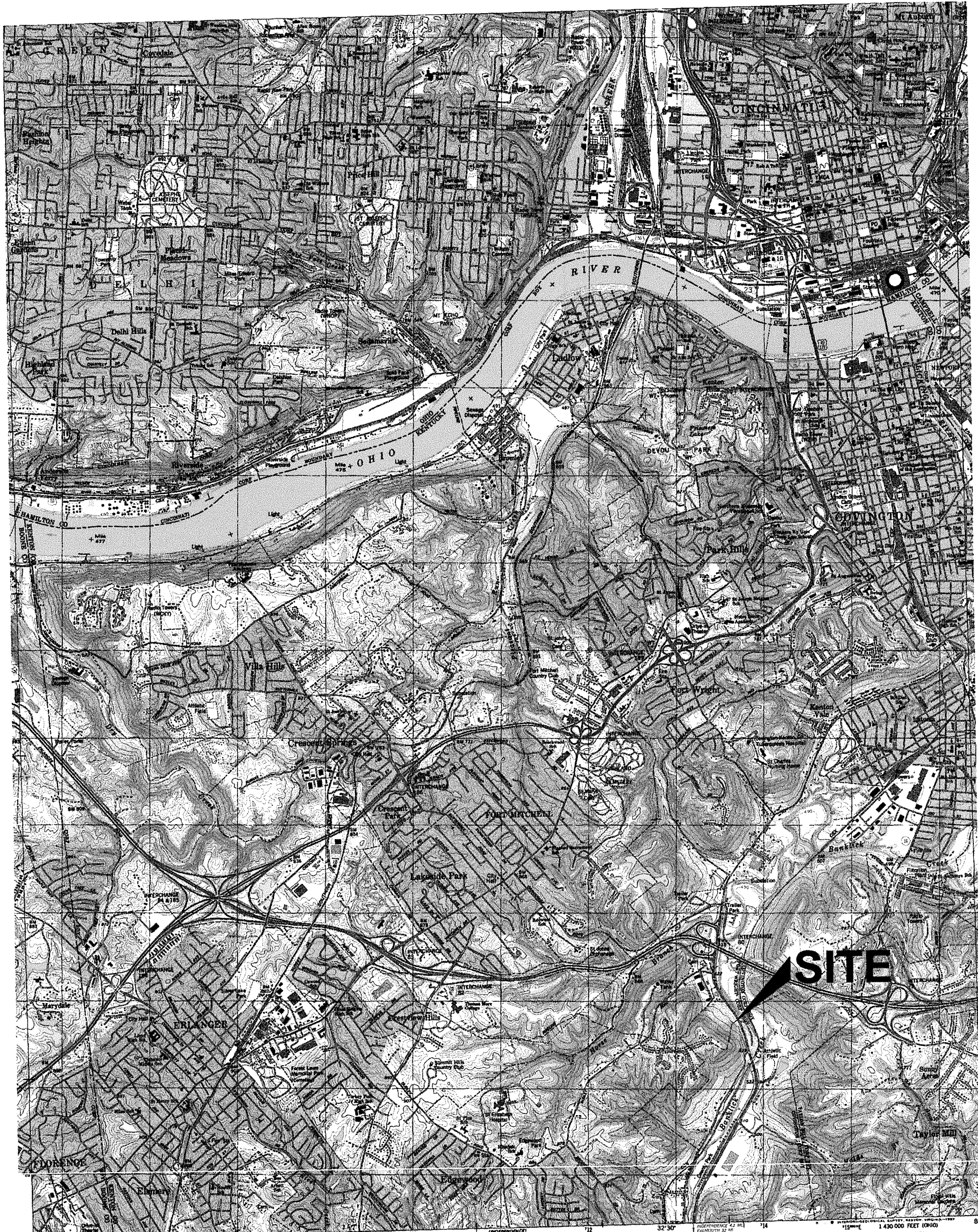
Identify the environmental benefit(s) of the project by checking all that apply.

- Construction of new waterlines serving existing residences previously without public water.
- Modifies/upgrades existing waterlines:
 - Inadequately sized waterlines.
 - Leaks, breaks, restrictive flow.
 - Replaces lead, copper or asbestos cement waterlines.
 - Other: Redundant / Hydraulic Improvement
- Provides fire protection.
- Replaces tanks/pumps due to age/condition.
- Installation of high efficiency/energy saving pumps.
- Other. Provide a brief description in the space below. _____

V. Fees

Check or money order must be made payable to "Kentucky State Treasurer" for the total amount. Fees do not apply to projects FUNDED by a municipality, water district, or other publicly owned utility.

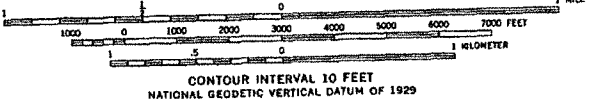
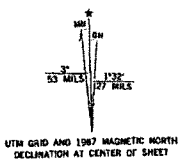
Project Category: _____ Total Amount: \$ _____



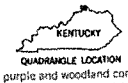
SITE

39°00' 84°33'30" 1 900 000 FEET (KY.) 10 35' 10 110 120 32'30" 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 1 430 000 FEET (OHIO) 84°30'

Mapped, edited, and published by the Geological Survey
 Control by USGS, NOS/NOAA, USCE, and the city of Cincinnati
 Topography by photogrammetric methods from aerial photographs taken 1969, and
 in part by the city of Cincinnati. Field checked 1950 and 1953. Revised from
 aerial photographs taken 1977. Field checked 1978. Map edited 1981
 Polyconic projection. 10,000-foot grid ticks based on Kentucky coordinate system,
 north zone, and Ohio coordinate system, south zone
 1927 North American Datum
 To place on the projected North American Datum 1983
 move the projection lines 3 meters south and
 5 meters west as shown by dashed corner ticks
 Fine red dashed lines indicate selected fence and field lines where
 generally visible on aerial photographs. This information is uncheckered
 Red tint indicates areas in which only landmark buildings are shown
 Ohio area files within the Between the Miami Land files based on the
 Great Miami River Base. Dotted land lines established by private
 subdivision of the Symmes Purchase



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U. S. GEOLOGICAL SURVEY
 DENVER, COLORADO 80225 OR RESTON, VIRGINIA 22092
 KENTUCKY GEOLOGICAL SURVEY, LEXINGTON, KENTUCKY 40506,
 AND KENTUCKY DEPARTMENT OF COMMERCE, FRANKFORT, KENTUCKY 40601
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



Revisions shown in purple and woodland compiled in cooperation
 with State of Kentucky agencies from aerial photographs taken 1984
 and other sources. Contours not revised. This information not field checked
 Map edited 1987
 Purple tint indicates extension of urban areas

ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route	U. S. Route
	State Route

COVINGTON, KY.-OHIO
 88/4 WEST CINCINNATI 19 QUADRANGLE
 39084-AS-TF-024

1981
 PHOTOREVISED 1997
 DMA 4082 II B2-SERIES Y85



FIRE FLOW CERTIFICATION

**Madison Pike 30-Inch & 24-Inch
Hydraulic Redundancy - Phase 2
City of Covington
Kenton County, KY
August 9, 2016**

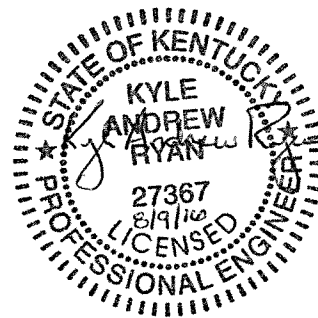
I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing 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 Innovyze. 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

**Madison Pike 30-Inch & 24-Inch
Hydraulic Redundancy - Phase 2
City of Covington
Kenton County, KY
August 9, 2016**

I certify that the proposed improvements are capable of meeting the American Water Works Association Standard C651-14 standard for flushing velocity in the main meeting 3.0 feet per second while maintaining at least 20 psi pressure in accordance with 401 KAR 8:100.

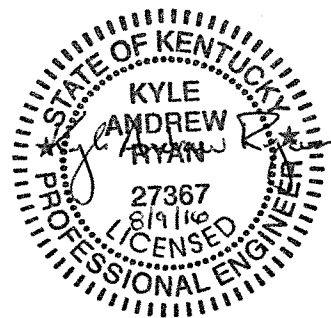
The maximum flow rate that can reliably be supplied to the main and meet 20 psi in the system under maximum hour conditions is 4,230 gpm. At least 30 psi can be maintained under the peak domestic demand for the 4 affected businesses along this portion of Madison Pike. There are no residential customers along this portion of Madison Pike. The peak domestic demand using past metered usage for the 4 affected businesses along this portion of Madison Pike was estimated at 58.8 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 Innovyze. 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 Dudley Tanks was one-half full.



Madison Pike 30-Inch & 24-Inch
 Hydraulic Redundancy - Phase 2
 Covington
 Kenton County, Kentucky
 Output from InfoWater model - copied to Excel
 August 9, 2016



Maximum Hour Run for Potential Customers

Maximum Hour Run, 0 affected Residential Customers = 0 GPM				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J196	0.0	520	865.8	149.8
J204	27.1	523	865.6	148.5
J206	6.6	520	865.5	149.7
J208	22.3	507	865.3	155.2
J210	2.8	515	865.0	151.7
J202	0.0	538	864.6	141.5
J200	0.0	519	864.6	149.8

1.5" Service @ #6 SPERTI DR
 1" Service @ #3610 MADISON PIKE
 2" Service @ #3636 MADISON PIKE
 1" Service @ #3650 MADISON PIKE

Flushing Velocities Under Maximum Hour

Flushing velocity 3.0 fps for new 30" & 24" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J196	0.0	520	863	149
J204	27.1	523	863	147
J206	6.6	520	862	148
J208	22.3	507	861	153
J210	2.8	515	860	149
J202	0.0	538	858	139
J200	4230.0	519	856	146

1.5" Service @ #6 SPERTI DR
 1" Service @ #3610 MADISON PIKE
 2" Service @ #3636 MADISON PIKE
 1" Service @ #3650 MADISON PIKE

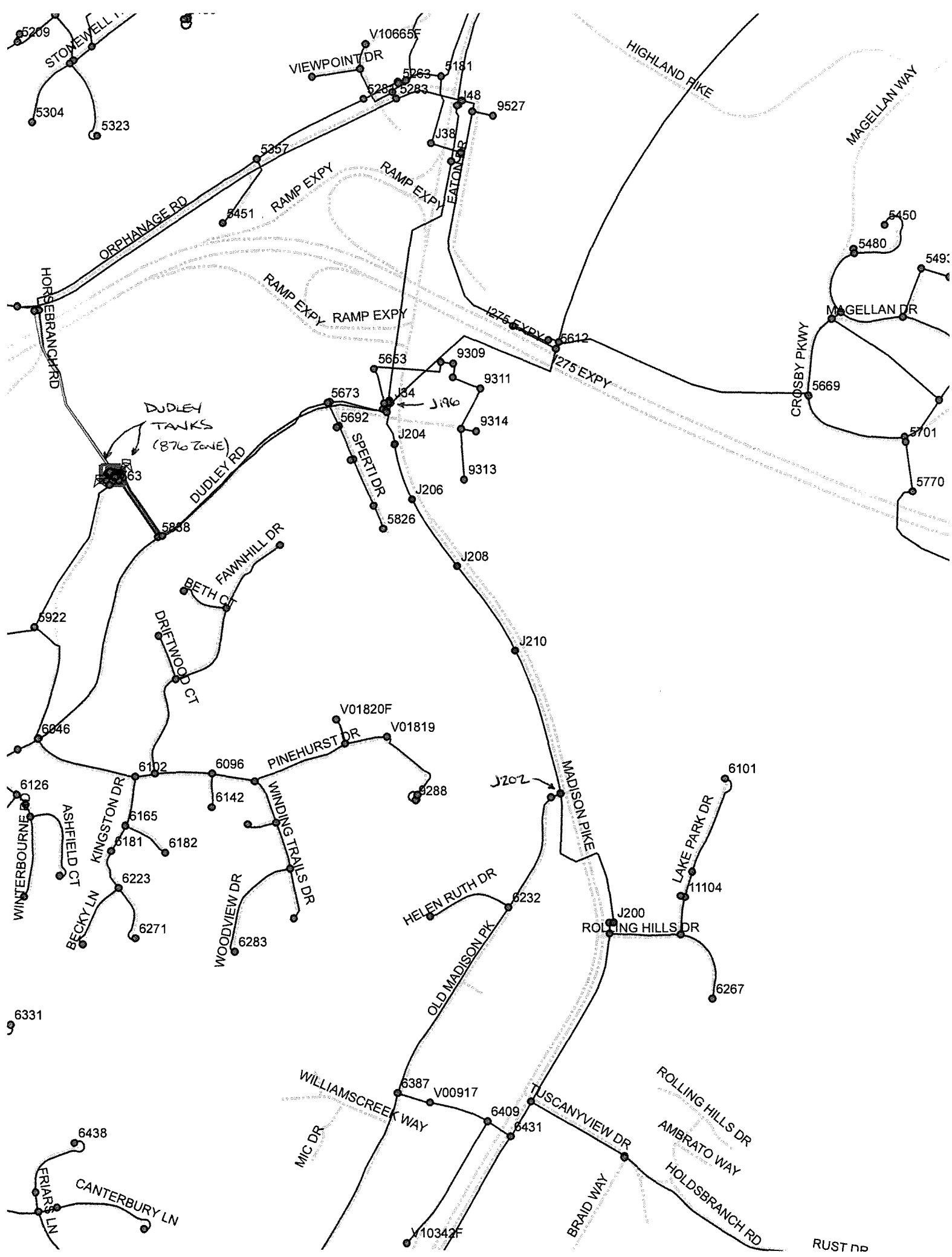
Pipe Information for flushing velocity at 3.0 fps for new 30" & 24" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
P339	347	30	7725	3.5	120
P345	454	30	7698	3.5	120
P347	626	30	7691	3.5	120
P349	801	30	7669	3.5	120
P351	1158	30	7666	3.5	120
P343	1343	24	4230	3.0	120

