

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF NORTHERN KENTUCKY)	
WATER DISTRICT FOR APPROVAL OF)	CASE NO. 2018-00413
COX ROAD AND OLIVER ROAD PROJECT)	
FOR ISSUANCE OF A CERTIFICATE)	
OF CONVENIENCE AND NECESSITY)	

APPLICATION FOR APPROVAL OF CONSTRUCTION

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

I. General Information:

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 Rechtin, Vice President of Finance and Support Services
2835 Crescent Springs Rd.
Erlanger, KY 41018-0640
(859) 426-2758 Phone
(859) 442-0665 fax
lrechtin@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(18)(b). No material changes have occurred since the end of the latest 12 month period.

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.

II. Proposed Construction: 807 KAR 5:001(15)

5. NKWD proposes to construct new facilities as described in Exhibit A. The plans and maps for the project are being submitted with a petition for confidentiality. The District has identified the need for a hydraulic improvement project on an existing 6-inch and 8-inch water main along Cox Road and Oliver Road (KY 2045), which serves 104 customers along the project route plus this main is necessary hydraulically to service the populated areas of Independence, KY and areas in southern Kenton County. 807 KAR 5:001(15)(2)(a).

The proposed project is in the public interest based on the need for replacement of the existing facilities. The Cox Road and Oliver Road Water Main Replacement Project will replace approximately 7,600 feet of water main along Cox Road and Oliver Road {from KY 16 to house #4594 Oliver Road} in the City of Independence, Kenton County, Kentucky. The existing cast iron water mains within the project limits were installed around 1950, have a history of failure, and portions rank as high priority for replacement. The existing 6-inch and 8-inch water main will be upsized to a new 12-inch ductile iron water main, which will hydraulically help the Independence area and areas south. Bids for this project were opened on November 1, 2018 and were originally subject to acceptance in 60 days. An extension to January 31, 2019 has been obtained. **Therefore, the bids will expire on January 31, 2019.** Board approval of the final bids for the project is included in Exhibit C.

6. The project will be funded by internally available funds budgeted through the 2019 Operating Capital Budget Line 13-154A/15-157 "Oliver and Cox Water Main

Replacement Part B". The total project budget for this project is \$1,300,000 which includes construction cost, engineering, materials, and contingencies. A summary of the project costs is provided below:

○ Engineering Part A & B	\$ 93,444.00
○ Contractor Cost Part A (constructed 2009)	\$ 251,734.20
○ Contractor Bid Part B	\$ 940,926.60
○ Misc. & Contingencies	<u>\$ 13,895.20</u>
Total Project Cost	\$ 1,300,000.00

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. The District has received all approvals from the DOW for the Plans and Specifications and funding for these improvements. See Exhibit B.

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

10. The proposed construction project identified in Exhibit A is scheduled to begin construction in March, 2019 or upon PSC approval and the expected in service date is October, 2019

11. No new franchises are required. Easements, encroachment permits and rights of way statements are attached as Exhibit B.

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

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

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

15. New customers added, estimated 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 March, 2019 or upon PSC approval. The proposed in-service date is October, 2019. 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.

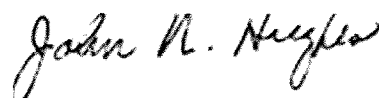
23. Current balance sheet, income statement and debt schedule are attached as Exhibits E and F.

24. USoA plant accounts are included in Exhibit D.

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

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:



John N. Hughes
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Frankfort, KY 40601
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502 227 7270 Ph.



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Manager of Legal, Compliance,
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Erlanger, KY 41018
amattingly@nkywater.org
859-578-5455 Ph.

Attorneys for NKWD

NORTHERN KENTUCKY
WATER DISTRICT

Case No. 2018-00413

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

**Proposed Cox Road & Oliver Road (KY 2045) 12-inch
Water Main Replacement Project
Kenton County, Kentucky
184-0613**

Project Description

The District maintains an existing 6-inch and 8-inch water main along Cox Road and Oliver Road (KY 2045) which serves 104 customers along the project route plus this main is necessary hydraulically to service the populated areas of Independence, KY and areas in southern Kenton County.

The Cox Road and Oliver Road Water Main Replacement Project will replace approximately 7,600 feet of water main along Cox Road and Oliver Road {from KY 16 to house #4594 Oliver Road} in the City of Independence, Kenton County, Kentucky.

The existing cast iron water mains within the project limits were installed around 1950, have a history of failure and ranks as high priority for replacement.

The existing 6-inch and 8-inch water main will be upsized to a new 12-inch ductile iron water main, which will hydraulically help the Independence area and areas south.

Bids for this project were opened on November 1, 2018 and are subject to acceptance for 60 days. An extension to January 31, 2019 has been obtained. Therefore, the bids will expire on January 31, 2019.

**NORTHERN KENTUCKY WATER DISTRICT
Cox Road & Oliver Road (KY 2045) 12-Inch
Water Main Replacement Project
Kenton County, Kentucky
184-0613**

TABLE OF CONTENTS

Project Description

<u>EXHIBIT</u>	<u>TITLE</u>
A	ENGINEERING REPORTS AND INFORMATION (1) Project map (2) Engineer's opinion of probable total construction cost; (3) System Hydraulic Model (4) Plans prepared by HDR Engineering, Inc., Cox Road & Oliver Road (KY 2045) 12-Inch Water Main Replacement dated October 2018, sealed by a P.E. (5) Specifications prepared by HDR Engineering, Inc., Cox Road & Oliver Road (KY 2045) 12-Inch Water Main Replacement dated October 2018, 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

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

ENGINEERING REPORTS AND INFORMATION

Project Map

Engineer's Opinion of Probable Total Construction Cost

System Hydraulic Model

Plans prepared by HDR Engineering, Inc., titled "Cox Road & Oliver Road (KY 2045) Water Main Replacement Kenton County, Kentucky" dated October 2018, sealed by a P.E.

Specifications prepared by HDR Engineering, Inc., titled "Cox Road & Oliver Road (KY 2045) Water Main Replacement Kenton County, Kentucky" dated October 2018, sealed by a P.E.

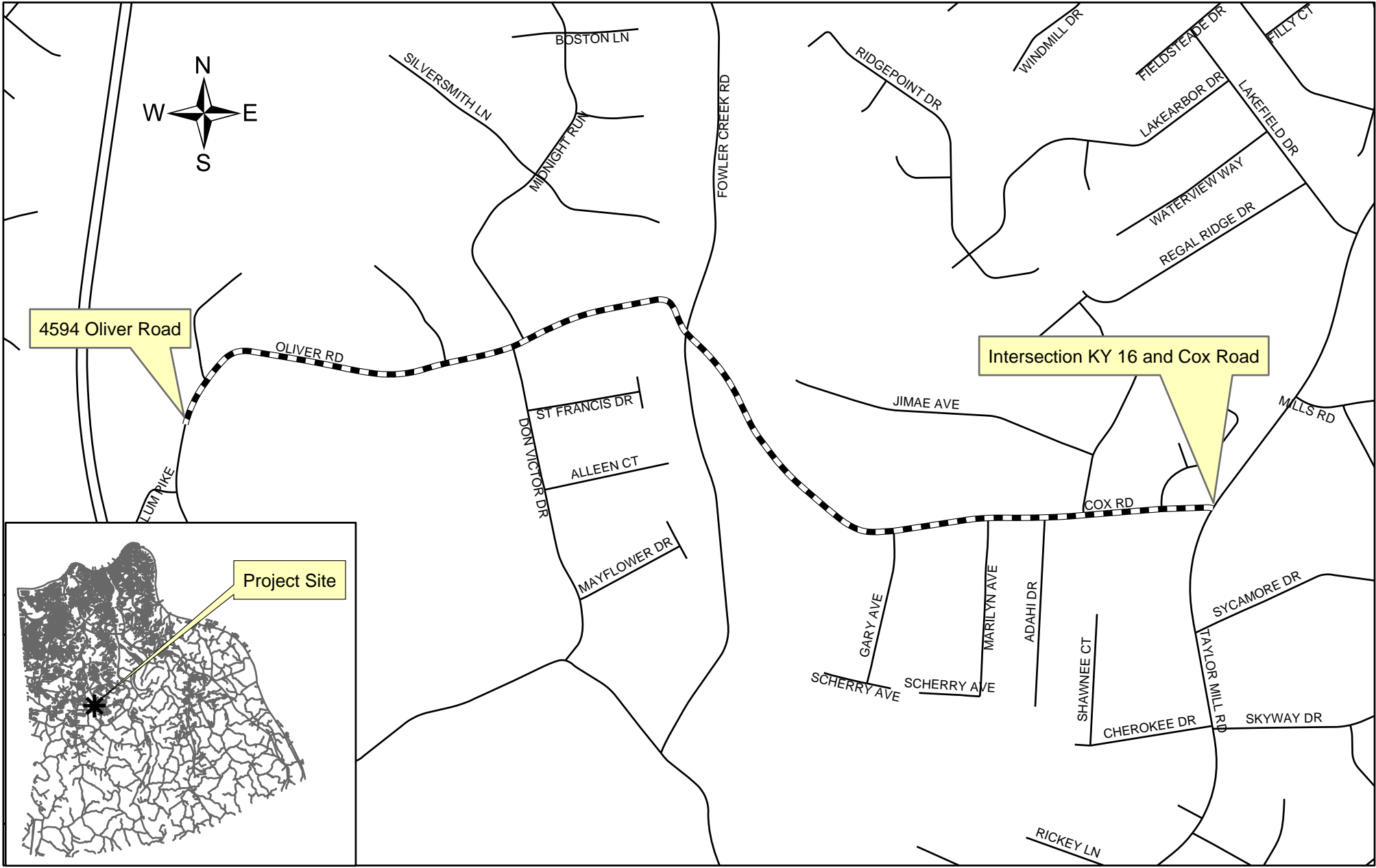
NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