Maximum Available Flow Under Maximum Hour

Maximum Hour Run, Maximum Available Flow				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
J196	0.0	520	863.3	148.8
J204	27.1	523	862.8	147.2
J206	6.6	520	862.1	148.2
J208	22.3	507	861.2	153.5
J210	2.8	515	860.0	149.5
J202	0.0	538	858.3	138.8
J200	4230.0	519	856.3	146.2

1.5" Service @ #6 SPERTI DR
 1" Service @ #3610 MADISON PIKE
 2" Service @ #3636 MADISON PIKE
 1" Service @ #3650 MADISON PIKE

Pipe ID	From Node	To Node
P339	J196	J204
P345	J204	J206
P347	J206	J208
P349	J208	J210
P351	J210	J202
P343	J202	J200



NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky***

184-0795

Plans titled “NKWD – Proposed 30” & 24” Water Main Replacement Project along Madison Pike from Dudley Road to Rolling Hills Drive (Phase 2), Covington, Kentucky” dated April 1, 2016, sealed by a P.E.

(Included as a separate file)

NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky***

184-0795

Specifications titled “Proposed 30” & 24” Water Main Replacement Project along Madison Pike from Dudley Road to Rolling Hills Drive (Phase 2), Covington, Kenton County, Kentucky” dated June 2017, sealed by a P.E.

(Included as a separate file)

NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky***

184-0795

CERTIFIED STATEMENTS

Affidavit

Franchises

Plan Review and Permit Status

Easements and Right-of-Way Status

Construction Dates and Proposed Date In Service

Plant Retirements

NORTHERN KENTUCKY
WATER DISTRICT

Project

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184-0795

Affidavit

AFFIDAVIT

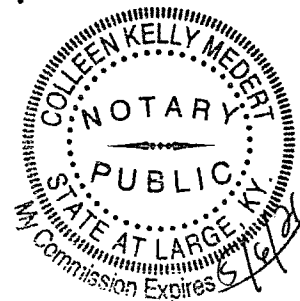
**Proposed 30" & 24" Water Main Replacement Project along Madison Pike from Dudley Pike to Rolling Hills Drive (Phase 2)
Covington, Kenton County, Kentucky**

Affiant, Stacey Kampsen, being the first duly sworn, deposes and says that she is the Finance Manager of the Northern Kentucky Water District, which she is the Applicant in the proceeding styled above; that she has read the foregoing "Proposed 30" & 24" Water Main Replacement Project along Madison Pike from Dudley Pike to Rolling Hills Drive (Phase 2) 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.

Stacey Kampsen
Stacey Kampsen
Finance Manager
Northern Kentucky Water District

Subscribed and sworn to before me in said County to be her act and deed by
Stacey Kampsen, Finance Manager of the Northern Kentucky Water District, this
30th day of JUNE 2017.

Colleen Kelly Medert
NOTARY PUBLIC
Kenton County, Kentucky
My commission expires 5/6/21
486788



NORTHERN KENTUCKY
WATER DISTRICT

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184-0795

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 titled “Proposed 30” & 24” Redundancy Water Main Madison Pike (Phase 2), Dudley Road to Rolling Hills Drive Covington, Kentucky” dated April 1, 2016 (rev.), sealed by a P.E.

See attached permit letters for:

- Kentucky Division of Water on September 23, 2016.
- Kentucky Department of Transportation on October 24, 2016
- Kentucky Pollutant Discharge Elimination System on July 19, 2016.
- Sanitation District #1 Grading Permit on October 6, 2016.
- Water Quality Certification on April 23, 2015.

Easements and Right-of-Way Status – No Easements were needed for this project and all right-of-way statements have been submitted.

See attached agreement for:

- CSX Transportation Inc.

Start date of construction – September 2017

Proposed date in service – December 2017

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

NORTHERN KENTUCKY
WATER DISTRICT

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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

Aaron B. Keatley
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

September 23, 2016

Mr. Kyle Ryan
Northern KY Water District
2835 Crescent Springs Rd
Erlanger, KY 41018

RE: Northern KY Water District
AI # 2485, APE20160007
PWSID # 0590220-16-007
Madison Pike 30" & 24" Redundancy Water
Main Phase 2
Campbell County, KY

Dear Mr. Ryan:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 72 LF of 16-inch DI, 1,273 LF of 24-inch DI, and 3,377 LF of 30 -inch DI waterline. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the attached construction permit.

If you have any questions concerning this project, please contact Mr. Fred Sarabi at 502-782-7058.

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:FS

Enclosures

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

NORTHERN KENTUCKY
WATER DISTRICT

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PLAN REVIEW AND PERMIT STATUS

Permit from Kentucky Department of Transportation



Kentucky Transportation Cabinet
 Department of Highways
 Division of Maintenance
 Permits Branch

ENCROACHMENT PERMIT

KEPT No.: 06-2016-01017

Permittee: Northern Kentucky Water District

Permit Type / Subtype: Utilities / Water

Work Completion Date: 10/24/2017

INDEMNITIES		
Type	Amount Required	Tracking Number
Performance Bond	\$0.00	
Cash / Check	\$0.00	
Self-Insured	\$50,000.00	41018
Payment Bond	\$0.00	
Liability Insurance	\$0.00	

This permit has been: **APPROVED** **DENIED**

Matthew Bogen	D6 Permits - Supervisor	10/24/2016
SIGNATURE	TITLE	DATE

The TC 99-1(B), including the application TC-99 1(A) and all related and accompanying documents and drawings make up the permit. It is not a permit unless both the TC 99-1(A) and TC 99-1(B) are both present.

LOCATION(S)			
Description	County - Route	Latitude	Longitude
Water main replacement	Kenton - KY 17	39.014823	-84.529092

NORTHERN KENTUCKY
WATER DISTRICT

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Covington, Kentucky*

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PLAN REVIEW AND PERMIT STATUS

Coverage Acknowledgement from Kentucky Division of Water KPDES KYR10



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

July 19, 2016

John Scheben
Northern KY Water District
PO Box 18640
Erlanger, KY 41018

Re: KYR10 Coverage Acknowledgment
KPDES No.: KYR10K706
Madison Pike Water Main Phase 2
Permit Type: Construction
AI ID: 126732
Kenton County, Kentucky

Dear John Scheben:

The discharges associated with the Notice of Intent you submitted have been approved for coverage under the "Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Storm Water Discharges Associated with Construction Activities (KYR100000)" master general permit. Your coverage becomes effective on the date of this letter, and will automatically terminate two years from the effective date of your coverage unless an extension is requested prior to the termination date, until the KYR100000 master general permit expires on November 30, 2019, or the Division of Water revokes coverage, whichever comes first. During this period of coverage all discharges shall comply with the conditions of the KYR100000 master general permit. This permit and links to the eNOI (and permit coverage extension) and eNOT forms can be found on our website:

<http://dep.ky.gov/formslibrary/Documents/KYR10PermitPage.pdf>.

Any questions concerning the general permit and its requirements should be directed to me at (502) 564-3410.

Construction Site GPS Coordinates: 39.02582 , -84.53498
Receiving Water: Sanitation District No 1

Sincerely,

A handwritten signature in black ink that reads "Justina Riddick".

Justina Riddick
Surface Water Permits Branch
Division of Water

NORTHERN KENTUCKY
WATER DISTRICT

Project

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PLAN REVIEW AND PERMIT STATUS

Grading Permit from Sanitation District #1



October 6, 2016

Mr. Steve Broering
Northern Kentucky Water District
P. O. Box 18640 2835 Crescent Springs Road
Erlanger, KY 41018

**RE: NKWD-Madison Pike Water Main Replacement Phase 2
Grading Permit – GRP-16-08-009**

Dear Mr. Boering:

Your application for a Grading Permit for the NKWD-Madison Pike Water Main Replacement Phase 2 Project has been reviewed and approved by SD1 under Permit number GRP-16-08-009.

In no event shall SD1's issuance of this permit be construed as relieving you from obtaining all other applicable local, state or federal permits and/or licenses prior to performing any land disturbing activities.

The person named on the permit (permittee) has agreed to comply with all applicable SD1 Rules and Regulations. This permit must be retained by the permittee and made available for review upon request.

Upon completion of this project a Notice of Termination must be submitted to SD1. All erosion protection and sediment control best management practices (e.g., silt fence, sediment basins, etc.) installed on the site must be removed and permanent vegetation established before SD1 will approve any Notice of Termination.

Please contact SD1's Environmental Compliance Administrator, Andy Aman, at 859-578-6880 at least 72 hours prior to beginning any land disturbing activities to schedule an onsite pre-construction meeting.

This permit shall remain valid for two years from the date of this approval letter. Once work begins, appropriate and timely progress towards completion of work must occur. If the site becomes inactive for one year, this permit becomes void.

If you have any questions or comments regarding this notice, please contact me at 859-578-6881 or by email at wplunkett@sd1.org.

Sincerely,



William A. Plunkett, P. E.
Environmental Engineer
Integrated Watershed Management, Development Services

cc: Planning and Development Services of Kenton County
Viox & Viox, Inc.

NORTHERN KENTUCKY
WATER DISTRICT

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184-0795

PLAN REVIEW AND PERMIT STATUS

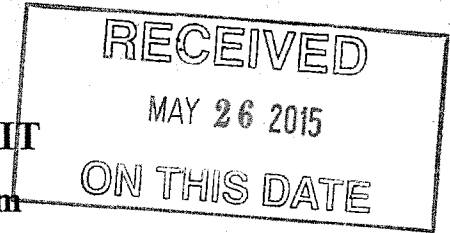
Permit from Kentucky Division of Water Flood Plain Management Section



STEVEN L. BESHEAR
GOVERNOR

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
200 FAIR OAKS LANE, 4TH FLOOR
FRANKFORT, KENTUCKY 40601
www.kentucky.gov

LEONARD K. PETERS
SECRETARY



STREAM CONSTRUCTION PERMIT
For Construction In Or Along A Stream

Issued to: Northern KY Water District
Address: PO Box 18640
Fort Thomas, KY 41075

Permit expires on
April 23, 2016

Permit No. 21358

In accordance with KRS 151.250 and KRS 151.260, the Energy and Environment Cabinet approves the application dated **March 13, 2015** for construction of approximately 60 LF of concrete encased 24" ductile iron water main in the floodplain of Banklick Creek, with coordinates 39.016191, -84.529388, in Kenton County. AI: 46164

There shall be no deviation from the plans and specifications submitted and hereby approved unless the proposed change shall first have been submitted to and approved in writing by the Cabinet. This approval is subject to the attached limitations. **Please read these limitations carefully!** If you are unable to adhere to these limitations for any reason, please contact this office prior to construction.