Project Map



Cox Road & Oliver Road 12" WMR

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

Engineer's Opinion
Of Probable
Construction Cost

Cox Road and Oliver Road 12-Inch Water Line Replacement					
Item No.	Description	Unit of Measure	Estimated Quantity	Unit Cost Total	Total Cost
1	6.01 CLASS 50 or 52 DUCTILE IRON PIPE (12-inch). (Detail 103, 103a, 104, 104a, 110)	LF	7430	\$75.00	\$557,250.00
2	6.02.B CLASS 50 or 52 DUCTILE IRON PIPE (12-inch) – RESTRAINED JOINT	LF	45	\$85.00	\$3,825.00
3	6.02 CLASS 50 or 52 DUCTILE IRON PIPE (8-inch) – RESTRAINED JOINT	LF	35	\$70.00	\$2,450.00
4	6.01 CLASS 50 or 52 DUCTILE IRON PIPE (6-inch). (Detail 103, 103a, 104, 104a, 110)	LF	105	\$60.00	\$6,300.00
5	7.01 CONNECT TO EXISTING MAIN/TIE-IN (12-Inch)	EA	1	\$3,500.00	\$3,500.00
6	7.01 CONNECT TO EXISTING MAIN/TIE-IN (8-Inch)	EA	4	\$3,000.00	\$12,000.00
7	7.01 CONNECT TO EXISTING MAIN/TIE-IN (6-Inch)	EA	5	\$2,500.00	\$12,500.00
8	8.01 INSTALL FIRE HYDRANT ASSEMBLY	EA	9	\$2,500.00	\$22,500.00
9	8.03 REMOVE FIRE HYDRANT	EA	8	\$500.00	\$4,000.00
10	9.01 DUCTILE IRON RESILIENT SEATED GATE VALVE (12-Inch)	EA	20	\$2,500.00	\$50,000.00
11	9.01 DUCTILE IRON RESILIENT SEATED GATE VALVE (8-Inch)	EA	4	\$1,000.00	\$4,000.00
12	9.01 DUCTILE IRON RESILIENT SEATED GATE VALVE (6-Inch)	EA	5	\$800.00	\$4,000.00
13	10.02 REPLACE SERVICE LINE AND INSTALL WATER METER SETTING (3/4" THRU 2") (Service line materials provided by NKWD)	EA	103	\$750.00	\$77,250.00
14	10.08 REMOVE EXISTING CURB STOP/METER CROCK	EA	1	\$300.00	\$300.00
15	11.01 CONCRETE ENCASEMENT	LF	40	\$50.00	\$2,000.00
16	11.02 PLUG AND BLOCK (All Sizes)	EA	1	\$250.00	\$250.00
17	11.03 AIR RELEASE VALVE (ARV and service line materials provided by NKWD)	EA	4	\$1,500.00	\$6,000.00
18	11.04 ANCHORING TEE AND BLOCK (12"x12"x12")	EA	1	\$750.00	\$750.00
19	11.04 ANCHORING TEE AND BLOCK (12"x12"x8")	EA	2	\$600.00	\$1,200.00
20	11.04 ANCHORING TEE AND BLOCK (12"x12"x6")	EA	13	\$500.00	\$6,500.00
21	11.04 ANCHORING TEE AND BLOCK (8"x8"x8")	EA	1	\$500.00	\$500.00
22	11.05 REDUCER (8 x 12)	EA	3	\$350.00	\$1,050.00
23	11.11 TEST TAP	EA	1	\$500.00	\$500.00
24	11.15 SLEEVE OUT EXISTING TEE/CROSS/VALVE	EA	1	\$500.00	\$500.00
25	12.05 ASPHALTIC CONCRETE MILLING AND PAVING	SY	1944	\$10.00	\$19,440.00
26	12.06 ASPHALTIC CONCRETE	SY	396	\$75.00	\$29,700.00
27	12.07 ASPHALTIC CONCRETE - DRIVEWAY	SY	184	\$50.00	\$9,200.00
28	12.09 CONCRETE PAVEMENT	SY	122	\$85.00	\$10,370.00
29	12.10 CONCRETE DRIVEWAY	SY	570	\$75.00	\$42,750.00
30	12.12 CONCRETE SIDEWALK	SY	10	\$50.00	\$500.00
31	12.13 GRAVEL DRIVEWAY/PARKING AREA	SY	33	\$50.00	\$1,650.00
32	12.14 BEST MANAGEMENT PRACTICE	LS	1	\$5,000.00	\$5,000.00
33	12.15 REPLACE DRIVEWAY CULVERT	EA	2	\$750.00	\$1,500.00
34	12.16 MAINTENANCE OF TRAFFIC	LS	1	\$20,000.00	\$20,000.00
Final Opinion of Probable Construction Cost					\$919,235.00

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

System Hydraulic Model

Northern Kentucky Water District

December 3, 2015

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

Re: Cox Road and Oliver Road 12" Water Main Replacement, Kenton County, Kentucky

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 project does not meet the sanitary sewer separation requirements from station 80+00 to 81+50.

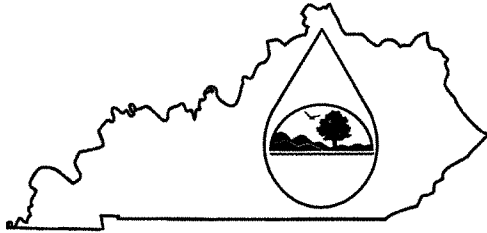
If there are questions, please do not hesitate to contact me at 859-426-2703.



Jeff Schuchter
Acting Engineering and Construction Manager

cc: file

Enclosed: Form DW-1
Hydraulic Calculations
U.S.G.S. 7 ½ minute topographic map
Customer List
3 Sets of full size plans
CD containing PDFs of plans and specifications



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 application.
 Questions on completing this application? Contact the Water Infrastructure Branch at 502/564-3410, by e-mail at WIBEngineering@ky.gov or visit our website at <http://water.ky.gov> for more information.

I. Construction Project Information

Project Name: Cox Road and Oliver Road 12" Water Main Replacement

Project County: Kenton Estimated Project Cost: \$ 966,625

Project Latitude/Longitude (DMS): 38.947680, -84.519980

Is this a federally funded project: n/a

DWSRF

SPAP

Other: _____

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: Northern Kentucky Water District

Does the project contain any of the following: n/a

Booster Pump Stations

Water Storage Tanks

Waterlines

Waterline Material	Waterline Size	Linear Feet
ductile iron	12"	7,475

Provide a DETAILED description of work to be performed for this project. Attach additional sheets as necessary:

Installation of 7,475 feet of 12' ductile iron water main from the intersection of Cox Road (KY 2045)/Taylor Mill Road (KY16) to a point on Oliver Road (KY 2045).

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

- Sanitary Sewer WWTP: _____
- 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 #: 859-426-2703 Fax #: 859-578-7893 Email: jschuchter@nkywater.org

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

Utility Name: n/a 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? _____

- 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**” 2007 Edition (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. Provide detailed plans (no larger than 24” X 36”) which must comply with **401 KAR 8:100**. See the instructions for additional details.

B. Design Engineer

Name: Kevin Brian Firm: HDR Inc.
 Street Address: 401 West Main Street
 City, State, Zip: Louisville, KY 40213
 Phone #: 502-909-3241 Fax #: 502-588-5814 Email: kevin.brian@hdrinc.com

Design Capacities

Identify the number of new connections and the projected average daily demand: n/a

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

Identify the number of connections in the service area: _____

Other Information to be Submitted with the Project

- 1. Provide a copy of the U.S.G.S. 7 ½ minute topographic map or a detailed vicinity 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: _____
- 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: \$ _____



FIRE FLOW CERTIFICATION

**Cox Road and Oliver Road
12" Water Line Replacement
City of Independence
Kenton County, KY
November 23, 2015**

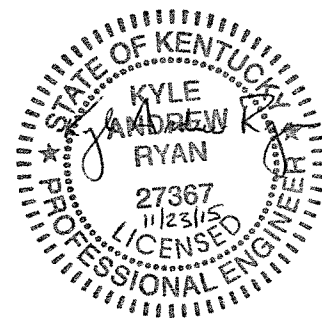
I certify that the proposed improvements meet the 807 KAR 5:066, Section 10b regulation for fire flow protection relating to KRS Chapter 278. I am certifying that "the system can provide a minimum fire flow of 250 gallons per minute; and the water system supporting this flow has the capability of providing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

This certification is based on hydraulic modeling performed using InfoWater, the program available from 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

**Cox Road and Oliver Road
12" Water Line Replacement
City of Independence
Kenton County, KY
November 23, 2015**

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

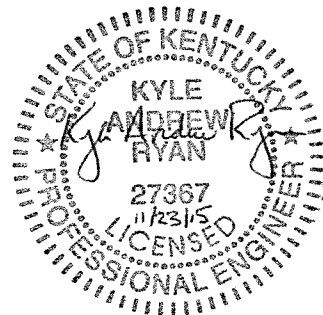
The maximum flow rate that can reliably be supplied to the main and meet 20 psi in the system under maximum hour conditions is 1,500 gpm. At least 30 psi can be maintained under the peak domestic demand for the 105 customers affected. The peak domestic demand using the D.R. Taylor formula for 105 customers is 102.5 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 Independence Tank was one-half full.



Cox Road and Oliver Road
 12" Water Line Replacement
 Independence
 Kenton County, Kentucky
 Output from InfoWater model - copied to Excel
 November 23, 2015



Maximum Hour Run for Potential Customers

Maximum Hour Run, 105 affected Customers = 102.5 GPM				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
8424	9.3	770	1110.0	147.3
V00275	9.3	806	1109.9	131.7
8378	9.3	878	1109.8	100.4
8382	9.3	874	1109.8	102.2
V00281	9.3	788	1109.7	139.4
8439	9.3	890	1109.3	95.0
8430	9.3	900	1109.2	90.6
10499	9.3	908	1109.1	87.2
10498	9.3	914	1109.1	84.5
11118	9.3	912	1109.1	85.4
10497	9.3	906	1109.1	88.0

Flushing Velocities Under Maximum Hour

*side street mains closed to get 2.5 fps

Oliver Road

Flushing velocity 2.5 fps for new 12" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
8424	881.0	770	1069	129
V00275	9.3	806	1071	115
8378	9.3	878	1075	85
8382	9.3	874	1074	87
V00281	9.3	788	1077	125
8439	9.3	890	1078	81
8430	9.3	900	1078	77
10499	9.3	908	1078	74
10498	9.3	914	1078	71
11118	9.3	912	1079	72
10497	9.3	906	1079	75

Pipe Information for flushing velocity at 2.5 fps for new 12" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
7147	1108	12	924	2.6	120
7145	93	12	900	2.6	120
7073	1635	12	890	2.5	120
7069	798	12	881	2.5	120

Cox Road

Flushing velocity 2.5 fps for new 12" pipe (under max hour)				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
8424	9.3	770	1085.8	136.8
V00275	9.3	806	1085.5	121.1
8378	9.3	878	1084.8	89.6
8382	9.3	874	1084.9	91.4
V00281	9.3	788	1084.2	128.3
8439	9.3	890	1079.3	82.0
8430	9.3	900	1077.8	77.0
10499	9.3	908	1076.8	73.2
10498	9.3	914	1076.3	70.3
11118	9.3	912	1075.1	70.7
10497	881.0	906	1074.4	73.0

Pipe Information for flushing velocity at 2.5 fps for new 12" pipe					
Pipe ID	Length, ft	Diam, inch	Flow, gpm	Velocity, fps	Roughness
7067	1844	12	945	2.7	120
7047	586	12	931	2.6	120
12087	373	12	919	2.6	120
12086	221	12	902	2.6	120
12084	497	12	893	2.5	120
13228	305	12	881	2.5	120

Maximum Available Flow Under Maximum Hour

Maximum Hour Run, Maximum Available Flow				
ID	Demand, gpm	Elevation, ft	Grade, ft	Pressure, psi
8424	9.3	770	1070.2	130.1
V00275	9.3	806	1069.8	114.3
8378	9.3	878	1068.9	82.7
8382	9.3	874	1069.0	84.5
V00281	9.3	788	1068.1	121.4
8439	9.3	890	1063.5	75.2
8430	9.3	900	1062.1	70.2
10499	9.3	908	1061.2	66.4
10498	1500.0	914	1060.7	63.6
11118	9.3	912	1061.2	64.7
10497	9.3	906	1061.5	67.4

<u>Pipe ID</u>	<u>From Node</u>	<u>To Node</u>
7069	8424	V00275
7073	V00275	8382
7145	8382	8378
7147	8378	V00281
7067	V00281	8439
7047	8439	8430
12087	10499	8430
12086	10498	10499
12084	11118	10498
13228	10497	11118