This permit is valid from the standpoint of stream obstruction only. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal and local agencies. Specifically if the project involves work in a stream, such as bank stabilization, dredging, relocation, or in designated wetlands, a 401 Water Quality Certification from the Division of Water will be required.

This permit is nontransferable and is not valid unless actual construction of this authorized work is begun prior to the expiration date noted above. Any violation of the Water Resources Act of 1966 as amended is subject to penalties as set forth in KRS 151.990.

If you have any questions regarding this permit, please call Mr. Ross Bishop at (502) 564-3410.

Issued April 23, 2015.

Todd Powers, P.E., Supervisor
Floodplain Management Section
Surface Water Permit Branch

TAP/RB/

pc: Columbia Regional Office, Florence Regional Office
Martin Scribner - Kenton County Floodplain Coordinator
Justin Verst, PE- Viox & Viox, Inc.
Mary Etingher, Agent- Viox & Viox, Inc.
Steve Broering- Northern Kentucky Water District
File

NORTHERN KENTUCKY
WATER DISTRICT

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184-0795

EASEMENTS AND RIGHT-OF-WAY STATUS

CSX Transportation Inc. Agreement



Jessica Braig
Contract Specialist

6737 Southpoint Drive South, Bldg 1
Jacksonville, FL 32216
904-279-3881
Jessica_Braig@csx.com

September 17, 2015

Mr. Brendan O'Bryan
Northern Kentucky Water District
2835 Crecent Springs Road
Erlanger, KY 41018

Agreement No.: CSX788676

Dated: August 10, 2015

Dear Mr. Brendan O'Bryan,

Attached is the fully-executed Agreement of the above reference file.

In accordance with this Agreement, Agreement Holder is responsible for paying the actual cost of CSXT flagging and/or support services, including all applicable surcharges (collectively "Fees").

No work is to be performed on CSXT property without Roadmaster's authorization.

It is your responsibility to schedule any work on CSXT property with CSXT Outside Services. To schedule the work, complete and follow the instructions on the attached Outside Party Number Request Form.

It was a pleasure assisting you with this project and we look forward to working with you in the future.

Should there be any questions, please feel free to give us a call at the above referenced number.

Sincerely,

Jessica Braig

Attachement



Instructions:

Please fill out sections 2-4 then submit to the Flagging Coordinator via email or fax.

Flagging Coordinator

E-Mail: op_request@csx.com

Fax: 904.245.3692

Telephone: 904.279.3805

Flagging/Inspection (Responsibility of Agreement Holder)

Estimated Average Cost

Flagging: \$1,000 per day (minimum 8 hours)

Inspection: \$1,500 per day

1. Important Information

The estimated flagging and inspection cost is based on average cost for 8 hours regular time on CSX work days. Overtime rates will apply for hours beyond 8 hours per day or beyond 40 hours per week for railroad personnel. Inspection costs will include inspector's project time, travel time, expenses, per diem, project management cost for scheduling, means and methods review, coordinating, and general account administration. Other railroad costs may include signal locates, material, rental equipment, burden and tax. The above references flagging and inspection costs are estimates only and will be billed after the project commencement.

In the event local flagging services are not available at the time of your request, flagging resources from outside the geographical area of your project may be assigned at extra cost to the Agreement Holder/Project Owner. The cost of flagging services vary based on factors including but not limited to, type of project, duration of project, utilization of local or out-of-town flagging personnel, etc.

2. Project Contact Information

Contact Name: _____
Company Name: _____
Address: _____
City_State_Zip: _____
Phone: _____
Email: _____

3. Billing Contact Information (Agreement Holder/Facility Owner)

Contact Name: _____
Company Name: Northern Kentucky Water District
Billing Address: _____
City_State_Zip: _____
Phone: _____
Email: _____

4. Project Information

Agreement Number: CSX788676 Agreement Date: 8/10/2015
City/County/ST/Mile: Covington, Kenton County, Kentucky, Milepost 00T-102.42
Request Start Date: _____
Duration in Days: _____
Project Description: _____

jack and bore 30" steel casing for 24" water main. located at mp 00T-102.42 val sta 5577+10

5. CSX Use Only:

Road Master (RM): _____ Signal Manager: _____
RM Email: _____ Signal Mgr. Email: _____
RM Phone: _____ Signal Mgr. Phone: _____
Division: _____ Subdivision: _____

Additional Documents Needed _____

Special Billing Instructions

Contractor Must Provide CGL: No CGL Expiration Date: 1/1/2016
RPL Insurance: Paid Contractor Must Provide RPL: No
Inspector Required? Yes Proj. Cord. Fee Paid? No OP# _____ Valid Thru _____

FACILITY ENCROACHMENT AGREEMENT

THIS AGREEMENT, made and effective as of August 10, 2015, by and between CSX TRANSPORTATION, INC., a Virginia corporation, whose mailing address is 500 Water Street, Jacksonville, Florida 32202, hereinafter called "Licensor," and NORTHERN KENTUCKY WATER DISTRICT, a municipal corporation, political subdivision or state agency, under the laws of the Commonwealth of Kentucky, whose mailing address is 2835 Crescent Springs Road, Po Box 18640, Erlanger, Kentucky 41018, hereinafter called "Licensee," WITNESSETH:

WHEREAS, Licensee desires to construct (unless previously constructed and designated as existing herein), use and maintain the below described facility(ies), hereinafter called "Facilities," over, under or across property owned or controlled by Licensor, at the below described location(s):

1. One (1) twenty-four inch (24") diameter pipeline crossing, solely for the conveyance of potable water, located at or near Covington, Kenton County, Kentucky, Louisville Division, Louisville Cincinnati Subdivision, Valuation Station 5577, Milepost 00T-102.42, Latitude N39:00:59.91, Longitude W84:31:46.69;

hereinafter, called the "Encroachment," as shown on print(s) labeled Exhibit "A," attached hereto and made a part hereof;

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

1. LICENSE:

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

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

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

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

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

1.2 The term Facilities, as used herein, shall include only those structures and ancillary facilities devoted exclusively to the transmission usage above within the Encroachment, and as shown on attached Exhibit A.

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

2. ENCROACHMENT FEE; TERM:

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

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

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

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

3. CONSTRUCTION, MAINTENANCE AND REPAIRS:

3.1 Licensee shall construct, maintain, relocate, repair, renew, alter, and/or remove the Facilities, in a prudent, workmanlike manner, using quality materials and complying with any applicable standard(s) or regulation(s) of Licensor (CSXT Specifications), or Licensee's particular industry, National Electrical Safety Code, or any governmental or regulatory body having jurisdiction over the Encroachment.

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

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

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

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

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

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

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

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

4. PERMITS, LICENSES:

4.1 Before any work hereunder is performed, or before use of the Encroachment for the contracted purpose, Licensee, at its sole cost and expense, shall obtain all necessary permit(s) (including but not limited to zoning, building, construction, health, safety or environmental matters), letter(s) or certificate(s) of approval. Licensee expressly agrees and warrants that it shall conform and limit its activities to the terms of such permit(s), approval(s) and authorization(s), and shall comply with all applicable ordinances, rules, regulations, requirements and laws of any governmental authority (State, Federal or Local) having jurisdiction over Licensee's activities, including the location, contact, excavation and protection regulations of the Occupational Safety and Health Act (OSHA) (29 CFR 1926.651(b)), et al., and State "One Call" - "Call Before You Dig" requirements.

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

5. MARKING AND SUPPORT:

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

- (A) support track(s) and roadbed in a manner satisfactory to Licensor;
- (B) backfill with satisfactory material and thoroughly tamp all trenches to prevent settling of surface of land and roadbed of Licensor; and
- (C) either remove any surplus earth or material from Licensor's property or cause said surplus earth or material to be placed and distributed at location(s) and in such manner Licensor may approve.

5.2 After construction or maintenance of the Facilities, Licensee shall:

- (A) Restore any track(s), roadbed and other disturbed property; and
- (B) Erect, maintain and periodically verify the accuracy of aboveground markers, in a form approved by Licensor, indicating the location, depth and ownership of any underground Facilities or related facilities.

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

6. TRACK CHANGES:

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

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

7. FACILITY CHANGES:

7.1 Licensee shall periodically monitor and verify the depth or height of the Facilities or Encroachment in relation to the existing tracks and facilities, and shall relocate the Facilities or change the Encroachment, at Licensee's expense, should such relocation or change be necessary to comply with the minimum clearance requirements of Licensor.

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

8. INTERFERENCE WITH RAIL FACILITIES:

8.1 Although the Facilities/Encroachment herein permitted may not presently interfere with Licensor's railroad or facilities, in the event that the operation, existence or maintenance of said Facilities, in the sole judgment of Licensor, causes: (a) interference (including, but not limited to, physical or interference from an electromagnetic induction, or interference from stray or other currents) with Licensor's power lines, communication, signal or other wires, train control system, or electrical or electronic apparatus; or (b) interference in any manner, with the operation, maintenance or use of the rail corridor, track(s), structures, pole line(s), devices, other property, or any appurtenances thereto; then and in either event, Licensee, upon receipt of written notice from Licensor of any such interference, and at Licensee's sole risk, cost and expense, shall promptly make such changes in its Facilities or installation, as may be required in the reasonable judgment of the Licensor to eliminate all such interference. Upon Licensee's failure to remedy or change, Licensor may do so or contract to do so at Licensee's sole cost.

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

9. RISK, LIABILITY, INDEMNITY:

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

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

hereunder shall be absolute, irrespective of any joint, sole or contributory fault or negligence of Licensor.

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

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

9.4 Notwithstanding Section 9.1, Licensee also expressly assumes all risk of loss which in any way may result from Licensee's failure to maintain either required clearances for any overhead Facilities or the required depth and encasement for any underground Facilities, whether or not such loss(es) result(s) in whole or part from Licensor's contributory negligence or joint fault.

9.5 Obligations of Licensee hereunder to release, indemnify and hold Licensor harmless shall also extend to companies and other legal entities that control, are controlled by, subsidiaries of, or are affiliated with Licensor, as well as any railroad that operates over the rail corridor on which the Encroachment is located, and the officers, employees and agents of each.

9.6 If a claim is made or action is brought against Licensor, and/or its operating lessee, for which Licensee may be responsible hereunder, in whole or in part, Licensee shall be notified to assume the handling or defense of such claim or action; but Licensor may participate in such handling or defense.

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

10. INSURANCE:

10.1 Prior to commencement of surveys, installation or occupation of premises pursuant to this Agreement, Licensee shall procure and shall maintain during the continuance of this Agreement, at its sole cost and expense, a policy of

(i) Statutory Worker's Compensation and Employers Liability Insurance with available limits of not less than ONE MILLION AND 00/100 U.S. DOLLARS (\$1,000,000.00), which must contain a waiver of subrogation against CSXT and its Affiliates;

(ii) Commercial General Liability coverage (inclusive of contractual liability) with available limits of not less than FIVE MILLION AND 00/100 U.S. DOLLARS (\$5,000,000.00), naming Licensor, and/or its designee, as additional insured and in combined single limits for bodily injury and property damage and covering the contractual liabilities assumed under this Agreement. The evidence of insurance coverage shall be endorsed to provide for thirty (30) days' notice to Licensor, or its designee, prior to cancellation or modification of any policy. Mail CGL certificate, along with agreement, to CSX Transportation, Inc., Speed Code J180, 500 Water Street, Jacksonville, FL 32202. On each successive year, send certificate to RenewalCOI@csx.com.