Cox Road/Oliver Road address list

Name	Address	Town
KENNETH LANCASTER	733 COX RD	INDEPENDENCE
DARLINE IVEY	735 COX RD	INDEPENDENCE
KARYL SHOUSE	737 COX RD	INDEPENDENCE
MARGARET SPURLOCK	739 COX RD	INDEPENDENCE
NEW SERVICE	740 COX RD	INDEPENDENCE
WILLIAM FOWLER	741 COX RD	INDEPENDENCE
JOSEPH SCOTT MARKSBERRY	744 COX RD	INDEPENDENCE
MICHAEL BARNETT	746 COX RD	INDEPENDENCE
KIMBERLY WITT	747 COX RD	INDEPENDENCE
DON WITT	748 COX RD	INDEPENDENCE
LAWRENCE LANKHEIT	750 COX RD	INDEPENDENCE
RICHARD HAUENSTEIN	752 COX RD	INDEPENDENCE
ROBERT L KIRK	754 COX RD	INDEPENDENCE
RAY S HUGHES	756 COX RD	INDEPENDENCE
LOIS CUTHBERT	757 COX RD	INDEPENDENCE
RUTH B KENNEDY	759 COX RD	INDEPENDENCE
THERESA GRAY	760 COX RD	INDEPENDENCE
HAROLD W SCHMIDT JR	761 COX RD	INDEPENDENCE
KENNETH JUSTICE	763 COX RD	INDEPENDENCE
ANN M DURHAM	764 COX RD	INDEPENDENCE
MIKE SESTER	767 COX RD	INDEPENDENCE
DANIEL FARRAR	768 COX RD	INDEPENDENCE
THERESE MILLER	770 COX RD	INDEPENDENCE
ROBERT M SHORT	773 COX RD A	INDEPENDENCE
MARGARET HEWINS	773 COX RD B	INDEPENDENCE
SHARON L HUFF	779 COX RD	INDEPENDENCE
ELIHU REYNOLDS	781 COX RD	INDEPENDENCE
DEBRA WYATT	783 COX RD	INDEPENDENCE
DARA WILSON	785 COX RD	INDEPENDENCE
JOHN OLDIGES SR	789 COX RD	INDEPENDENCE
DAVE WEYER	790 COX RD	INDEPENDENCE
JAMES ASBURY	792 COX RD	INDEPENDENCE
PATRICIA OLDIGES	793 COX RD	INDEPENDENCE
STEVE SMITH	794 COX RD	INDEPENDENCE
DOUG SLOAN	795 COX RD	INDEPENDENCE
MELISSA A TRAFT	796 COX RD	INDEPENDENCE
BILLY MESSER	798 COX RD	INDEPENDENCE
DONALD MORGAN	799 COX RD	INDEPENDENCE
KEITH BATES	804 COX RD	INDEPENDENCE
SARAH DRAKE	805 COX RD	INDEPENDENCE
DOUGLAS SMITH	806 COX RD	INDEPENDENCE
ASHLEY MUZNY	812 COX RD	INDEPENDENCE

RICHARD A WILLIAMS	814 COX RD	INDEPENDENCE
RICHARD A WILLIAMS	814 COX RD A	INDEPENDENCE
JACKIE FOOTE	815 COX RD	INDEPENDENCE
LAWRENCE A LOSEY	816 COX RD	INDEPENDENCE
MELISSA ROBERTS	819 COX RD	INDEPENDENCE
ANTHONY HALL	820 COX RD	INDEPENDENCE
MICHAEL APPLGATE	822 COX RD	INDEPENDENCE
JENNA MARTIN	823 COX RD	INDEPENDENCE
LISA STAMPER	824 COX RD	INDEPENDENCE
MILLER C MILLER	825 COX RD	INDEPENDENCE
E & E REAL ESTATE, LLC	826 COX RD	INDEPENDENCE
DAN SCHOENSTEIN	829 COX RD	INDEPENDENCE
CLARK A HAGEMAN	831 COX RD	INDEPENDENCE
DARREN FUEHNER	4369 OLIVER RD	INDEPENDENCE
N LUTES	4370 OLIVER RD	INDEPENDENCE
JEFF PIPER	4374 OLIVER RD	INDEPENDENCE
RACHEL MARTIS	4387 OLIVER RD	INDEPENDENCE
KEVIN HIGGINS	4391 OLIVER RD	INDEPENDENCE
W E MILLER	4394 OLIVER RD	INDEPENDENCE
LINDA HOLMES	4395 OLIVER RD	INDEPENDENCE
MARVIN BECK	4406 OLIVER RD	INDEPENDENCE
GERALD DAY	4416 OLIVER RD	INDEPENDENCE
DONALD WOLFE	4428 OLIVER RD	INDEPENDENCE
CYNDI HANSEL	4431 OLIVER RD	INDEPENDENCE
BELINDA GOWEN	4444 OLIVER RD	INDEPENDENCE
BRANDON SEE	4448 OLIVER RD	INDEPENDENCE
ARNOLD WALKER	4449 OLIVER RD	INDEPENDENCE
ANGELA DEMOSS	4450 OLIVER RD	INDEPENDENCE
ANDREA MULLING	4451 OLIVER RD	INDEPENDENCE
LAWRENCE ROBKE	4452 OLIVER RD	INDEPENDENCE
CONNIE HERGOTT	4453 OLIVER RD	INDEPENDENCE
DAVID SCOTT	4455 OLIVER RD	INDEPENDENCE
DAVID MILLER	4456 OLIVER RD	INDEPENDENCE
LINDA J RIGGS	4457 OLIVER RD	INDEPENDENCE
MARIETTA MILLER	4460 OLIVER RD	INDEPENDENCE
TERM FINANCE CO	4477 OLIVER RD	INDEPENDENCE
DENNIS HACKER	4478 OLIVER RD	INDEPENDENCE
DAVID MILLER	4489 OLIVER RD	INDEPENDENCE
RICHARD DAVIS	4505 OLIVER RD	INDEPENDENCE
JOHN MARKSBERRY	4521 OLIVER RD	INDEPENDENCE
EVA BICKERS	4545 OLIVER RD	INDEPENDENCE
DAN BONDICK	4546 OLIVER RD	INDEPENDENCE
JERRY TURNER	4552 OLIVER RD	INDEPENDENCE
DAVID MOENING	4555 OLIVER RD	INDEPENDENCE
DAVID MOENING	4561 OLIVER RD	INDEPENDENCE
AMY MATT	4567 OLIVER RD	INDEPENDENCE
DALE KLARE	4569 OLIVER RD	INDEPENDENCE

JESSICA HOUZE	4570 OLIVER RD	INDEPENDENCE
DAVID MOENING	4571 OLIVER RD	INDEPENDENCE
KELLY S JETT	4581 OLIVER RD	INDEPENDENCE
LESLIE HEUSER	4590 OLIVER RD	INDEPENDENCE
STEVE MOSER	4591 OLIVER RD	INDEPENDENCE

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

Plans titled “Cox Road & Oliver Road (KY 2045) Water Main Replacement Kenton County, Kentucky” dated October 2018, sealed by a P.E

And

Specifications titled “Cox Road & Oliver Road (KY 2045) Water Main Replacement Kenton County, Kentucky” dated October 2018, sealed by a P.E

See separate documents

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

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

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky


184-0613

Affidavit

AFFIDAVIT

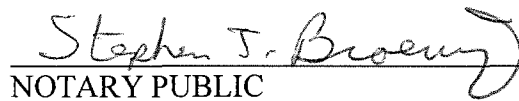
**Cox Road & Oliver Road (KY 2045) 12-inch Water Main Replacement Project,
Kenton County, Kentucky**

Affiant, Lindsey Rechten, being the first duly sworn, deposes and says that she is the Vice President of Finance and Support Services of the Northern Kentucky Water District, which she is the Applicant in the proceeding styled above; that she has read the foregoing "Cox Road & Oliver Road (KY 2045) 12-inch Water Main Replacement Project, Kenton County, Kentucky." Application and knows the contents thereof, and that the same is true of her own knowledge, except as to matters which are therein stated on information or belief, and that is to those matters she believes them to be true.

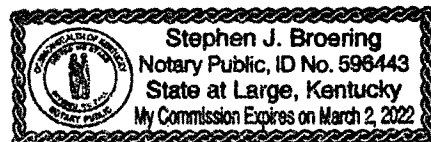


Lindsey Rechten
Vice President - Finance & Support Services
Northern Kentucky Water District

Subscribed and sworn to before me in said County to be her act and deed by
Lindsey Rechten, Vice President of Finance & Support Services of the Northern
Kentucky Water District, this
7th day of December 2018.



NOTARY PUBLIC
Kenton County, Kentucky
My commission expires 3-2-2022



NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

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 HDR Engineering, Inc., titled “Cox Road & Oliver Road (KY 2045) Water Main Replacement Kenton County, Kentucky” dated October 2018, sealed by a P.E.

See attached permit letters for:

- Kentucky Division of Water on September 19, 2018 AI#2485, APE20180003
- Kentucky Department of Transportation encroachment permit #06-2015-00998
- U.S. Army Corp of Engineers stream crossing permit LRL-2016-00022-teh

Easements and Right-of-Way Status –Easements are needed for this project and all have been secured

PIDN – 060-20-00-062.00

PIDN – 046-00-00-101.00

PIDN – 061-10-00-208.00

PIDN – 046-40-00-005.00

Start date of construction – March 2019

Proposed date in service – October 2019

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

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

PLAN REVIEW AND PERMIT STATUS

Approval Letter from Kentucky Division of Water

Kentucky Transportation Cabinet Encroachment Permit

Army Corp of Engineers Stream Crossing Permit



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

September 19, 2018

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

RE: Cox Road and Oliver Road 12-inch Water Main
Replacements
Campbell County, KY
Northern KY Water District
AI #: 2485, APE20180003
PWSID #: 0590220-18-003

Dear Mr. Ryan:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 7,475 feet of 12-inch DI, 35 feet of 8-inch DI and 105 feet of 6-inch DI water main. 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 with the following condition.

If you have any questions concerning this project, please contact Mr. Mohammed Mohiuddin at 502-782-7020.

Sincerely,

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

TH: MM
Enclosures

C: HDR Engineering Inc.
Campbell County Health Department
Division of Plumbing



Distribution-Water Line Extension

Northern KY Water District

Facility Requirements

Activity ID No.:APE20180003

Page 1 of 5

PORT000000279 (Cox Road and Oliver Road Water Main Replacement) 7,475 feet of 12-inch DI, 35 feet of 8-inch DI and 105 feet of 6-inch DI Water main:

Narrative Requirements:

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

Distribution-Water Line Extension

Northern KY Water District

Facility Requirements

Activity ID No.:APE20180003

Page 2 of 5

PORT000000279 (Cox Road and Oliver Road Water Main Replacement) 7,475 feet of 12-inch DI, 35 feet of 8-inch DI and 105 feet of 6-inch DI Water main:

Narrative Requirements:

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

Distribution-Water Line Extension

Northern KY Water District

Facility Requirements

Activity ID No.:APE20180003

Page 3 of 5

PORT000000279 (Cox Road and Oliver Road Water Main Replacement) 7,475 feet of 12-inch DI, 35 feet of 8-inch DI and 105 feet of 6-inch DI Water main:

Narrative Requirements:

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

Distribution-Water Line Extension

Northern KY Water District

Facility Requirements

Activity ID No.:APE20180003

Page 4 of 5

PORT000000279 (Cox Road and Oliver Road Water Main Replacement) 7,475 feet of 12-inch DI, 35 feet of 8-inch DI and 105 feet of 6-inch DI Water main:

Narrative Requirements:

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

Distribution-Water Line Extension

Northern KY Water District

Facility Requirements

Activity ID No.:APE20180003

Page 5 of 5

PORT000000279 (Cox Road and Oliver Road Water Main Replacement) 7,475 feet of 12-inch DI, 35 feet of 8-inch DI and 105 feet of 6-inch DI Water main:

Narrative Requirements:

Condition No.	Condition
T-45	Valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair; the valves shall be easily accessible, and not subject to flooding for pipes crossing underwater. [Recommended Standards for Water Works 8.9.2.b]
T-46	Permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples on each side of the valve closest to the supply source for pipes crossing. [Recommended Standards for Water Works 8.9.2.c]

From: [Brefeld, Linzy M. \(KYTC-D06\)](#)
To: [Steve Broering](#)
Subject: RE: Permit 06-2015-00998 KY 2045 Cox Road and Oliver Road
Date: Wednesday, December 13, 2017 7:30:56 AM

Permit extended to 1/31/2019.