(iii) Business automobile liability insurance with available limits of not less than ONE MILLION AND 00/100 U.S. DOLLARS (\$1,000,000.00) combined single limit for bodily injury and/or property damage per occurrence;

(iv) Such other insurance as Licensor may reasonably require.

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

10.3 Licensor, or its designee, may at any time request evidence of insurance purchased by Licensee to comply with this Agreement. Failure of Licensee to comply with Licensor's request shall be considered a default by Licensee.

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

10.5 (A) In the event Licensee finds it necessary to perform construction or demolition operations within fifty feet (50') of any operated railroad track(s) or affecting any railroad bridge, trestle, tunnel, track(s), roadbed, overpass or underpass, Licensee shall: (a) notify Licensor; and (b) require its contractor(s) performing such operations to procure and maintain during the period of construction or demolition operations, at no cost to Licensor, Railroad

Protective Liability (RPL) Insurance, naming Licensor, and/or its designee, as Named Insured, written on the current ISO/RIMA Form (ISO Form No. CG 00 35 01 96) with limits of FIVE MILLION AND 00/100 U.S. DOLLARS (\$5,000,000.00) per occurrence for bodily injury and property damage, with at least TEN MILLION AND 00/100 U.S. DOLLARS (\$10,000,000.00) aggregate limit per annual policy period, with Pollution Exclusion Amendment (ISO CG 28 31 11 85) if an older ISO Form CG 00 35 is used. The original of such RPL policy shall be sent to and approved by Licensor prior to commencement of such construction or demolition. Licensor reserves the right to demand higher limits.

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

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

11. GRADE CROSSINGS; FLAGGING:

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

11.2 If Licensor deems it advisable, during any construction, maintenance, repair, renewal, alteration, change or removal of said Facilities, to place watchmen, flagmen, inspectors or supervisors for protection of operations of Licensor or others on Licensor's rail corridor at the Encroachment, and to keep persons, equipment or materials away from the track(s), Licensor shall have the right to do so at the expense of Licensee, but Licensor shall not be liable for failure to do so.

11.3 Subject to Licensor's consent and to Licensor's Railroad Operating Rules and labor agreements, Licensee may provide flagmen, watchmen, inspectors or supervisors during all times of construction, repair, maintenance, replacement or removal, at Licensee's sole risk and expense; and in such event, Licensor shall not be liable for the failure or neglect of such watchmen, flagmen, inspectors or supervisors.

12. LICENSOR'S COSTS:

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

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

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

13. DEFAULT, BREACH, WAIVER:

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

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

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

14. TERMINATION, REMOVAL:

14.1 All rights which Licensee may have hereunder shall cease upon the date of (a) termination, (b) revocation, or (c) subsequent agreement, or (d) Licensee's removal of the Facility from the Encroachment. However, neither termination nor revocation of this Agreement shall affect any claims and liabilities which have arisen or accrued hereunder, and which at the time of termination or revocation have not been satisfied; neither party, however, waiving any third party defenses or actions.

14.2 Within thirty (30) days after revocation or termination, Licensee, at its sole risk and expense, shall (a) remove the Facilities from the rail corridor of Licensor, unless the parties hereto agree otherwise, (b) restore the rail corridor of Licensor in a manner satisfactory to

Licensors, and (c) reimburse Licensor any loss, cost or expense of Licensor resulting from such removal.

15. NOTICE:

15.1 Licensee shall give Licensor at least thirty (30) days written notice before doing any work on Licensor's rail corridor, except that in cases of emergency shorter notice may be given. Licensee shall provide proper notification as follows:

a. For non-emergencies, Licensee shall complete and submit Licensor's Outside Party Number Request Form (Form # OP) by facsimile, to facsimile numbers: (904) 245-3692. Licensee may also scan and email a completed form to email address: OP_Request@csx.com. A blank form, as well as additional instructions and information, can be obtained from Licensor's web site, via web link:
http://www.csx.com/share/wwwcsx_mura/assets/File/Customers/Non-freight_Services/Property_Real_Estate/Outside_Party_Number_Request_Form.pdf.

b. For emergencies, Licensee shall complete all of the steps outlined in Section 15.1 a. above, and shall also include detailed information of the emergency. Licensee shall also call and report details of the emergency to Licensor's Rail Operations Emergency Telephone Number: 1-800-232-0144. In the event Licensor needs to contact Licensee concerning an emergency involving Licensee's Facility(ies), the emergency phone number for Licensee is: 859-578-9898.

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

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

16. ASSIGNMENT:

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

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

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

16.4 Licensor expressly reserves the right to assign this Agreement, in whole or in part, to any grantee, lessee, or vendee of Licensor's underlying property interests in the Encroachment, upon written notice thereof to Licensee.

16.5 In the event of any unauthorized sale, transfer, assignment, sublicense or encumbrance of this Agreement, or any of the rights and privileges hereunder, Licensor, at its option, may revoke this Agreement by giving Licensee or any such assignee written notice of such revocation; and Licensee shall reimburse Licensor for any loss, cost or expense Licensor may incur as a result of Licensee's failure to obtain said consent.

17. TITLE:

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

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

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

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

17.5 Licensee shall not at any time own or claim any right, title or interest in or to Licensor's property occupied by the Encroachments, nor shall the exercise of this Agreement for any length of time give rise to any right, title or interest in Licensee to said property other than the license herein created.

17.6 Nothing in this Agreement shall be deemed to give, and Licensor hereby expressly waives, any claim of ownership in and to any part of the Facilities.

17.7 Licensee shall not create or permit any mortgage, pledge, security, interest, lien or encumbrances, including without limitation, tax liens and liens or encumbrances with respect to work performed or equipment furnished in connection with the construction, installation, repair, maintenance or operation of the Facilities in or on any portion of the Encroachment (collectively, "Liens or Encumbrances"), to be established or remain against the Encroachment or any portion thereof or any other Licensor property.

17.8 In the event that any property of Licensor becomes subject to such Liens or Encumbrances, Licensee agrees to pay, discharge or remove the same promptly upon Licensee's receipt of notice that such Liens or Encumbrances have been filed or docketed against the Encroachment or any other property of Licensor; however, Licensee reserves the right to challenge, at its sole expense, the validity and/or enforceability of any such Liens or Encumbrances.

18. GENERAL PROVISIONS:

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

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

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

18.4 This Agreement is executed under current interpretation of applicable Federal, State, County, Municipal or other local statute, ordinance or law(s). However, each separate division (paragraph, clause, item, term, condition, covenant or agreement) herein shall have independent and severable status for the determination of legality, so that if any separate division is determined to be void or unenforceable for any reason, such determination shall have

no effect upon the validity or enforceability of each other separate division, or any combination thereof.

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

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

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

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

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

19. **RESERVED:**

20. **RESERVED:**

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

Witness for Licensor:

Jessica A. Be.

CSX TRANSPORTATION, INC.

By: [Signature]

Print/Type Name: David E. Elder
Director

Print/Type Title: _____

Witness for Licensee:

[Signature]

NORTHERN KENTUCKY WATER DISTRICT

By: [Signature] ^{AKK}

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

Print/Type Name: Ronald Lova

Print/Type Title: President/CEO

Tax ID No.: 61-1311695

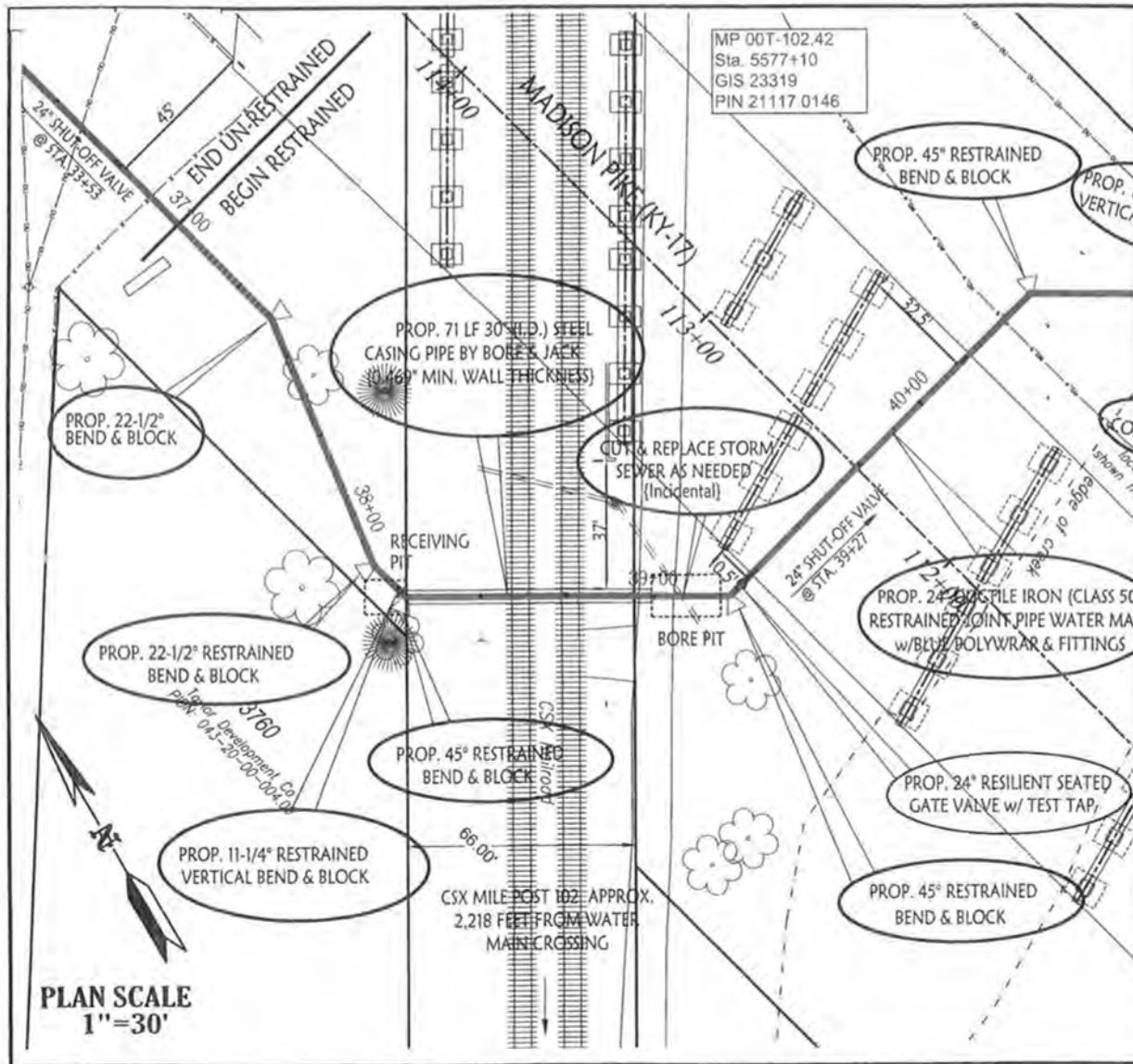
Authority under Ordinance or

Resolution No. (Attached)

Dated August 20th, 2015

CSX788676

Exhibit A



PLAN SCALE
1"=30'

NOTES:

CONTRACTOR SHALL REFER TO CSXT DESIGN & CONSTRUCTION STANDARD SPECIFICATIONS FOR ADDITIONAL INFORMATION AND GUIDANCE.

THE FRONT OF THE CASING PIPE SHALL BE PROVIDED WITH MECHANICAL ARRANGEMENTS OR DEVICES THAT WILL POSITIVELY PREVENT THE AUGER FROM LEADING THE PIPE SO THAT NO UNDOORTEED EXCAVATION IS AHEAD OF THE PIPE (CSXT PIPELINE SPECS. PAGE 23, A), ii), (c)

CASING PIPE ENDS MUST BE SEALED (CSXT PIPELINE SPECS PAGE 19, E)

SHUT-OFF VALVE LOCATIONS
50' EAST OF EAST TRACK CENTERLINE
510' WEST OF WEST TRACK CENTERLINE
(STA 39+27 & STA. 33+53 RESPECTIVELY)

CSX PROPERTY SERVICES REVIEW

No Exceptions Exceptions Note

This review is for the project's conformity with CSX utility design specifications only. Local responsibility for all aspects of the project design shall remain with the licensee owner. This review does not constitute approval or protest without meeting all of CSX's safety and contractual requirements.