Linzy Brefeld, P.E.
District Permit Engineer
KYTC, District 6
421 Buttermilk Pike
Covington, KY 41017
859-341-2700 ext. 223
Linzy.Brefeld@ky.gov

From: Steve Broering [mailto:sbroering@nkywater.org]
Sent: Tuesday, December 12, 2017 10:41 AM
To: Brefeld, Linzy M (KYTC-D06) <Linzy.Brefeld@ky.gov>
Subject: Permit 06-2015-00998 KY 2045 Cox Road and Oliver Road

Linsey,

Attached to this email is a copy of a KTC permit (06-2015-00998) for the construction of a new water main along Cox and Oliver Roads (KY 2045) in Kenton County. Due to past budget constraints the District could not construct the project in 2016.

The District is requesting an extension of this permit for construction in 2018.

If you have any questions I can be reached at 859-426-2728.

Regards,
Steve Broering
Northern Kentucky Water District



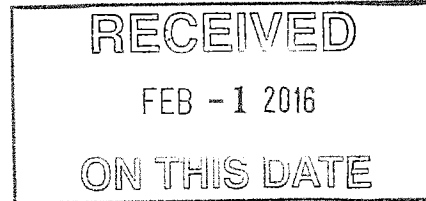
COMMONWEALTH OF KENTUCKY

Matthew G. Bevin
Governor

January 26, 2016

Northern KY Water District
Attn: Steve Broering
2835 Crescent Springs Rd.
Erlanger, KY 41018

SUBJECT: Kenton, MP – 2.135-3.7
Route No. 2045
Permit Number 06-2015-00998




Dear Applicant:

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

Please see that the work is done in strict conformity with the permit and any other applicable conditions. (See Form TC99-21 and any other attached documents, conditions or specifications). The work should be completed no later than 12/22/16. When the permitted work and any necessary restoration have been completed please notify this office by using the attached form which will serve as a notification for final inspection.

If there are any question regarding this permit, please do not hesitate to contact Matt Bogen at 859-341-2700 or fax number 859-341-6729.

Sincerely,


Matt Bogen, PE
Permits Supervisor

Robert A. Hans, P.E.
Chief District Engineer
Department of Highways
District 6- Covington
421 Buttermilk Pike
Covington, KY 41017



NOTICE OF COMPLETION OF ENCROACHMENT PERMIT WORK

PLEASE RETURN THIS FORM TO THE DISTRICT OFFICE WHEN WORK IS
COMPLETED AND IS READY FOR FINAL INSPECTION.

APPLICANT INFORMATION:

Northern KY Water District
Attn: Steve Broering
2835 Crescent Springs Rd.
Erlanger, KY 41018

PROJECT IDENTIFICATION:

Kenton, MP – 2.135-3.7
Route No. 2045
Permit Number 06-2015-00998
Road Name: Cox Rd.

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

Applicant Signature: _____

Please Return To: Department of Highways
 District 6 Covington
 421 Buttermilk Pike
 Covington, Kentucky 41017

Attention: Permits Dept.



ENCROACHMENT PERMIT

KEPTS No.: T06-2015-00998

Permittee: Northern Kentucky Water District

Latitude: 38.943422

Longitude: -84.530035

Completion Date: 12/22/2016

Coordinates provided on the TC 99-1(B) are the approved location for this permit

Indemnities		
Type	Amount Required	Tracking Number
Performance Bond	0	
Payment Bond	0	
Liability Insurance	0	

This permit has been:

APPROVED DENIED

Matt Bogen Permits Supervisor
 NAME TITLE

[Signature] 1/12/16
 SIGNATURE 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.



Kentucky Transportation Cabinet
Department of Highways
Permits Branch

TC 99-1 (A)
8/2012
Page 1 of 4

APPLICATION FOR ENCROACHMENT PERMIT

Permittee Information				KYTC No. 06-2015-00998			
Name	Northern Kentucky Water District			Permit Information			
Address	2835 Crescent Springs Road			Address	Cox Road and Oliver Road		
City	Erlanger			City	Independence		
State	KY	Zip	41018	State	KY	Zip	41051
Phone#	859-578-9898			County	Kenton		
Contact	Steve Broering			Route No.	2045	Mile-Point	2.135 - 3.7
Phone	859-426-2728	Cell		Longitude (X)	- 84.530035		
Email	sbroering@nkywater.org			Latitude (Y)	38.943422		
Contact				<i>Information below to be filled out by KYTC</i>			
Phone	Cell			<input type="checkbox"/> Air Right	<input type="checkbox"/> Entrance		
Email				<input checked="" type="checkbox"/> Utilities	<input type="checkbox"/> Other: _____		
				<input type="checkbox"/> Left	<input checked="" type="checkbox"/> Right	<input checked="" type="checkbox"/> X-ing	
				Access:	<input type="checkbox"/> Full	<input type="checkbox"/> Partial	<input checked="" type="checkbox"/> by Permit

General Description of Work:

12" Water Main Replacement on Cox Road and Oliver Road (KY 2045). The new water main will be connected to an existing water main on Oliver Road and terminate at Taylor Mill Road (KY 16). Restoration will be trench restoration, mill and pave, concrete and topsoil repair.

APPROVED

JAN 26 2016

KYTC District 6

184-0613

THE UNDERSIGNED PERMITTEE(s) (being duly authorized representative(s) or owner(s)) DO AGREE TO ALL TERMS AND CONDITIONS ON THE TC 99-1 (A).

Steve Broering

11-16-15

Signature

Date

This is not a permit unless and until the permittee(s) receives an approved TC 99-1(B) from KYTC. This application will become void if not approved by the cancellation date. The cancellation date will be one year from the date the permittee submits their application.



APPLICATION FOR ENCROACHMENT PERMIT

TERMS AND CONDITIONS

1. The permit, including this application and all related and accompanying documents and drawings making up the permit, remains in effect and is binding upon the Applicant/Permittee, its successors and assigns, as long as the encroachment(s) exists and also until the permittee is finally relieved by the Department of Highways from all its obligations.
2. Applicant shall meet all requirements of the Clean Water Act if the project will disturb one acre or more, the applicant shall obtain a KPDES KYR10 Permit from the Kentucky Division of Water. All disturbed areas shall meet the requirements of the Department of Highway's Standard Specifications, Sections 212 and 213, as amended.
3. **INDEMNITY:**
 - A. **PERFORMANCE BOND:** The permittee shall provide to the Department a performance bond according to the Permits Manual, Section PE-203 as a guarantee of conformance with the Department's Encroachment Permit requirements.
 - B. **PAYMENT BOND:** At the discretion of the department, a payment bond will be required of the permittee to ensure payment of liquidated damages assessed to the permittee.
 - C. **LIABILITY INSURANCE:** Liability insurance will be required of the permittee (in an amount approved by the department) to cover all liabilities associated with the encroachment.
 - D. It shall be the responsibility of the permittee, its successors and assigns, to maintain all indemnities in full force and effect until the permittee is authorized to release the indemnity by the Department.
4. A copy of this application and all related documents making up the approved permit will be given to the applicant and shall be made readily available for review at the work site at all times.
5. Perpetual maintenance of the encroachment is the responsibility of the permittee, its successors and assigns, with the approval of the Department as required, unless otherwise stated.
6. Permittee, its successors and assigns, shall comply with and agrees to be bound by the requirements and terms of (a) this application and all related documents making up the approved permit, (b) by the Department's Permits Manual, and (c) by the Manual on Uniform Traffic Control Devices, both manuals as revised to and in effect on the date of issuance of the permit, all of which documents are made a part thereof by this reference. Compliance by the permittee, its successors and assigns, with subsequent revisions to applicable provisions of either manual or other policy of the Department may be made a condition of allowing the encroachment to persist under the permit.
7. Permittee agrees that this and any encroachment may be ordered removed by the Department at any time, and for any reason, upon thirty days written notice to the last known address of the applicant or to the address at the location of the encroachment. The permittee agrees that the cost of removing and of restoring the associated right-of-way is the responsibility of the permittee, its successors and assigns.
8. Permittee, its successors and assigns, agree that if the Department determines that motor vehicular safety deficiencies develop as a result of the installation or use of the encroachment, the permittee, its successors and assigns, shall provide and bear the expenses to adjust, relocate, or reconstruct the facilities, and/or add signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department within a reasonable time after receipt of a written notice of such deficiency. The period within which such adjustments, relocations, additions, modifications, and/or other corrective measures must be completed will be specified in the notice.



APPLICATION FOR ENCROACHMENT PERMIT

9. Where traffic signals are required as a condition of granting the requested permit or are thereafter required to correct motor vehicular safety deficiencies, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee, its successors and assigns, and/or the Department in its reasonable discretion and only in accordance with the Department's current policy set forth in the Traffic Operations Manual and Permits Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, its successors and assigns, at no expense to the Department.

10. The requested encroachment shall not infringe on the frontage rights of an abutting owner without their written consent as hereinafter described. Each abutting owner shall express their consent, which shall be binding on their successors and assigns, by the submission of a notarized statement as follows, "I (we), _____, hereby consent to the granting of the permit requested by the applicant along Route _____, which permit does affect frontage rights along my (our) adjacent real property." By signature(s) _____, subscribed and sworn by _____, on this date _____.

11. The permit, if approved, is subject to the agreement that it shall not interfere with any similar rights or permit(s) previously granted to any other party, except as otherwise provided by law.

12. Permittee shall include documentation which describes the facilities to be constructed. Permittee, its successors and assigns, agrees as a condition of the granting of the permit to construct and maintain any and all permitted facilities or other encroachments in strict accordance with the submitted and approved permit documentation and the policies and procedures of the Department. Permittee, its successors and assigns, shall not use facilities authorized herein in any manner contrary to that prescribed by the approved permit. Only normal usage as contemplated by the parties and by this application and routine maintenance are authorized by the permit.

13. Permittee, its successors and assigns, at all times from the date permitted work is commenced until such time as all permitted facilities or other encroachments are removed from the right-of-way and the right-of-way restored, shall defend, protect, indemnify and save harmless the Department from any and all liability claims and demands arising out of the work, encroachment, maintenance, or other undertaking by the permittee, its successors and assigns, related or undertaken pursuant to the granted permit, due to any claimed act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party nor operate to enlarge any liability of the Department beyond that existing at common law or otherwise if this right to indemnity did not exist.

14. Upon a violation of any provision of the permit, or otherwise in its reasonable discretion, the Department may require additional action by the permittee, its successors and assigns, up to and including the removal of the encroachment and restoration of the right-of-way. In the event additional actions required by the Department under the permit are not undertaken as ordered and within a reasonable time, the Department may in its discretion cause those or other additional corrective actions to be undertaken and the Department may and shall recover the reasonable costs of those corrective actions from the permittee, its successors and assigns.

15. Permittee, its successors and assigns, shall use the encroachment premises in compliance with all requirements of federal law and regulation, including those imposed pursuant to Title VI of the Civil Right Act of 1964 (42 U.S.C. § 2000d et seq.) and the related regulations of the U.S. Department of Transportation in Title 49 C.F.R. Part 21, all as amended.



Kentucky Transportation Cabinet
Department of Highways
Permits Branch

TC 99-1 (A)
8/2012
Page 4 of 4

APPLICATION FOR ENCROACHMENT PERMIT

16. Permittee, its successors and assigns, agree that if the Department determines it is necessary for the facilities or other encroachment authorized by the permit to be removed, relocated or reconstructed in connection with the reconstruction, relocation or improvement of a highway, the Department may revoke permission for the encroachment to remain under the permit and may order its removal, relocation or reconstruction by the permittee, its successors and assigns, at the expense of the permittee, except where the Department is required by law to pay any or all of those costs.

17. Permittee agrees that the authorized permit is personal to the permittee and shall remain in effect until such time as (a) the permittee's rights to the adjoining real property to have benefitted from the requested encroachment have been relinquished, (b) until all permit obligations have been assumed by appropriate successors and assigns, and (c) unless and until a written release from permit obligations has been granted by the Department. The permit and its requirements shall also bind the real property to have benefitted from the requested encroachment to the extent permitted by law. The permit and the related encroachment become the responsibility of the successors and assigns of the permittee and the successors and assigns of each property owner benefitting from the encroachment, or the encroachment may not otherwise permissibly continue to be maintained on the right-of-way. (Does not apply to utility encroachments serving the general public.)

18. If work authorized by the permit is within a highway construction project in the construction phase, it shall be the responsibility of the permittee to make personal contact with the Department's Engineer on the project in order to coordinate all permitted work with the Department's prime contractor on the project.

19. This permit is not intended to, nor shall it, affect, alter or alleviate any requirement imposed upon the permittee, its successors and assigns, by any other agency.

20. Permittee, its successors and assigns, agrees to contain and maintain all dirt, mud, and other debris emanating from the encroachment away from the surrounding right-of-way and the travel way of the highway hereafter and at all times that its obligations under the permit remain in effect.



ENCROACHMENT PERMIT GENERAL NOTES & SPECIFICATIONS

Permit No. 06-2015-00998

I. SAFETY

A. General Provisions

- All signs and control of traffic shall be in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways, latest edition, Part VI, and safety requirements shall comply with the Permits Manual.
- All work necessary in shoulder or ditch line areas of a state highway shall be scheduled to be promptly completed so that hazards adjacent to the traveled way are kept to an absolute minimum.
- No more than one (1) traveled-lane shall be blocked or obstructed during normal working hours. All signs and flaggers during lane closure shall conform to the Manual on Uniform Traffic Control Devices.
- When necessary to block one (1) traveled-lane of a state highway, the normal working hours shall be as directed by the Department. No lanes shall be blocked or obstructed during adverse weather conditions (rain, snow, fog, etc.) without specific permission from the Department. Working hours shall be between 8:00 AM and 4:30 PM
- The traveled-way and shoulders shall be kept clear of mud and other construction debris at all times during construction of the permitted facility.
- No nonconstruction equipment or vehicles or office trailers shall be allowed on the right of way during working hours.
- The right of way shall be left free and clear of equipment, material, and vehicles during non-working hours.

B. Explosives

- No explosive devices or explosive material shall be used within state right of way without proper license and approval of the Kentucky Department of Mines and Minerals, Explosive Division.

C. Other Safety Requirements

- Applicant must follow MUTCD standards for traffic control

II. UTILITIES * Applies to Fully Controlled Access Highways ONLY

- *All work necessary within the right of way shall be performed behind a temporary fence erected prior to a boring operation.
- *The temporary woven wire fence shall be removed immediately upon completion of work on the right of way, and the control of access immediately restored to original condition, in accordance with applicable Kentucky Department of Highways Standard Drawings.
- *All vents, valves, manholes, etc., shall be located outside of the right-of-way.
- *Encasement pipe shall extend from right-of-way line to right-of-way line and shall be one continuous run of pipe. The encasement pipe shall be welded at all joints.
- The boring pit and tail ditch shall extend past the existing toe of slope or bottom of ditch line and shall be a minimum of 42 inches deep.

Permit No. 06-2015-00998

II. UTILITIES (Continued)

- Encasement pipe shall conform to current standards for highway crossings in accordance with the Permits Manual.
- Parallel lines shall be constructed between back slope of ditch line and right-of-way line and shall have a minimum of 30-inch cover above top of pipe or conduit.
- All pavement cuts shall be restored per Kentucky Transportation Cabinet form TC 99-13.
- Aerial crossing of this utility line shall have a minimum clearance of _____ feet from the high point of the roadway to the low point of the line (calculated at the coefficient for expansion of 120 degrees Fahrenheit).
- The 30-foot clear zone requirement shall be met to the extent possible in accordance with the Permits Manual.
- Special requirements:

Pavement restoration of Oliver Rd. @ Fowler Creek intersection shall be mill and repave as designated on plans.

III. GENERAL

A. OSHA

- Kentucky Occupational Safety and Health Standards for the construction industry, which has the effect of law, states in part: (Page 52, 1926.651, Specific Excavation Requirements) "Prior to opening an excavation, effort shall be made to determine whether underground installations, (sewer, telephone, water, fuel, electric lines, etc.) will be encountered, and if so, where such underground installations are located. When the excavation approaches the estimated location of such an installation, the exact location shall be determined, and when it is uncovered, proper supports shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation."

B. Archaeological

- Whenever materials of an archaeological nature are discovered during the course of construction work or maintenance operations, contact shall be made immediately with the Division of Environmental Analysis, which maintains an archaeologist on staff, or with the Office of the State Archaeologist located at the University of Kentucky. Following this consultation, further action shall be decided on a case-by-case basis by the State Highway Engineer or the Transportation Planning Engineer or their designated representative.

C. Utilities in the Work Areas

- The permittee shall be responsible for any damage to existing utilities, and any utility modifications or relocations within state right of way necessary, as determined by the Department or by the owner of the utility, shall be at the expense of the permittee and subject to the approval of the Department.
- All existing manholes and valve boxes shall be adjusted to be flush with finished grade.

D. Environmental

- If the activity to which this permit relates disturbs one acre or more of land, you must obtain a KPDES KYR10 permit.

Websites

<http://www.water.ky.gov/permitting/wastewaterpermitting/KPDES/storm/>

Inspectors for KPDES KYR10 at www.KEPSC.org

Permit No. 06-2015-00998

IV. RIGHT OF WAY RESTORATION

- All disturbed portions of the right of way shall be restored to grass as per Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition). A satisfactory turf, as determined by the Department, shall be established by the permittee prior to release of indemnity. Sodding or seeding shall be as follows:

Lawn or High Maintenance Situation	70% Lawn Fescue (e.g., variety - Falcon) 30% Bluegrass or
	70% Lawn Rye (e.g., variety - Derby) 30% Bluegrass
Right of Way Lawn Maintenance Situation	70% KY 31 Fescue 30% Perennial Rye Grass or
	100% KY Fescue
- Two tons of clean straw mulch per acre of seeding.
- Prior to seeding, the ground shall be prepared in accordance with Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition).
- Substitutes for sod such as artificial turf, rocked mulch, or paved areas may be acceptable if they are aesthetically pleasing.
- All ditch-flow lines and all ditch-side slopes shall be sodded.
- Existing concrete right of way markers shall not be disturbed, but if damaged in any way, they shall be entirely replaced by the permittee, with new concrete markers to match the original markers, in accordance with Kentucky Department of Highways Standard Drawings. Markers that are entirely removed shall be re-established in the proper locations by the permittee and to the satisfaction of the Department.
- Other right of way restoration requirements are as follows:

Applicant shall add a drainage swale along the north side of Oliver Rd. from the Midnight Run intersection to the adjacent driveway culvert (see markings on plan sheet).

V. DRAINAGE

- All pipe shall be laid in a straight alignment, to proper grades, and with all materials and methods of installation including bedding and joint seating in accordance with Department Standard Specifications for Road and Bridge Construction (latest edition). Pipe shall not be covered until inspected by the Department and express permission obtained to make backfill.
- All gutter lines at the base of new curbs shall be on continuous grades, and pockets of water along with curbs or in entrance areas or other paved areas within the right of way shall not be acceptable.
- All drainage structures and appurtenances (manholes, catch basins, curbing, inlet basins, etc.) shall conform to Department specifications and shall be constructed in accordance with the Department Standard Drawings. Type required:

Any negative impact to existing drainage features shall be corrected by applicant to KYTC
standards.

Permit No. 06-2015-00998

VI. Paving

- No bituminous pavement shall be installed within the right of way between November 15 and April 1, nor when the temperature is below 40 degrees Farenheit, without the express consent of the Department. No bituminous pavement shall be installed when the underlying course is wet.
- Paving within the right of way shall be as follows:
 - Base (Type) Flowable fill (Thickness) Varies
 - Surface Base (Type) Bit. base course (Thickness) Match existing
 - Finished Surface (Type) Bit. surface course (Thickness) 1.5"
- Existing pavement and shoulder material shall be removed to accomodate the above paving specifications.
- The finished surface of all new pavement within the right of way shall be true to the required slope and grade, uniform in density and texture, free of irregularities, and equivalent in riding qualities to the adjacent highway pavement or as determined by the Department of Highways.
- All materials and methods of construction, including base and subgrade preparation, shall be in accordance with Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition).
- 24 hours notice to the Department is required prior to beginning paving operations.
Phone: 341-2700 Name: Matt Bogen
- To ensure proper surface drainage, the new pavement shall be flush with the edge of existing highway pavement and shall slope away from the existing edge of the pavement as specified in drawings.
- Existing edge of pavement shall be saw-cut to provide a straight and uniform joint for new pavement. An approved joint sealer, in accordance with Kentucky Department of Highways Standard Specifications (latest edition), shall be applied between new and existing pavements.

VII. SIDEWALKS SPECIFICATIONS *This dimension should be equal to the width of the sidewalk.

A. New Sidewalks

- Sidewalks shall be constructed of Class A concrete (3,500 p.s.i. test), shall be *_____ feet in width, 6 inches in thickness across the bituminous entrance, and 4 inches in thickness across the remaining sections.
- Sidewalks shall have tooled joints not less than 1 inch in depth at four foot intervals*, and 1/2 premolded expansion joints extending entirely through the sidewalk at intervals not to exceed 50 feet.
- All materials and methods of construction, including curing, shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition).

B. Existing Sidewalks

- (Applicable if existing sidewalks are being relocated)** Use of the sidewalk shall not be blocked or obstructed, and a usable walkway shall be maintained across the construction area at all times.
- All damaged sections of the sidewalks shall be entirely replaced to match existing sections.

Permit No. 06-2015-00998

VIII. DENSE GRADED SHOULDERS

- Any existing dense-graded aggregate shoulders in the entire frontage within the construction area, which have been disturbed or damaged or on which dirt has been placed or mud has been deposited or tracked, shall be restored to original condition by removal of all contaminated material and replaced to proper grade with new dense-graded aggregate.
- All new aggregate shoulders as specified in the plan shall consist of 5 inches of compacted dense-graded aggregate, 2^{1/2} pounds per square yard of calcium chloride.
- All dense-graded aggregate shoulders shall slope away from the new edge of pavement at the rate of 3/4 inch per foot.

IX. CURBING

A. Bituminous Curbs

- Bituminous concrete curbs shall be given a paint coat of asphalt emulsion.
- The surface under the bituminous concrete curb shall be tacked with asphalt emulsion.
- All bituminous concrete curbs shall be constructed of a Class I bituminous concrete mixture as specified by official Department of Highways specifications.
- All bituminous curbs shall be rolled curb, with a minimum base width of 8 inches and a minimum height of _____ inches. The top of the curb shall be constructed in such a manner as to guarantee a uniform rolled effect throughout the entire run.