By: *Seal Sebb*



VIOX & VIOX
Civil Engineers, Surveyors, and Landscape Architects

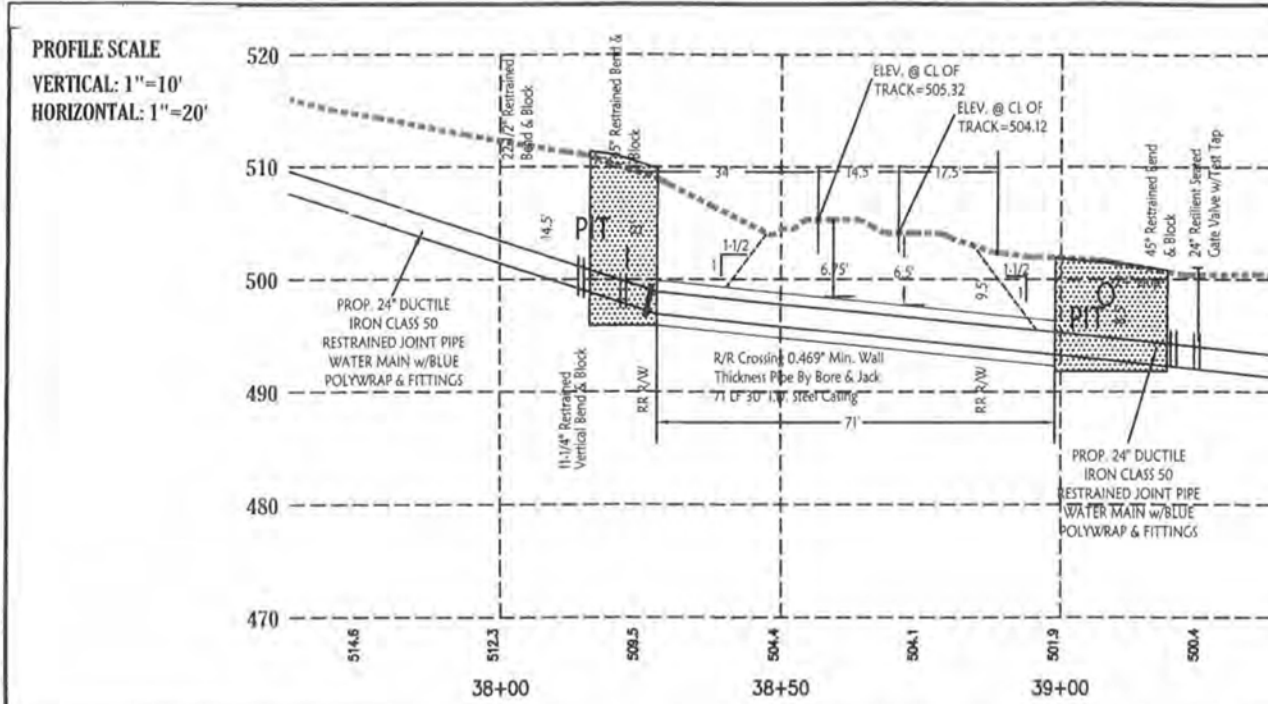
Location:	MILE POST 102
Latitude:	N 39:00:59.908
Longitude:	W 84:31:46.6854
Drawing No.:	MADISON PH 2 Sheet 1 of 2
Drawing Date:	Dec 1, 2014 Last Revised
Drawing Scale:	1 inches = 30 Feet

08/10/2015

Page 1 of 2

CSX788676

Exhibit A



NOTES:
 CONTRACTOR SHALL REFER TO CSXT DESIGN & CONSTRUCTION STANDARD SPECIFICATIONS FOR ADDITIONAL INFORMATION AND GUIDANCE.
 SHUT-OFF VALVE LOCATIONS
 50' EAST OF EAST TRACK CENTERLINE
 510' WEST OF WEST TRACK CENTERLINE
 (STA. 39+27 & STA. 33+53 RESPECTIVELY)

CSX PROPERTY SERVICES REVIEW
 No Exceptions Exceptions Noted
 This review is for the general appearance with CSX utility design specifications only. Also responsibility for all aspects of the work design shall remain with the design team. This review does not constitute approval to proceed without meeting all of CSX's safety and contractual requirements.
 By: *[Signature]*

THE FRONT OF THE CASING PIPE SHALL BE PROVIDED WITH MECHANICAL ARRANGEMENTS OR DEVICES THAT WILL POSITIVELY PREVENT THE AUGER FROM LEADING THE PIPE SO THAT NO UNSUPPORTED EXCAVATION IS AHEAD OF THE PIPE.
 CSXT PIPELINE SPECS. PAGE 23, A), n) (c)
 CASING PIPE ENDS WILL BE SEALED IN ACCORDANCE WITH CSXT SPECS.
 CSXT PIPELINE SPECS. PAGE 19, E)

Additional Notes/Information:	PIPELINE CONTENT DETAILS		
CSXT Pipeline Spec. Reference	Commodity Description: WATER		
	Maximum Operating Pressure: 250		
	Is Commodity Flammable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
	CARRIER/CASING PIPE DETAILS		
	Carrier Pipe	Casing Pipe	
Page 13, C), & 17, D)	DUCTILE IRON PIPE	STEEL	
Page 14, C), & 17, D)	Material Specifications & Grade: CLASS 50	ASTM A 252 GRADE 2	
Page 13, C), & 17, D)	Specified Minimum Yield Strength: 42000 PSI	35000 PSI	
	Nominal Size Outside Diameter (Inches): 24"	30"	
Page 14, D), (d)	Wall Thickness (Inches): 0.375"	0.469"	
Page 13, C), & 17, D)	Type of Seam		
Page 13, C), & 17, D)	Type of Joints	PUSH-ON	WELDED
Page 16, n)	Tunnel Liner Plates Required:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
	Cathodic Protection:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Type:
	Protective Coating:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Type:
	Temp. Track Support or Rip-Rap Req.:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	Must Describe & Show on Drawing



Location:	MILE POST 102
Latitude:	N 39:00:59.908
Longitude:	W 84:31:46.6854
Drawing No.:	MADISON PH 2 Sheet 2 of 2
Drawing Date:	Dec 1, 2014 Last Revised:
Drawing Scale:	V 1 Inches = 10 Feet
Drawing Scale:	H 1 Inches = 20 Feet

08/10/2015

Page 2 of 2

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky*

184-0795

BID INFORMATION AND BOARD RESOLUTION

Bid Tabulation

Engineer’s Recommendation of Award

Board Meeting Minutes

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Proposed 30" & 24" Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky*

184-0795

Bid Tabulation

**BID TABULATIONS FOR
NORTHERN KENTUCKY WATER DISTRICT
MADISON AVE.- PH 2
(Dudley Pike to Rolling Hills Drive)
Kenton County, KY**

ITEM No.	DESCRIPTION	UNIT	QTY	HOWELL CONTRACTORS, INC.		GARNEY COMPANIES, INC.		LYKINS CONTRACTING		NOTES	BRACKNEY INC.	
				UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST		UNIT COST	TOTAL COST
1	6.01 16" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	52	\$125.00	\$6,500.00	\$100.00	\$5,200.00	\$125.00	\$6,500.00		\$110.00	\$5,720.00
2	6.01 20" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	10	\$130.00	\$1,300.00	\$120.00	\$1,200.00	\$275.00	\$2,750.00		\$118.00	\$1,180.00
3	6.01 24" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	592	\$135.00	\$79,920.00	\$145.00	\$85,840.00	\$205.00	\$121,360.00		\$146.00	\$86,432.00
4	6.01 30" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	2625	\$145.00	\$380,625.00	\$165.00	\$433,125.00	\$246.00	\$645,750.00		\$232.00	\$609,000.00
5	6.02B 16" Class 50 Ductile Iron Pipe - RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	20	\$200.00	\$4,000.00	\$125.00	\$2,500.00	\$180.00	\$3,600.00		\$175.00	\$3,500.00
6	6.02B 24" Class 50 Ductile Iron Pipe - RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	681	\$180.00	\$122,580.00	\$180.00	\$122,580.00	\$180.00	\$122,580.00		\$195.00	\$132,795.00
7	6.02B 30" Class 50 Ductile Iron Pipe - RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	760	\$260.00	\$197,600.00	\$200.00	\$152,000.00	\$200.00	\$152,000.00		\$288.00	\$218,880.00
8	6.04 48" Steel Casing Pipe By Bore & Jack {0.626 Min. Wall Thickness- KDOT Spec's}	LF	65	\$770.00	\$50,050.00	\$630.00	\$40,950.00	\$695.00	\$45,175.00		\$982.00	\$63,830.00
9	6.04 36" Steel Casing Pipe By Bore & Jack {0.500 Min. Wall Thickness- RAILROAD Spec's}	LF	71	\$550.00	\$39,050.00	\$800.00	\$56,800.00	\$525.00	\$37,275.00		\$910.00	\$64,610.00
10	7.01 Connect to Ex. 16" Main	EA	1	\$5,000.00	\$5,000.00	\$4,100.00	\$4,100.00	\$7,500.00	\$7,500.00		\$3,500.00	\$3,500.00
11	7.01 Connect to Ex. 20" Main	EA	1	\$5,000.00	\$5,000.00	\$5,500.00	\$5,500.00	\$8,500.00	\$8,500.00		\$4,000.00	\$4,000.00
12	7.01 Connect To Ex. 24" Main	EA	1	\$5,000.00	\$5,000.00	\$5,500.00	\$5,500.00	\$10,500.00	\$10,500.00		\$5,000.00	\$5,000.00
13	8.01 Install Fire Hydrant	EA	6	\$3,850.00	\$23,100.00	\$5,500.00	\$33,000.00	\$3,285.00	\$19,710.00		\$4,000.00	\$24,000.00
14	8.03 Return Fire Hydrant	EA	6	\$100.00	\$600.00	\$900.00	\$5,400.00	\$640.00	\$3,840.00		\$300.00	\$1,800.00
15	9.01 16" Resilient Seated Gate Valves	EA	4	\$5,650.00	\$22,600.00	\$6,500.00	\$26,000.00	\$7,500.00	\$30,000.00		\$6,840.00	\$27,360.00
16	9.03 24" Resilient Seated Gate Valves	EA	2	\$15,300.00	\$30,600.00	\$18,000.00	\$36,000.00	\$15,650.00	\$31,300.00		\$19,740.00	\$39,480.00
17	9.03 30" Resilient Seated Gate Valves	EA	2	\$29,150.00	\$58,300.00	\$32,000.00	\$64,000.00	\$28,985.00	\$57,970.00		\$34,730.00	\$69,460.00

**BID TABULATIONS FOR
NORTHERN KENTUCKY WATER DISTRICT
MADISON AVE.- PH 2
(Dudley Pike to Rolling Hills Drive)
Kenton County, KY**