B. Concrete Curbs

- All curbs or curb and gutter shall be constructed of Class A concrete (3,500 p.s.i. test) and shall be uniform in height, width, and alignment, true to grade, and satisfactory in finish and appearance as determined by the Department. All materials and methods of construction, including curing, shall be in accordance with Department of Highways Standard Specifications for Road and Bridge Construction (latest edition).
- All concrete curbs shall be 6 inches in width, extend _____ inches above finished grade and 12 inches below finished grade, with all visible edge rounded to 1/2 inch radii.
- All concrete curbs shall have expansion joints constructed at intervals of not more than 30 feet, and 1/2 inch premolded expansion joint material (cut to conform to the curb or to the curb and gutter section) shall be used in each expansion joint.
- The last _____ feet of all concrete curbs are to be tapered down to finished grade.

Permit No. 06-2015-00998

X. RIGHT-OF-WAY FENCE REPLACEMENT

- The replacement fence shall be a height of at least 48 inches and shall be of sufficient density to contain all animals (if applicable).
- The replacement fence shall be a minimum of 1 foot and a maximum of 2 feet outside the right-of-way line.
- The fence materials and design shall meet accepted industry standards and be treated as paintable.
- The permittee shall be required to maintain the fence in a high state of repair.
- The existing fence shall be removed by permittee and stored at the Department's maintenance storage yard for future reuse by the Department.
- The control of access shall not be diminished as a result of replacement of the fence.
- Miscellaneous:

NOTICE TO PERMITTEE

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

IMPORTANT NOTICE

Federal law requires that High Visibility Class 2 or Class 3 retroreflective safety apparel that meets ANSI/ISEA 107-2004 Standards shall be worn at all times by anyone working within the KYTC R/W limits.

Class 3 apparel is required for flaggers after dark.

If any questions, please contact Matt Bogen at (859) 341-2700.

Northern Kentucky Water District

November 16, 2015

Mr. Matt Bogen
KDOT District 6
421 Buttermilk Pike
Ft. Mitchell, KY 41017

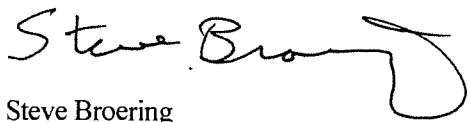
RE: Encroachment Permit Application

Dear Mr. Bogen,

Please find the attached encroachment permit application, 3 sets of plans and a cd-rom with plans for a 12" water main replacement on Cox Road and Oliver Road (KY 2045

If you have any questions please contact me at 859-426-2728.

Regards,



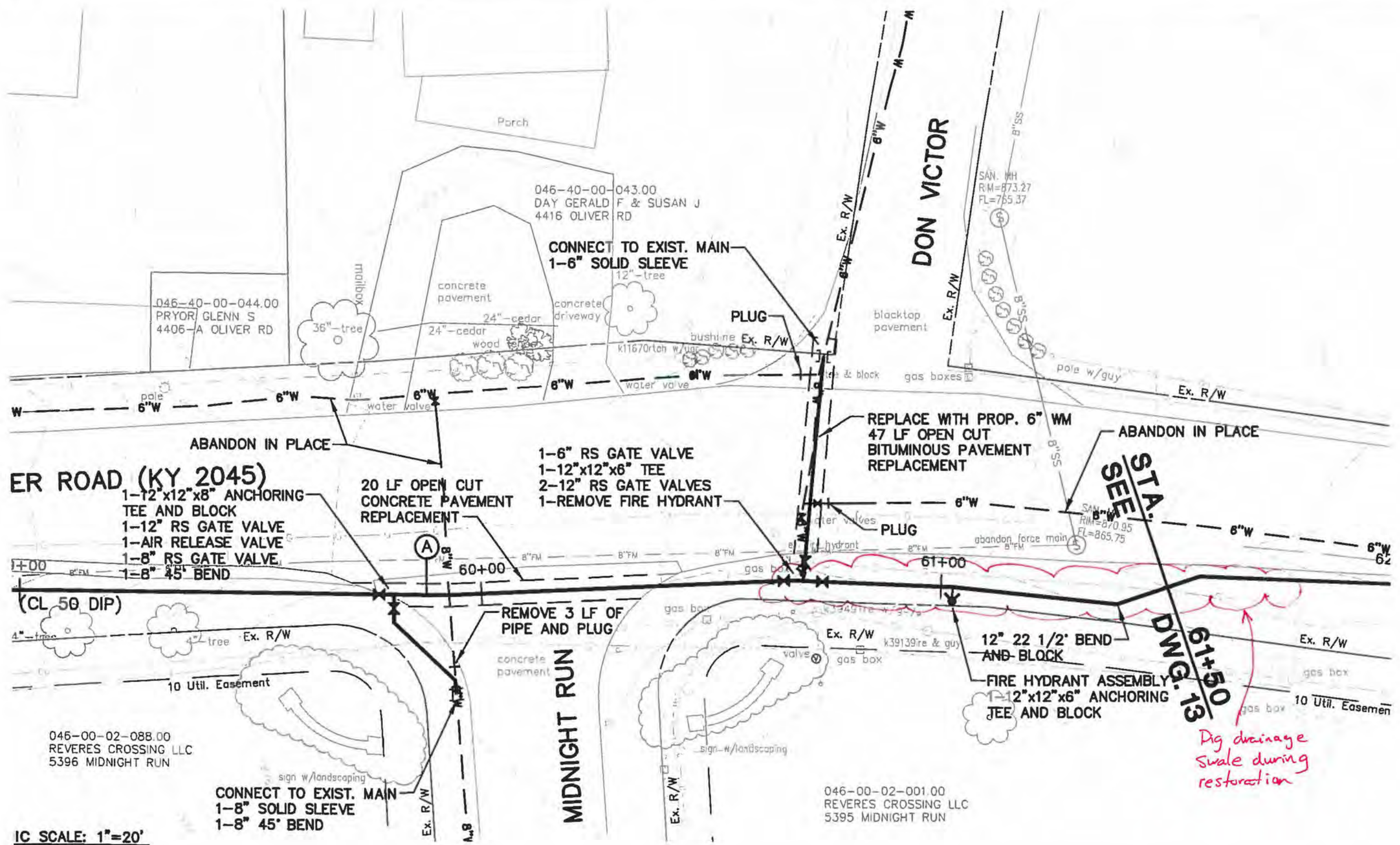
Steve Broering

IMPORTANT NOTICE

Federal law requires that traffic control shall be implemented in accordance with MUTCD Standards and KYTC Specifications under the supervision of a Work Zone Traffic Control Supervisor.

A Work Zone Traffic Control Technician shall be available on the jobsite to ensure that the work zone is in compliance with the applicable standards.

If any questions, please contact Matt Bogen at (859) 341-2700.



FOR

One Riverfront Plaza

**AND OLIVER ROAD
IN REPLACEMENT**
 WATER DISTRICT
 COUNTY, KENTUCKY

046-40-00-044.00
 PRYOR GLENN S
 4406-A OLIVER RD

046-40-00-043.00
 DAY GERALD F & SUSAN J
 4416 OLIVER RD

SAN. MH
 RIM=873.27
 FL=765.37

ER ROAD (KY 2045)
 1-12"x12"x8" ANCHORING
 TEE AND BLOCK
 1-12" RS GATE VALVE
 1-AIR RELEASE VALVE
 1-8" RS GATE VALVE
 1-8" 45° BEND

20 LF OPEN CUT
 CONCRETE PAVEMENT
 REPLACEMENT

1-6" RS GATE VALVE
 1-12"x12"x6" TEE
 2-12" RS GATE VALVES
 1-REMOVE FIRE HYDRANT

REPLACE WITH PROP. 6" WM
 47 LF OPEN CUT
 BITUMINOUS PAVEMENT
 REPLACEMENT

ABANDON IN PLACE

(CL 50 DIP)

REMOVE 3 LF OF
 PIPE AND PLUG

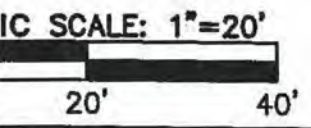
12" 22 1/2' BEND
 AND-BLOCK

FIRE HYDRANT ASSEMBLY
 1-12"x12"x6" ANCHORING
 TEE AND BLOCK

CONNECT TO EXIST. MAIN
 1-8" SOLID SLEEVE
 1-8" 45° BEND

046-00-02-001.00
 REVERES CROSSING LLC
 5395 MIDNIGHT RUN

*Dig drainage
 swale during
 restoration*

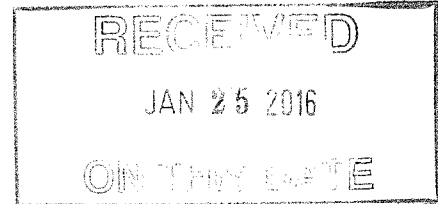




DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
P.O. BOX 59
LOUISVILLE KY 40201-0059
FAX: (502) 315-6677
<http://www.lrl.usace.army.mil/>

January 19, 2016

Operations Division
Regulatory Branch (South)
ID No. LRL-2016-00022-teh



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

Dear Mr. Broering:

This is in response to your request for authorization to replace an existing 12-inch water line for temporary impacts to 15 linear feet of Thompson Branch Creek for the Northern Kentucky Water District located along Cox Road near Independence in Kenton County, Kentucky. The information supplied by you was reviewed to determine whether a Department of the Army (DA) permit will be required under the provisions of Section 404 of the Clean Water Act.

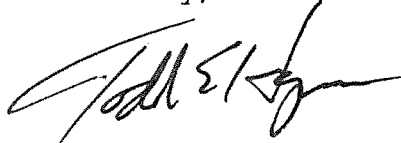
Your project is considered a discharge of backfill or bedding material for utility lines. The project is authorized under the provisions of 33 CFR 330 Nationwide Permit (NWP) No. 12, Utility Line Activities, as published in the Federal Register February 21, 2012. Under the provisions of this authorization, you must comply with the enclosed Terms and General Conditions for Nationwide Permit No. 12.

You must also comply with the enclosed Water Quality Certification (WQC) Conditions for Nationwide Permit No. 12 dated March 19, 2012, issued by the Kentucky Division of Water (KDOW). Once you obtain your certification or if no application was required, you may proceed with the project without further contact or verification from us.

This decision is valid until March 18, 2017. The enclosed Compliance Certification should be signed and returned when the project is completed. If your project is not completed by this date or if your project is modified, you must contact us for another permit determination in accordance with the rules and regulations in effect at that time. Please note that we also perform periodic inspections to ensure compliance with our permit conditions and applicable Federal laws. A copy of this letter is being sent to the KDOW (see enclosure for address).

If you have any questions, please contact this office by writing to the above address, ATTN: CELRL-OPF-S, or by calling me at 502-315-6683. All correspondence pertaining to this matter should refer to our ID No. LRL-2015-00022.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd Hagman". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Todd Hagman
Senior Project Manager
South Section
Regulatory Branch

Enclosures

Compliance Certification:

Permit Number: LRL-2016-00022-teh

Name of Permittee: Northern Kentucky Water District

Date of Issuance: January 19, 2016

Upon completion of the activity authorized by this permit and any mitigation required by this permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers
CELRL-OPF-S
P.O. Box 59
Louisville, Kentucky 40201

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

From: [Hagman, Todd E CIV USARMY CELRL \(US\)](#)
To: [Steve Broering](#)
Subject: nationwide permit info
Date: Tuesday, December 12, 2017 11:39:44 AM
Attachments: [NWP12 Terms.pdf](#)
[NWP General Conditions 2017-condensed.pdf](#)
[KY Conditions Summary.pdf](#)
[NWP 12 401 Terms.pdf](#)

Steve,

Please see the attached terms and conditions for the utility line crossing nationwide permit. Based on the size of the impact and location, it will not need a pre-construction notification to the Corps.