ITEM No.	DESCRIPTION	UNIT	QTY	CLEARY CONSTRUCTION INC.		SMITHCORP INC.		NOTES	NORRIS BROS. EXCAVATING, LLC		UNITED PIPELINE, INC.	
				UNIT COST	TOTAL COST	UNIT COST	TOTAL COST		UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
1	6.01 16" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	52	\$85.00	\$4,420.00	\$140.00	\$7,280.00		\$95.06	\$4,943.12	\$140.00	\$7,280.00
2	6.01 20" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	10	\$100.00	\$1,000.00	\$170.00	\$1,700.00		\$194.00	\$1,940.00	\$190.00	\$1,900.00
3	6.01 24" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	592	\$130.00	\$76,960.00	\$180.00	\$106,560.00		\$116.40	\$68,908.80	\$200.00	\$118,400.00
4	6.01 30" Class 50 Ductile Iron Pipe (Detail 103, 103a, 104, 104a, 110)	LF	2625	\$167.00	\$438,375.00	\$254.00	\$666,750.00		\$286.15	\$751,143.75	\$210.00	\$551,250.00
5	6.02B 16" Class 50 Ductile Iron Pipe - RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	20	\$100.00	\$2,000.00	\$120.00	\$2,400.00		\$150.35	\$3,007.00	\$225.00	\$4,500.00
6	6.02B 24" Class 50 Ductile Iron Pipe - RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	681	\$215.00	\$146,415.00	\$185.00	\$125,985.00		\$143.56	\$97,764.36	\$200.00	\$136,200.00
7	6.02B 30" Class 50 Ductile Iron Pipe - RESTRAINED JOINT (Detail 103, 103a, 104, 104a, 110)	LF	760	\$295.00	\$224,200.00	\$240.00	\$182,400.00		\$203.70	\$154,812.00	\$260.00	\$197,600.00
8	6.04 48" Steel Casing Pipe By Bore & Jack {0.626 Min. Wall Thickness- KDOT Spec's}	LF	65	\$1,200.00	\$78,000.00	\$1,200.00	\$78,000.00		\$1,164.00	\$75,660.00	\$850.00	\$55,250.00
9	6.04 36" Steel Casing Pipe By Bore & Jack {0.500 Min. Wall Thickness- RAILROAD Spec's}	LF	71	\$900.00	\$63,900.00	\$900.00	\$63,900.00		\$776.00	\$55,096.00	\$650.00	\$46,150.00
10	7.01 Connect to Ex. 16" Main	EA	1	\$5,500.00	\$5,500.00	\$10,500.00	\$10,500.00		\$25,220.00	\$25,220.00	\$6,000.00	\$6,000.00
11	7.01 Connect to Ex. 20" Main	EA	1	\$6,000.00	\$6,000.00	\$9,200.00	\$9,200.00		\$38,800.00	\$38,800.00	\$7,000.00	\$7,000.00
12	7.01 Connect To Ex. 24" Main	EA	1	\$6,500.00	\$6,500.00	\$7,700.00	\$7,700.00		\$43,650.00	\$43,650.00	\$8,000.00	\$8,000.00
13	8.01 Install Fire Hydrant	EA	6	\$5,000.00	\$30,000.00	\$3,500.00	\$21,000.00		\$4,365.00	\$26,190.00	\$5,000.00	\$30,000.00
14	8.03 Return Fire Hydrant	EA	6	\$350.00	\$2,100.00	\$100.00	\$600.00		\$291.00	\$1,746.00	\$1,500.00	\$9,000.00
15	9.01 16" Resilient Seated Gate Valves	EA	4	\$10,000.00	\$40,000.00	\$6,900.00	\$27,600.00		\$15,520.00	\$62,080.00	\$11,000.00	\$44,000.00
16	9.03 24" Resilient Seated Gate Valves	EA	2	\$24,000.00	\$48,000.00	\$1,900.00	\$3,800.00		\$23,280.00	\$46,560.00	\$29,500.00	\$59,000.00
17	9.03 30" Resilient Seated Gate Valves	EA	2	\$43,000.00	\$86,000.00	\$33,000.00	\$66,000.00		\$29,100.00	\$58,200.00	\$48,500.00	\$97,000.00

**BID TABULATIONS FOR
NORTHERN KENTUCKY WATER DISTRICT
MADISON AVE.- PH 2
(Dudley Pike to Rolling Hills Drive)
Kenton County, KY**

ITEM No.	DESCRIPTION	UNIT	QTY	HOWELL CONTRACTORS, INC.		GARNEY COMPANIES, INC.		LYKINS CONTRACTING		NOTES	BRACKNEY INC.	
				UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST		UNIT COST	TOTAL COST
18	11.18 STREAM CROSSING: Bedding & Backfill Per Thelen {See Details 131040E-1 & 131040E-2}	LF	65	\$200.00	\$13,000.00	\$500.00	\$32,500.00	\$110.00	\$7,150.00		\$235.00	\$15,275.00
19	10.03 Reconnect Copper Service {1"} { <i>Materials Supplied By NKWD</i> }	EA	2	\$750.00	\$1,500.00	\$1,200.00	\$2,400.00	\$600.00	\$1,200.00		\$2,345.00	\$4,690.00
20	10.03 Reconnect Copper Service {1-1/2"} { <i>Materials Supplied By NKWD</i> }	EA	1	\$800.00	\$800.00	\$1,200.00	\$1,200.00	\$850.00	\$850.00		\$2,400.00	\$2,400.00
21	10.03 Reconnect Copper Service {2"} { <i>Materials Supplied By NKWD</i> }	EA	1	\$850.00	\$850.00	\$1,200.00	\$1,200.00	\$1,100.00	\$1,100.00		\$2,500.00	\$2,500.00
22	11.04 16" Plug and Block {Cut Into Ex. Main}	EA	1	\$2,500.00	\$2,500.00	\$5,500.00	\$5,500.00	\$3,255.00	\$3,255.00		\$1,825.00	\$1,825.00
23	11.05 Air Relief Valves-2" { <i>Materials Supplied By NKWD</i> }	EA	3	\$350.00	\$1,050.00	\$2,100.00	\$6,300.00	\$1,915.00	\$5,745.00		\$825.00	\$2,475.00
24	11.06 24"x24"x6" Anchoring Tees & Blocks	EA	1	\$1,550.00	\$1,550.00	\$3,600.00	\$3,600.00	\$2,100.00	\$2,100.00		\$2,350.00	\$2,350.00
25	11.06 30"x30"x6" Anchoring Tees & Blocks	EA	5	\$1,950.00	\$9,750.00	\$4,800.00	\$24,000.00	\$5,310.00	\$26,550.00		\$4,000.00	\$20,000.00
26	11.07 16"x16"x16" Tee & Block {Cut Into Ex. 16" Main}	EA	1	\$1,350.00	\$1,350.00	\$3,800.00	\$3,800.00	\$4,500.00	\$4,500.00		\$4,650.00	\$4,650.00
27	11.07 30"x30"x16" Tee & Block	EA	2	\$3,400.00	\$6,800.00	\$5,000.00	\$10,000.00	\$6,600.00	\$13,200.00		\$4,750.00	\$9,500.00
28	11.09 30"-20" Reducer	EA	1	\$2,750.00	\$2,750.00	\$2,800.00	\$2,800.00	\$5,500.00	\$5,500.00		\$3,360.00	\$3,360.00
29	11.09 30"-24" Reducer	EA	1	\$3,700.00	\$3,700.00	\$3,000.00	\$3,000.00	\$6,000.00	\$6,000.00		\$3,500.00	\$3,500.00
30	11.10 Flushing Device {2"}}	EA	1	\$1,500.00	\$1,500.00	\$2,700.00	\$2,700.00	\$1,000.00	\$1,000.00		\$600.00	\$600.00
31	11.11 Test Tap	EA	1	\$1,000.00	\$1,000.00	\$900.00	\$900.00	\$450.00	\$450.00		\$600.00	\$600.00
32	11.16 Corrosion Test Stations	EA	25	\$600.00	\$15,000.00	\$650.00	\$16,250.00	\$400.00	\$10,000.00		\$800.00	\$20,000.00
33	11.17 Magnesium Anodes	EA	9	\$1,500.00	\$13,500.00	\$3,500.00	\$31,500.00	\$850.00	\$7,650.00		\$615.00	\$5,535.00
34	12.05 Asphaltic Concrete Milling & Paving {Detail 103a} { <i>KDOT Spec's</i> }	SY	300	\$37.00	\$11,100.00	\$25.00	\$7,500.00	\$30.00	\$9,000.00		\$40.40	\$12,120.00
35	12.06 Asphaltic Concrete {Trench} {Detail 103a}	SY	1810	\$15.00	\$27,150.00	\$48.00	\$86,880.00	\$44.00	\$79,640.00		\$43.40	\$78,554.00
36	12.07 Bituminous Drive Restoration	SY	200	\$48.00	\$9,600.00	\$48.00	\$9,600.00	\$50.00	\$10,000.00		\$52.00	\$10,400.00
37	12.08 Shoulder Restoration - <i>Gravel</i> { <i>KDOT Spec's</i> }	SY	265	\$20.00	\$5,300.00	\$15.00	\$3,975.00	\$10.00	\$2,650.00		\$30.00	\$7,950.00

**BID TABULATIONS FOR
NORTHERN KENTUCKY WATER DISTRICT
MADISON AVE.- PH 2
(Dudley Pike to Rolling Hills Drive)
Kenton County, KY**

ITEM No.	DESCRIPTION	UNIT	QTY	CLEARY CONSTRUCTION INC.		SMITHCORP INC.		NOTES	NORRIS BROS. EXCAVATING, LLC		UNITED PIPELINE, INC.	
				UNIT COST	TOTAL COST	UNIT COST	TOTAL COST		UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
18	11.18 STREAM CROSSING: Bedding & Backfill Per Thelen {See Details 131040E-1 & 131040E-2}	LF	65	\$860.00	\$55,900.00	\$384.61	\$24,999.65	*2	\$213.40	\$13,871.00	\$400.00	\$26,000.00
19	10.03 Reconnect Copper Service {1"} { <i>Materials Supplied By NKWD</i> }	EA	2	\$340.00	\$680.00	\$1,000.00	\$2,000.00		\$1,164.00	\$2,328.00	\$425.00	\$850.00
20	10.03 Reconnect Copper Service {1-1/2"} { <i>Materials Supplied By NKWD</i> }	EA	1	\$350.00	\$350.00	\$1,200.00	\$1,200.00		\$1,455.00	\$1,455.00	\$450.00	\$450.00
21	10.03 Reconnect Copper Service {2"} { <i>Materials Supplied By NKWD</i> }	EA	1	\$360.00	\$360.00	\$1,300.00	\$1,300.00		\$2,134.00	\$2,134.00	\$550.00	\$550.00
22	11.04 16" Plug and Block {Cut Into Ex. Main}	EA	1	\$4,000.00	\$4,000.00	\$3,200.00	\$3,200.00		\$7,760.00	\$7,760.00	\$3,000.00	\$3,000.00
23	11.05 Air Relief Valves-2" { <i>Materials Supplied By NKWD</i> }	EA	3	\$1,000.00	\$3,000.00	\$250.00	\$750.00		\$1,940.00	\$5,820.00	\$3,500.00	\$10,500.00
24	11.06 24"x24"x6" Anchoring Tees & Blocks	EA	1	\$6,000.00	\$6,000.00	\$2,900.00	\$2,900.00		\$5,820.00	\$5,820.00	\$3,000.00	\$3,000.00
25	11.06 30"x30"x6" Anchoring Tees & Blocks	EA	5	\$7,800.00	\$39,000.00	\$4,200.00	\$21,000.00		\$8,245.00	\$41,225.00	\$6,000.00	\$30,000.00
26	11.07 16"x16"x16" Tee & Block {Cut Into Ex. 16" Main}	EA	1	\$5,000.00	\$5,000.00	\$2,100.00	\$2,100.00		\$11,640.00	\$11,640.00	\$2,000.00	\$2,000.00
27	11.07 30"x30"x16" Tee & Block	EA	2	\$9,000.00	\$18,000.00	\$5,000.00	\$10,000.00		\$21,340.00	\$42,680.00	\$7,000.00	\$14,000.00
28	11.09 30"-20" Reducer	EA	1	\$6,000.00	\$6,000.00	\$2,700.00	\$2,700.00		\$4,365.00	\$4,365.00	\$4,800.00	\$4,800.00
29	11.09 30"-24" Reducer	EA	1	\$6,500.00	\$6,500.00	\$2,900.00	\$2,900.00		\$4,365.00	\$4,365.00	\$5,000.00	\$5,000.00
30	11.10 Flushing Device {2"}}	EA	1	\$1,500.00	\$1,500.00	\$2,700.00	\$2,700.00		\$6,305.00	\$6,305.00	\$2,000.00	\$2,000.00
31	11.11 Test Tap	EA	1	\$680.00	\$680.00	\$250.00	\$250.00		\$485.00	\$485.00	\$4,500.00	\$4,500.00
32	11.16 Corrosion Test Stations	EA	25	\$920.00	\$23,000.00	\$1,200.00	\$30,000.00		\$1,455.00	\$36,375.00	\$3,500.00	\$87,500.00
33	11.17 Magnesium Anodes	EA	9	\$475.00	\$4,275.00	\$1,500.00	\$13,500.00		\$970.00	\$8,730.00	\$4,000.00	\$36,000.00
34	12.05 Asphaltic Concrete Milling & Paving {Detail 103a} { <i>KDOT Spec's</i> }	SY	300	\$30.00	\$9,000.00	\$30.00	\$9,000.00		\$33.95	\$10,185.00	\$40.00	\$12,000.00
35	12.06 Asphaltic Concrete {Trench} {Detail 103a}	SY	1810	\$72.00	\$130,320.00	\$30.00	\$54,300.00		\$33.95	\$61,449.50	\$150.00	\$271,500.00
36	12.07 Bituminous Drive Restoration	SY	200	\$55.00	\$11,000.00	\$85.00	\$17,000.00		\$33.95	\$6,790.00	\$70.00	\$14,000.00
37	12.08 Shoulder Restoration - <i>Gravel</i> { <i>KDOT Spec's</i> }	SY	265	\$25.00	\$6,625.00	\$25.00	\$6,625.00		\$33.95	\$8,996.75	\$35.00	\$9,275.00

**BID TABULATIONS FOR
NORTHERN KENTUCY WATER DISTRICT
MADISON AVE.- PH 2
(Dudley Pike to Rolling Hills Drive)
Kenton County, KY**

ITEM No.	DESCRIPTION	UNIT	QTY	HOWELL CONTRACTORS, INC.		GARNEY COMPANIES, INC.		LYKINS CONTRACTING		NOTES	BRACKNEY INC.	
				UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST		UNIT COST	TOTAL COST
38	12.15 Bituminous Shoulder Restoration - { <i>KDOT Spec's</i> }	SY	2570	\$40.00	\$102,800.00	\$45.00	\$115,650.00	\$36.00	\$92,520.00		\$36.00	\$92,520.00
39	12.17 Striping	LS	1	\$1,500.00	\$1,500.00	\$2,500.00	\$2,500.00	\$1,750.00	\$1,750.00		\$5,000.00	\$5,000.00
40	12.14 Best Management Practice { <i>SWPPP</i> }	LS	1	\$5,000.00	\$5,000.00	\$15,000.00	\$15,000.00	\$7,500.00	\$7,500.00		\$12,000.00	\$12,000.00
	TOTAL CONTRACTOR BID				\$1,270,875.00		\$1,468,450.00		\$1,605,620.00	*1		\$1,678,351.00
	NOTES											
*1	Lykins Contracting had a math error on the Total Bid. They showed \$1,475,010.00. The correct total bid is \$1,605,620.00											
*2	Smithcorp had a math error on Line Item #18 Total. They showed \$25,000.00. The correct total bid is \$24,999.65											
*3	Smithcorp had a math error on the Total Bid. They showed \$1,729,860.00. The correct total bid is \$1,729,859.65											

**BID TABULATIONS FOR
NORTHERN KENTUCY WATER DISTRICT
MADISON AVE.- PH 2
(Dudley Pike to Rolling Hills Drive)
Kenton County, KY**

ITEM No.	DESCRIPTION	UNIT	QTY	CLEARY CONSTRUCTION INC.		SMITHCORP INC.		NOTES	NORRIS BROS. EXCAVATING, LLC		UNITED PIPELINE, INC.	
				UNIT COST	TOTAL COST	UNIT COST	TOTAL COST		UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
38	12.15 Bituminous Shoulder Restoration - { <i>KDOT Spec's</i> }	SY	2570	\$50.00	\$128,500.00	\$50.00	\$128,500.00		\$33.95	\$87,251.50	\$48.00	\$123,360.00
39	12.17 Striping	LS	1	\$1,600.00	\$1,600.00	\$1,560.00	\$1,560.00		\$5,820.00	\$5,820.00	\$1,900.00	\$1,900.00
40	12.14 Best Management Practice { <i>SWPPP</i> }	LS	1	\$3,200.00	\$3,200.00	\$10,000.00	\$10,000.00		\$8,245.00	\$8,245.00	\$5,000.00	\$5,000.00
TOTAL CONTRACTOR BID												
					\$1,723,860.00		\$1,729,859.65	*3		\$1,899,816.78		\$2,045,715.00
NOTES												
*1	Lykins Contracting had a math error on the Total Bid. They showed \$1,475,010.00. The correct total bid is \$1,605,620.00											
*2	Smithcorp had a math error on Line Item #18 Total. They showed \$25,000.00. The correct total bid is \$24,999.65											
*3	Smithcorp had a math error on the Total Bid. They showed \$1,729,860.00. The correct total bid is \$1,729,859.65											

NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky***

184-0795

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

June 1, 2017

Northern Kentucky Water District
P.O. Box 18640
2835 Crescent Springs Road
Erlanger, KY 41018

ATTN: John Scheben
Staff Engineer

RE: Madison Pike Phase 2
30" & 24" Water Main Replacement

Dear Mr. Scheben,

We have reviewed the bids received June 1, 2017, for the Madison Pike Phase 2 - 30" & 24" Water Main Replacement, Covington, Kenton County, KY. The breakdown of the bids has been provided to your staff and to the contractors.

The low bidder was Howell Contractors Inc. with a bid of \$1,270,875 well under our estimate of \$2.1 million and \$137,170 less than the second lowest bid received. All of the bidders were under our estimate.

Howell Contractors Inc. has been a contractor for the NKWD many times in the past. Therefore, it is our recommendation that the contract should be awarded to them for \$1,270,875.

Hopefully, this recommendation is sufficient for your Commission to make a decision.

Yours truly,

James H. Viox III, P.E., L.S.

NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky***

184-0795

Board Meeting Minutes

**Northern Kentucky Water District
Board of Commissioners
Regular Meeting
June 22, 2017**

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on May 18, 2017 at the Northern Kentucky Water District located at 2835 Crescent Springs Road, Erlanger, Kentucky. All Commissioners were present, except Commissioner Spaulding. Also present were Ron Lovan, Dave Enzweiler, Bill Speier, Amy Kramer, Jenna Canafax, Steve Glass, Stacey Kampsen, Kristin Leadingham with VonLehman CPA and Advisory Firm, and Michael Nitardy of Frost Brown Todd LLC.

Chairperson Macke called the meeting to order at 12:05 a.m., and Steve Glass led the pledge of allegiance.

The Board reviewed correspondence received and articles published since the last special Board meeting on May 18, 2017.

Ms. Kristin Leadingham with VonLehman CPA and Advisory Firm, the District's outside auditor, presented the December 31, 2016 audit report. It was noted that, prior to this presentation, Ms. Leadingham had also met with the Chairman, Treasurer, President/CEO and Finance Manager for the District on June 20, 2017 to review the report. On motion of Commissioner Cunningham, seconded by Commissioner Wagner, the Commissioners unanimously approved the acceptance of the December 31, 2016 audit report. At this point, Ms. Leadingham left the meeting.

On motion of Commissioner Cunningham, seconded by Commissioner Koester, the Commissioners unanimously approved the minutes for the special board meeting held on May 18, 2017.

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 periods May 1, 2017 through May 31, 2017. On motion of Commissioner Wagner, seconded by Commissioner Sommerkamp, and after discussion, the Commissioners unanimously approved the expenditures of the District for the month of May, 2017.

On motion of Commissioner Sommerkamp, seconded by Commissioner Wagner, the Commissioners unanimously approved the acceptance of the bid by and awarding the contract to Horizon Bros. Painting Corp., Inc. for the Dudley 1080 Tank Rehabilitation project with a total project budget of \$700,000, and authorized staff to execute the appropriate documents.

On motion of Commissioner Cunningham, seconded by Commissioner Sommerkamp, the Commissioners unanimously approved the District's acceptance of the bid by and awarding the contract to Greater Comfort Heating and Air Conditioning, Inc. for HVAC Periodic

Maintenance for one year with the option to extend the contract for up to two additional one-year terms, and authorized staff to execute the appropriate documents.

On motion of Commissioner Wagner, seconded by Commissioner Koester, the Commissioners unanimously approved the District's acceptance of the bid by and awarding the contract to A&S Electric Supply, Inc. for the Central Facility Lighting project with a total project budget of \$50,000, and authorized staff to execute the appropriate documents.

On motion of Commissioner Wagner, seconded by Commissioner Cunningham, the Commissioners unanimously approved a professional services agreement with Magna Engineers PLLC, to design the RICE/NESHAP Generator project, with a total project budget of \$1,038,000, and authorized staff to execute the appropriate documents.

On motion of Commissioner Wagner, seconded by Commissioner Cunningham, the Commissioners unanimously approved the District's acceptance of the bid by and awarding the contract to Howell Contractors, Inc. for the Madison Pike Phase 2, 30" and 24" Water Main Replacement project, with a total project budget of \$1,675,000, and authorized staff to execute the appropriate documents.

Departmental reports were then provided. As part of the Finance report, Ms. Kampsen provided a general overview of work being done in preparation for a future application for an adjustment of rates. Ms. Kampsen noted that she met on June 20, 2017 with the Chairman, Treasurer, and President/CEO of the District. The audit report and progress on a future rate adjustment application were reviewed during the meeting. As part of the Engineering, Production and Distribution report, Ms. Kramer reviewed with the Commissioners the status of on-going projects within the 2016 5-Year Capital Budget, including highlighting the two change orders since the last Board meeting and expenses incurred to date.

Chairman Macke, having determined there being no further business, adjourned the meeting at 1:55 p.m.

CHAIRMAN

SECRETARY

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NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky***

184-0795

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

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 BAN 2017, PSC Reference No. 178 “Madison Ave. (Pike) between Dudley and Hands Pike”, as part of the 2017 Five-Year Capital Budget with a total budget of \$3,940,000 (Page 29 of the 5-Year Capital Budget). The total project budget for this phase (Phase 2) is \$1,675,000 which includes construction cost, engineering, materials, and contingencies. A summary of the project costs is provided below:

○ Engineering	\$ 89,422.63
○ Contractor’s Bid	\$ 1,270,875.00
○ Misc. & Contingencies	<u>\$ 314,702.37</u>
Total Project Cost	\$ 1,675,000.00

USoA Accounts: The anticipated amounts for the project cost of \$1,675,000.00 will fall under the following Uniform System of Accounts Codes:

Code 331 “Transmission & Distribution Mains”	\$ 1,651,900
Code 334 “Meter & Meter Installation ”	\$ 0
Code 335 “Hydrants”	\$ 23,100

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: \$26,430.40/year over 62.5 years for Code 331 “Transmission & Distribution Mains”
\$462.00/year over 50 years for Code 335 “Hydrants”

Debt Service: \$101,629.01 over 25 years (conventional 3.5% loan).

NORTHERN KENTUCKY
WATER DISTRICT

Project

*Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky*

184-0795

SCHEDULE OF MORTGAGES, BONDS, NOTES, AND
OTHER INDEBTEDNESS

**Northern Kentucky Water District
Bonds
Effective June 1, 2016 - May 31, 2017**

Bond Numbers	Par Value of Actual Issue	Cash Realized on Actual Issue	Par Value of Amt. Held by or for Respondent	Actually Outstanding May 31, 2017	Interest During Year Accrued	Interest During Year Actually Paid
Bond 1997	11,225,000	11,131,694	-	-	-	-
Bond 1998	11,355,000	11,141,619	-	-	-	-
USDA 2000	2,287,000	2,287,000	-	1,787,000	91,367	91,550
Bond 2001A	16,325,000	15,835,250	-	-	-	-
Bond 2002A	45,485,000	44,121,624	-	-	-	-
Bond 2002B	10,575,000	10,525,204	-	-	-	-
Bond 2003A	1,615,000	1,583,553	-	-	-	-
Bond 2003B	30,270,000	30,068,115	-	-	-	-
Bond 2003C	23,790,000	23,532,357	-	-	-	-
Bond 2004	10,455,000	10,195,116	-	-	-	-
Bond 2006	29,000,000	28,736,444	-	-	454,732	442,444
Bond 2009	29,290,000	27,430,236	-	-	224,141	672,425
Bond 2011	30,830,000	28,862,016	-	25,490,000	1,122,962	1,132,562
Bond 2012	54,840,000	-	-	44,950,000	2,331,833	2,374,000
Bond 2013A	26,400,000	25,807,113	-	23,845,000	1,066,727	1,073,376
Bond 2013B	24,120,000	-	-	16,535,000	832,534	859,950
Bond 2014B	15,805,000	-	-	10,015,000	547,159	534,138
Bond 2016	41,905,000	-	-	39,450,000	871,680	354,756
Total	415,572,000	271,257,341	-	162,072,000	7,543,135	7,535,201

**Northern Kentucky Water District
Long Term Debt
Effective May 31, 2017**

Description of Obligation	Issue Date	Mature Date	Interest Expense for Year Rate	Interest Expense for Year Amount	Principal Balance Effective May 31, 2017
Notes Payable Taylor Mill	March 2004	2018	0%	-	225,000
KIA F06-03 MPTP Project	June 2008	2028	3%	85,760	2,591,844
KIA F08-07 Various	June 2009	2029	1%	41,368	3,262,536
KIA C08-01 AMR Project	June 2009	2019	3%	84,502	2,359,244
KIA F09-02 GAC MPTP & FTTP	June 2010	2030	2%	493,182	20,458,628
KIA F13-012	N/A	N/A	2%	89,509	4,522,999
KIA F14-015	N/A	N/A	2%	51,193	3,287,143
KIA F15-011	N/A	N/A	2%	22,353	2,633,963
Total Long Term Debt				867,867	39,341,357

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

Attachment 23.01

Year	Maturity Date	Interest Rate	Principal Amount	Amounts Paid	Outstanding 5/31/2017
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	0.00
2017			44,000.00	44,000.00	0.00
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	500,000.00	1,787,000.00

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	5/31/2017
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	2/1/2011	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	0.00
Registered	Refinanced 11/22/16		21,125,000.00	21,125,000.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
TOTALS			29,000,000.00	29,000,000.00	0.00

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	5/31/2017
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	0.00
Registered	Deceased 11/22/16		23,215,000.00	23,215,000.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
Registered			0.00	0.00	0.00
TOTALS			29,290,000.00	29,290,000.00	0.00

Northern Kentucky Water Service District			Series 2011		Attachment 23.04
Bond Issue	05/31/11	\$30,830,000.00			
Bond	Maturity	Interest	Principal	Amounts	Outstanding
Number	Date	Rate	Amount	Paid	5/31/2017
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	0.00
Registered	2/1/2017	3.000%	960,000.00	960,000.00	0.00
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	2/1/2026	4.125%	1,340,000.00		1,340,000.00
Registered	2/1/2027	4.250%	1,395,000.00		1,395,000.00
Registered	2/1/2028	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%	1,745,000.00		1,745,000.00
Registered	2/1/2033	5.000%	1,835,000.00		1,835,000.00
Registered	2/1/2034	5.000%	1,925,000.00		1,925,000.00
Registered	2/1/2035	5.000%	2,025,000.00		2,025,000.00
TOTALS			30,830,000.00	5,340,000.00	25,490,000.00

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	5/31/2017
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	0.00
Registered	2/1/2017	5.000%	2,530,000.00	2,530,000.00	0.00
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	9,890,000.00	44,950,000.00

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	5/31/2017
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	0.00
Registered	2/1/2017	3.000%	665,000.00	665,000.00	0.00
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%	1,310,000.00		1,310,000.00
Registered	2/1/2033	4.500%	1,370,000.00		1,370,000.00
Registered	2/1/2034	4.250%	1,430,000.00		1,430,000.00
Registered	2/1/2035	4.125%	1,490,000.00		1,490,000.00
Registered	2/1/2036	4.125%	1,555,000.00		1,555,000.00
Registered	2/1/2037	4.250%	1,620,000.00		1,620,000.00
Registered	2/1/2038	4.250%	1,690,000.00		1,690,000.00
TOTALS			26,400,000.00	2,555,000.00	23,845,000.00

Northern Kentucky Water Service District			2013B		Attachment 23.07
Bond Issue	06/21/12	\$24,120,000.00			
Bond	Maturity	Interest	Principal	Amounts	Outstanding
Number	Date	Rate	Amount	Paid	5/31/2017
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	0.00
Registered	2/1/2017	5.000%	1,645,000.00	1,645,000.00	0.00
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	7,585,000.00	16,535,000.00

Northern Kentucky Water Service District			2014B		Attachment 23.08
Bond Issue	12/23/14	\$15,805,000.00			
Bond	Maturity	Interest	Principal	Amounts	Outstanding
Number	Date	Rate	Amount	Paid	5/31/2017
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	0.00
Registered	2/1/2017	5.000%	1,940,000.00	1,940,000.00	0.00
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	5,790,000.00	10,015,000.00

Northern Kentucky Water Service District			2016A		Attachment 23.09
Bond Issue	11/22/16	\$41,905,000.00			
Bond	Maturity	Interest	Principal	Amounts	Outstanding
Number	Date	Rate	Amount	Paid	5/31/2017
Registered	2/1/2017	5.000%	2,455,000.00	2,455,000.00	0.00
Registered	2/1/2018	5.000%	1,910,000.00		1,910,000.00
Registered	2/1/2019	5.000%	2,005,000.00		2,005,000.00
Registered	2/1/2020	5.000%	2,380,000.00		2,380,000.00
Registered	2/1/2021	5.000%	2,325,000.00		2,325,000.00
Registered	2/1/2022	5.000%	2,450,000.00		2,450,000.00
Registered	2/1/2023	5.000%	2,685,000.00		2,685,000.00
Registered	2/1/2024	5.000%	2,715,000.00		2,715,000.00
Registered	2/1/2025	5.000%	2,865,000.00		2,865,000.00
Registered	2/1/2026	5.000%	3,015,000.00		3,015,000.00
Registered	2/1/2027	5.000%	3,170,000.00		3,170,000.00
Registered	2/1/2028	3.000%	3,300,000.00		3,300,000.00
Registered	2/1/2029	4.000%	3,425,000.00		3,425,000.00
Registered	2/1/2030	3.000%	3,545,000.00		3,545,000.00
Registered	2/1/2031	3.000%	3,660,000.00		3,660,000.00
TOTALS			41,905,000.00	2,455,000.00	39,450,000.00

NORTHERN KENTUCKY
WATER DISTRICT

Project

***Proposed 30” & 24” Water Main Replacement
Project along Madison Pike from Dudley Road to
Rolling Hills Drive (Phase 2)
Covington, Kentucky***

184-0795

CURRENT BALANCE SHEET AND
INCOME STATEMENT



Balance Sheet
As of May 31, 2017

	Assets	2017	2016
Current Assets			
Cash and Cash Equivalents		\$20,600,883	\$16,325,379
Investments		\$671,569	\$1,177,298
Accounts Receivable			
Customers		\$3,426,426	\$3,684,577
Unbilled Customers		\$6,100,000	\$5,900,000
Other		\$223,619	\$195,808
Assessments Receivable		\$131,088	\$123,785
Inventory Supplies for New Installation and Maintenance, at Cost		\$1,548,649	\$1,645,318
Prepaid Expenses		\$574,886	\$613,076
		\$33,277,120	\$29,665,241
Restricted Assets			
Bond Proceeds Fund		\$25,918,219	\$2,903,131
Debt Service Reserve Account		\$19,117,402	\$18,597,235
Debt Service Account		\$11,425,977	\$11,012,011
Improvement, Repair, & Replacement		\$4,387,760	\$2,053,617
		\$60,849,358	\$34,565,994
Noncurrent Assets			
Miscellaneous Deferred Charges		\$3,892,595	\$3,120,866
Capital Assets:			
Land, System, Buildings, and Equipment		\$466,817,614	\$447,647,595
Construction in Progress		\$25,171,324	\$33,281,279
		\$491,988,938	\$480,928,874
Total Capital Assets before Accumulated Depreciation		\$491,988,938	\$480,928,874
Less: Accumulated Depreciation		(\$145,621,323)	(\$135,892,675)
		\$346,367,615	\$345,036,199
Total Capital Assets Net of Accumulated Depreciation		\$346,367,615	\$345,036,199
		\$350,260,210	\$348,157,065
Total Noncurrent Assets		\$350,260,210	\$348,157,065
		\$444,386,688	\$412,388,300
Total Assets		\$444,386,688	\$412,388,300
Deferred Outflows of Resources:			
Deferred Outflows Related to Pension		\$3,220,484	\$2,343,773
Deferred Loss on Refundings		\$5,007,930	\$3,336,479
		\$8,228,414	\$5,680,252
Total Deferred Outflows of Resources		\$8,228,414	\$5,680,252
		\$452,615,102	\$418,068,552
Total Assets & Deferred Outflows of Resources		\$452,615,102	\$418,068,552



**Balance Sheet
As of May 31, 2017**

Liabilities and Net Position	2017	2016
Current Liabilities		
Bond Indebtedness	\$11,321,232	\$9,654,000
Notes Payable	\$1,264,992	\$1,239,909
Accounts Payable	\$867,132	\$1,154,227
Accrued Payroll & Liabilities	\$1,043,694	\$1,069,676
Other Accrued Liabilities	\$130,765	\$130,438
Customer Deposits	\$1,013,432	\$980,311
	\$15,641,247	\$14,228,561
Current Liabilities From Restricted Assets		
Accounts Payable	\$1,137,526	\$1,770,021
Accrued Interest Payable	\$2,514,547	\$2,764,507
	\$3,652,073	\$4,534,528
Long Term Debt		
Arbitrage Liability	\$1,174,629.00	
Long Term Portion of Bonded Indebtedness	\$166,145,814	\$175,410,810
Notes Payable	\$37,310,544	\$33,258,500
Bond Anticipation Notes Payable	\$26,000,000.00	
Note Payable-Taylor Mill Purchase	\$50,000	\$225,000
Deferred Note Payable	\$100,000	\$100,000
Net Pension Liability	\$16,504,154	\$14,819,690
	\$247,285,141	\$223,814,000
Total Liabilities	\$266,578,461	\$242,577,089
Deferred Inflows of Resources		
Deferred Inflows Related to Pension	\$239,044	\$0
	\$239,044	\$0
Total Liabilities and Deferred Inflows of Resources	\$266,817,505	\$242,577,089
Retained Earnings	\$185,797,597	\$175,491,463
Total Liabilities, Deferred Inflows of Resources, and Retained Earnings	\$452,615,102	\$418,068,552

NORTHERN KENTUCKY WATER DISTRICT
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	YTD May <u>2017</u>	YTD May <u>2016</u>
Operating Revenues		
Water Sales	\$ 19,329,113	\$ 18,367,849
Forfeited Discounts	319,855	362,780
Rents From Property	176,612	192,182
Other Water Revenues	<u>140,350</u>	<u>115,200</u>
Total Operating Revenues	<u>19,965,930</u>	<u>19,038,011</u>
Operating Expenses		
Operating and Maintenance Expense	9,778,867	9,872,407
Depreciation Expense	<u>4,983,800</u>	<u>5,033,800</u>
Total Operating Expenses	<u>14,762,667</u>	<u>14,906,207</u>
Net Operating Income	<u>5,203,263</u>	<u>4,131,804</u>
Other Income (Expense)		
Investment Income	317,495	353,501
Unrealized Gain/(Loss) on Investments	891	15,612
Miscellaneous Non-Operating Income (Expense)	43,090	53,502
Gain/(Loss) on Disposal of Fixed Asset	-	774,125
Interest on Long-Term Debt	(3,074,083)	(3,847,134)
Amortization of Debt Discount and Expense	<u>291,728</u>	<u>227,936</u>
Total Non-Operating Expenses	<u>(2,420,879)</u>	<u>(2,422,458)</u>
Change in Net Position Before Capital Contributions	2,782,384	1,709,346
Capital Contributions	<u>203,643</u>	<u>224,647</u>
Change in Net Position	<u>2,986,027</u>	<u>1,933,993</u>