Todd E. Hagman

Project Manager/Biologist
Mitigation, Compliance, and Enforcement Branch
Regulatory Division
Louisville District
U.S. Army Corps of Engineers
600 Dr. Martin Luther King Jr. Pl.
Louisville, KY 40201
502-315-6683

Terms for Nationwide Permit No. 12

Utility Line Activities

Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of utility lines, including outfall and intake structures. There must be no change in pre-construction contours of waters of the United States. A “utility line” is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and internet, radio, and television communication. The term “utility line” does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP authorizes, to the extent that Department of the Army authorization is required, temporary structures, fills, and work necessary for the remediation of inadvertent returns of drilling fluids to waters of the United States through sub-soil fissures or fractures that might occur during horizontal directional drilling activities conducted for the purpose of installing or replacing utility lines. These remediation activities must be done as soon as practicable, to restore the affected waterbody. District engineers may add special conditions to this NWP to require a remediation plan for addressing inadvertent returns of drilling fluids to waters of the United States during horizontal directional drilling activities conducted for the purpose of installing or replacing utility lines.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After construction, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to or along a stream

bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: Where the utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, a copy of the NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: For utility line activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Utility line activities must comply with 33 CFR 330.6(d).

Note 3: Utility lines consisting of aerial electric power transmission lines crossing navigable waters of the United States (which are defined at 33 CFR part 329) must comply with the applicable minimum clearances specified in 33 CFR 322.5(i).

Note 4: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 5: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

Note 6: This NWP authorizes utility line maintenance and repair activities that do not qualify for the Clean Water Act section 404(f) exemption for maintenance of currently serviceable fills or fill structures.

Note 7: For overhead utility lines authorized by this NWP, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

Note 8: For NWP 12 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, “District Engineer’s Decision.” The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).



**US Army Corps
of Engineers®**
Louisville District

2017 Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. **Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. **Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. **Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. **Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. **Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. **Wild and Scenic Rivers.** (a) No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>

17. **Tribal Rights.** No activity may impair tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. **Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on the listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.

(d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will review the ESA section 10(a)(1)(B) permit, and if he or she determines that it covers the proposed NWP activity, including any incidental take of listed species that might occur as a result of conducting the proposed NWP activity, the district engineer does not need to conduct a separate section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete PCN whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those

requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause an effect on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, and adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the US are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g. conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on the both sides of a stream or if the waterbody is a lake or coastal waters. Then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g. riparian areas and/or wetlands compensation) based on what is best for the aquatic environmental on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation if the use of mitigation bank or in-lieu fee program credits is not appropriate and practicable.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality

Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the work and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally

authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires Section 408 permission is not authorized by the NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other water for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an

illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that may be affected by the proposed activity. For any NWP activity that requires pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. Federal permittees must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of PCN Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line or ordinary high water mark.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural

resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, sites specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of PCN notifications to expedite agency coordination.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

2017 Nationwide Permits Regional and Permit-Specific Conditions COMMONWEALTH OF KENTUCKY

These regional conditions are in addition to, but do not supersede, the requirements in the Federal Register (Volume 82, No. 4 of January 6, 2017, pp 1860).

Notifications for all Nationwide Permits (NWP) shall be in accordance with General Condition No. 32.

1. For activities that would impact Outstanding State or National Resource Waters (OSNRWs), Exceptional Waters (EWs), Coldwater Aquatic Habitat Waters (CAHs) under the Endangered Species Act for the NWP listed below, a Pre-Construction Notification (PCN) will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWP (Section 404 activities), for impacts to these waters.

NWP 3 (Maintenance)

NWP 4 (Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities)

NWP 5 (Scientific Measurement Devices)

NWP 6 (Survey Activities)

NWP 7 (Outfall Structures and Associated Intake Structures)

NWP 12 (Utility Line Activities)

NWP 13 (Bank Stabilization)

NWP 14 (Linear Transportation Projects)

NWP 15 (U.S. Coast Guard Approved Bridges)

NWP 16 (Return Water from Upland Contained Disposal Areas)

NWP 17 (Hydropower Projects)

NWP 18 (Minor Discharges)

NWP 19 (Minor Dredging)

NWP 20 (Response Operations for Oil or Hazardous Substances)

NWP 21 (Surface Coal Mining Activities)

NWP 22 (Removal of Vessels)

NWP 23 (Approved Categorical Exclusions)

NWP 25 (Structural Discharges)

NWP 27 (Aquatic Habitat Restoration, Establishment, and Enhancement Activities)

NWP 29 (Residential Developments)

NWP 30 (Moist Soil Management for Wildlife)

NWP 31 (Maintenance of Existing Flood Control Facilities)

NWP 32 (Completed Enforcement Actions)

NWP 33 (Temporary Construction, Access, and Dewatering)

NWP 34 (Cranberry Production Activities)

NWP 36 (Boat Ramps)

NWP 37 (Emergency Watershed Protection and Rehabilitation)

NWP 38 (Cleanup of Hazardous and Toxic Waste)

NWP 39 (Commercial and Institutional Developments)

NWP 40 (Agricultural Activities)

- NWP 41 (Reshaping Existing Drainage Ditches)
 - NWP 42 (Recreational Facilities)
 - NWP 43 (Stormwater Management Facilities)
 - NWP 44 (Mining Activities)
 - NWP 45 (Repair of Uplands Damaged by Discrete Events)
 - NWP 46 (Discharges in Ditches)
 - NWP 48 (Commercial Shellfish Aquaculture Activities)
 - NWP 49 (Coal Remining Activities)
 - NWP 50 (Underground Coal Mining Activities)
 - NWP 51 (Land-Based Renewable Energy Generation Facilities)
 - NWP 52 (Water-Based Renewable Energy Generation Pilot Projects)
 - NWP 53 (Removal of Low-Head Dams)
 - NWP 54 (Living Shorelines)
2. In addition to the notification and agency coordination requirements in the NWPs, for impacts greater than 0.25 acres in all “waters of the U.S.” for the NWPs listed below, a PCN will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs:
- NWP 3 (Maintenance)
 - NWP 7 (Outfall Structures and Associated Intake Structures)
 - NWP 12 (Utility Line Activities)
 - NWP 14 (Linear Transportation Projects)
 - NWP 29 (Residential Developments)
 - NWP 39 (Commercial and Institutional Developments)
 - NWP 40 (Agricultural Activities)
 - NWP 41 (Reshaping Existing Drainage Ditches)
 - NWP 42 (Recreational Facilities)
 - NWP 43 (Stormwater Management Facilities)
 - NWP 44 (Mining Activities)
 - NWP 51 (Land-Based Renewable Energy Generation Facilities)
 - NWP 52 (Water-Based Renewable Energy Generation Pilot Projects)
 - NWP 53 (Removal of Low-Head Dams)
3. For activities in all “waters of the U.S.” for the NWPs listed below, a PCN will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWPs:
- NWP 21 (Surface Coal Mining Activities)
 - NWP 27 (Aquatic Habitat Restoration, Establishment & Enhancement Activities)
 - NWP 49 (Coal Remining Activities)
 - NWP 50 (Underground Coal Mining Activities)
4. Nationwide Permit No. 14 – Linear Transportation Projects.
- (a) New road alignments or realignments are limited to a permanent loss of 500 linear feet of intermittent or perennial stream length at each crossing. Road crossings with permanent losses greater than 500 linear feet of intermittent or perennial stream associated with new

alignments or realignments will be evaluated as an individual permit (i.e., a Letter of Permission or as a Standard Individual Permit).

- (b) In addition to the notification requirements contained in NWP 14, the permittee must submit a PCN to the district engineer prior to commencing the activity for the permanent loss of greater than 300 feet of ephemeral, intermittent and perennial stream of all “waters of the U.S.” (See General Condition 32 and the definition of "loss of waters of the United States" in the Nationwide Permits for further information.)
5. Notification in accordance with General Condition 32 is required to the Corps for all activities which are subject to jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 6. All applications are required as both a paper copy and in an electronic media format, including electronic mail or compact disc.
 7. For all activities, the applicant shall review the U.S. Fish and Wildlife Service’s IPaC website: <http://ecos.fws.gov/ipac> to determine if the activity might affect threatened and/or endangered species or designated critical habitat. If federally-listed species or designated critical habitat are identified, a PCN in accordance with General Condition 18 and 32 would be triggered and the official species list generated from the IPaC website must be submitted with the PCN.

Further information:

Outstanding State or National Resource Water (OSNRWs), Exceptional Waters (EWs), and Coldwater Aquatic Habitat Waters (CAHs) are waters designated by the Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet. The list can be found at the following link: <http://eppcapp.ky.gov/spwaters/>

Information on Pre-Construction Notification (PCN) can be found at NWP General Condition No. 32 in the Federal Register (Volume 81, No. 105 of June 1, 2017, pp 35211).

COORDINATING RESOURCE AGENCIES

Chief, Wetlands Regulatory Section
U.S. Environmental Protection Agency
Region IV
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303

Supervisor
U.S. Fish & Wildlife Service
JC Watts Federal Building, Room 265
330 West Broadway
Frankfort, Kentucky 40601

Supervisor
401 Water Quality Certification
Kentucky Division of Water
300 Sower Boulevard, 3rd Floor
Frankfort, KY 40601

Commissioner
Department of Fish and Wildlife Resources
#1 Game Farm Road
Frankfort, Kentucky 40601

Executive Director and State Historic Preservation Officer
Kentucky Heritage Council
410 High Street
Frankfort, Kentucky 40601

ADDITIONAL COORDINATING RESOURCE AGENCY FOR NWPS 21, 49, AND 50

Kentucky Department for Natural Resources
Division of Mine Permits
300 Sower Boulevard
Frankfort, KY 40601



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

R. BRUCE SCOTT
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

**General Certification--Nationwide Permit # 12
Utility Line Backfill and Bedding**

This General Certification is issued March 19, 2017, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 12, namely Utility Line Backfill and Bedding, provided that the following conditions are met:

1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.
2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.

General Certification--Nationwide Permit # 12

Utility Line Backfill and Bedding

Page 2

3. This general water quality certification is limited to the crossing of surface waters by utility lines. This document does not authorize the installation of utility lines in a linear manner within the stream channel or below the top of the stream bank.
4. For a single crossing, impacts from the construction and maintenance corridor in surface waters shall not exceed 50 feet of bank disturbance.
5. This general certification shall not apply to projects where multiple nationwide permits are issued for individual crossings which are part of a single, larger utility line project where the cumulative impacts exceed ½ acre of wetlands or 300 linear feet of surface waters. Cumulative impacts include utility line crossings, permanent or temporary access roads, headwalls, associated bank stabilization areas, substations, pole or tower foundations, maintenance corridor, and staging areas.
6. Stream impacts under Conditions 4 and 5 of this certification are defined as the length of bank disturbed. For utility line crossings and roads, only one bank length is used in calculation of the totals.
7. Any crossings must be constructed in a manner that does not impede natural water flow.
8. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).
9. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.
10. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.
11. Blasting of stream channels, even under dry conditions, is not allowed under this general water quality certification.
12. Utility lines placed parallel to the stream shall be located at least 50 feet from an intermittent or perennial stream, measured from the top of the stream bank. The cabinet may allow construction within the 50 foot buffer if avoidance and minimization efforts are shown and adequate methods are utilized to prevent soil from entering the stream.

General Certification--Nationwide Permit # 12

Utility Line Backfill and Bedding

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13. Utility line stream crossings shall be constructed by methods that maintain flow and allow for a dry excavation. Water pumped from the excavation shall be contained and allowed to settle prior to re-entering the stream. Excavation equipment and vehicles shall operate outside of the flowing portion of the stream. Spoil material from the excavation shall not be allowed to enter the flowing portion of the stream.
14. The activities shall not result in any permanent changes in pre-construction elevation contours in surface waters or wetlands or stream dimension, pattern or profile.
15. Utility line activities which impact wetlands shall not result in conversion of the area to non-wetland status. Mechanized land clearing of forested wetlands for the installation or maintenance of utility lines is not authorized under this certification.
16. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:
 - Projects requiring in-stream stormwater detention/retention basins shall require individual water quality certifications.
 - Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur.
 - Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.
 - Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
 - Removal of riparian vegetation shall be limited to that necessary for equipment access.
 - To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.
 - Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall

General Certification--Nationwide Permit # 12

Utility Line Backfill and Bedding

Page 4

be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.

- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

BID INFORMATION

Bid Tabulation

Engineer's Recommendation of Award

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

Bid Tabulation



Bid Tabulation
 Cox Road and Oliver Road (KY 2045) 12-inch Water Main Replacement
 Northern Kentucky Water District
 Bids Received: November 1st, 2018

Item No.	Description	Unit	Estimated Qty.	Adleta Construction		Harrison Excavating & Hauling LLC		Hartman & Smith Construction Co.		Howell Contractors, INC.		JNT Excavating LLC		Larry Smith, INC.		Lonkard Construction Co.		Lykins Contracting, INC.		Smith & Brown Contractors, INC.		Tribute Contracting & Consultants, LLC		Welsh Excavating Co., INC.	
				Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount	Bid Unit Price	Bid Amount
1	6.01 CLASS 50 or 52 DUCTILE IRON PIPE (12-inch). (Detail 103, 103a, 104, 104a, 110)	LF	7,430	\$139.56	\$1,036,930.80	\$78.00	\$579,540.00	\$87.00	\$646,410.00	\$82.00	\$609,260.00	\$83.25	\$618,547.50	\$116.00	\$861,880.00	\$142.50	\$1,058,775.00	\$149.00	\$1,107,070.00	\$99.30	\$737,799.00	\$72.00	\$534,960.00	\$82.00	\$609,260.00
2	6.02 B CLASS 50 or 52 DUCTILE IRON PIPE (12-inch) - RESTRAINED JOINT	LF	45	\$147.75	\$6,648.75	\$110.00	\$4,950.00	\$112.00	\$5,040.00	\$92.00	\$4,140.00	\$90.00	\$4,050.00	\$125.00	\$5,625.00	\$165.15	\$7,431.75	\$142.00	\$6,390.00	\$154.00	\$6,930.00	\$75.00	\$3,375.00	\$93.50	\$4,207.50
3	6.02 B CLASS 50 or 52 DUCTILE IRON PIPE (8-inch) - RESTRAINED JOINT	LF	35	\$438.25	\$15,338.75	\$100.00	\$3,500.00	\$250.00	\$8,750.00	\$85.00	\$2,975.00	\$137.50	\$4,812.50	\$100.00	\$3,500.00	\$162.25	\$5,678.75	\$117.00	\$4,095.00	\$120.00	\$4,200.00	\$66.00	\$2,310.00	\$105.00	\$3,675.00
4	6.01 CLASS 50 or 52 DUCTILE IRON PIPE (6-inch). (Detail 103, 103a, 104, 104a, 110)	LF	105	\$184.32	\$19,353.60	\$60.00	\$6,300.00	\$150.00	\$15,750.00	\$75.00	\$7,875.00	\$80.00	\$8,400.00	\$95.00	\$9,975.00	\$160.75	\$16,878.75	\$112.00	\$11,760.00	\$107.00	\$11,235.00	\$60.00	\$6,300.00	\$71.00	\$7,455.00
5	7.01 CONNECT TO EXISTING MAIN/TIE-IN (12-Inch)	EA	1	\$10,000.00	\$10,000.00	\$8,500.00	\$8,500.00	\$5,250.00	\$5,250.00	\$5,000.00	\$5,000.00	\$3,500.00	\$3,500.00	\$2,500.00	\$2,500.00	\$2,475.00	\$2,475.00	\$5,120.00	\$5,120.00	\$3,320.00	\$3,320.00	\$6,000.00	\$6,000.00	\$5,245.00	\$5,245.00
6	7.01 CONNECT TO EXISTING MAIN/TIE-IN (8-Inch)	EA	4	\$8,735.00	\$34,940.00	\$75.00	\$300.00	\$4,250.00	\$17,000.00	\$4,000.00	\$16,000.00	\$3,500.00	\$14,000.00	\$1,500.00	\$6,000.00	\$4,615.00	\$18,460.00	\$4,350.00	\$17,400.00	\$5,220.00	\$20,880.00	\$3,025.00	\$12,100.00	\$3,900.00	\$15,600.00
7	7.01 CONNECT TO EXISTING MAIN/TIE-IN (6-Inch)	EA	5	\$5,800.00	\$29,000.00	\$45.00	\$225.00	\$4,250.00	\$21,250.00	\$3,500.00	\$17,500.00	\$2,500.00	\$12,500.00	\$1,500.00	\$7,500.00	\$3,980.00	\$19,900.00	\$3,805.00	\$19,025.00	\$4,100.00	\$20,500.00	\$2,990.00	\$14,950.00	\$2,600.00	\$13,000.00
8	8.01 INSTALL FIRE HYDRANT ASSEMBLY	EA	9	\$5,494.00	\$49,446.00	\$2,500.00	\$22,500.00	\$4,325.00	\$38,925.00	\$4,500.00	\$40,500.00	\$3,600.00	\$32,400.00	\$3,750.00	\$33,750.00	\$4,915.00	\$44,235.00	\$3,300.00	\$29,700.00	\$3,460.00	\$31,140.00	\$3,925.00	\$35,325.00	\$4,000.00	\$36,000.00
9	8.03 REMOVE FIRE HYDRANT	EA	8	\$300.00	\$2,400.00	\$500.00	\$4,000.00	\$300.00	\$2,400.00	\$100.00	\$800.00	\$400.00	\$3,200.00	\$500.00	\$4,000.00	\$675.00	\$5,400.00	\$900.00	\$7,200.00	\$450.00	\$3,600.00	\$650.00	\$5,200.00	\$500.00	\$4,000.00
10	9.01 DUCTILE IRON RESILIENT SEATED GATE VALVE (12-Inch)	EA	20	\$1,900.00	\$38,000.00	\$2,000.00	\$40,000.00	\$1,850.00	\$37,000.00	\$2,000.00	\$40,000.00	\$1,700.00	\$34,000.00	\$2,300.00	\$46,000.00	\$3,250.00	\$65,000.00	\$1,910.00	\$38,200.00	\$2,175.00	\$43,500.00	\$2,378.00	\$47,560.00	\$2,275.00	\$45,500.00
11	9.01 DUCTILE IRON RESILIENT SEATED GATE VALVE (8-Inch)	EA	4	\$1,050.00	\$4,200.00	\$1,500.00	\$6,000.00	\$975.00	\$3,900.00	\$1,100.00	\$4,400.00	\$900.00	\$3,600.00	\$1,400.00	\$5,600.00	\$2,200.00	\$8,800.00	\$1,100.00	\$4,400.00	\$1,280.00	\$5,120.00	\$1,550.00	\$6,200.00	\$1,150.00	\$4,600.00
12	9.01 DUCTILE IRON RESILIENT SEATED GATE VALVE (6-Inch)	EA	5	\$800.00	\$4,000.00	\$1,000.00	\$5,000.00	\$650.00	\$3,250.00	\$800.00	\$4,000.00	\$700.00	\$3,500.00	\$1,100.00	\$5,500.00	\$1,725.00	\$8,625.00	\$775.00	\$3,875.00	\$880.00	\$4,400.00	\$935.00	\$4,675.00	\$820.00	\$4,100.00
13	10.02 REPLACE SERVICE LINE AND INSTALL WATER METER SETTING (3/4" THRU 2") (Service line materials provided by NKWD)	EA	104	\$1,589.00	\$165,256.00	\$1,950.00	\$202,800.00	\$1,275.00	\$132,600.00	\$1,650.00	\$171,600.00	\$1,000.00	\$104,000.00	\$1,000.00	\$104,000.00	\$1,750.00	\$182,000.00	\$1,000.00	\$104,000.00	\$1,340.00	\$139,360.00	\$950.00	\$98,800.00	\$1,220.00	\$126,880.00
14	10.08 REMOVE EXISTING CURB STOP/METER CROCK	EA	1	\$500.00	\$500.00	\$500.00	\$500.00	\$800.00	\$800.00	\$75.00	\$75.00	\$250.00	\$250.00	\$100.00	\$100.00	\$675.00	\$675.00	\$300.00	\$300.00	\$330.00	\$330.00	\$600.00	\$600.00	\$500.00	\$500.00
15	11.01 CONCRETE ENCASEMENT	LF	40	\$63.00	\$2,520.00	\$100.00	\$4,000.00	\$125.00	\$5,000.00	\$200.00	\$8,000.00	\$40.00	\$1,600.00	\$100.00	\$4,000.00	\$97.50	\$3,900.00	\$250.00	\$10,000.00	\$48.00	\$1,920.00	\$60.00	\$2,400.00	\$135.00	\$5,400.00
16	11.04 PLUG AND BLOCK (12")	EA	1	\$5,800.00	\$5,800.00	\$2,500.00	\$2,500.00	\$1,850.00	\$1,850.00	\$2,500.00	\$2,500.00	\$250.00	\$250.00	\$300.00	\$300.00	\$1,250.00	\$1,250.00	\$1,250.00	\$1,250.00	\$1,180.00	\$1,180.00	\$700.00	\$700.00	\$2,500.00	\$2,500.00
17	11.05 AIR RELEASE VALVE (ARV and service line materials provided by NKWD)	EA	4	\$1,335.00	\$5,340.00	\$1,950.00	\$7,800.00	\$1,400.00	\$5,600.00	\$750.00	\$3,000.00	\$750.00	\$3,000.00	\$250.00	\$1,000.00	\$1,275.00	\$5,100.00	\$750.00	\$3,000.00	\$300.00	\$1,200.00	\$588.00	\$2,352.00	\$2,000.00	\$8,000.00
18	11.06 ANCHORING TEE AND BLOCK (12"x12"x12")	EA	1	\$400.00	\$400.00	\$1,500.00	\$1,500.00	\$400.00	\$400.00	\$600.00	\$600.00	\$500.00	\$500.00	\$875.00	\$875.00	\$1,700.00	\$1,700.00	\$695.00	\$695.00	\$840.00	\$840.00	\$575.00	\$575.00	\$830.00	\$830.00
19	11.06 ANCHORING TEE AND BLOCK (12"x12"x8")	EA	2	\$400.00	\$800.00	\$500.00	\$1,000.00	\$400.00	\$800.00	\$550.00	\$1,100.00	\$400.00	\$800.00	\$750.00	\$1,500.00	\$1,400.00	\$2,800.00	\$605.00	\$1,210.00	\$800.00	\$1,600.00	\$585.00	\$1,170.00	\$700.00	\$1,400.00
20	11.06 ANCHORING TEE AND BLOCK (12"x12"x6")	EA	14	\$350.00	\$4,900.00	\$750.00	\$10,500.00	\$300.00	\$4,200.00	\$500.00	\$7,000.00	\$325.00	\$4,550.00	\$650.00	\$9,100.00	\$1,215.00	\$17,010.00	\$600.00	\$8,400.00	\$700.00	\$9,800.00	\$490.00	\$6,860.00	\$540.00	\$7,560.00
21	11.06 ANCHORING TEE AND BLOCK (8"x8"x8")	EA	1	\$250.00	\$250.00	\$750.00	\$750.00	\$350.00	\$350.00	\$400.00	\$400.00	\$250.00	\$250.00	\$400.00	\$400.00	\$1,240.00	\$1,240.00	\$520.00	\$520.00	\$350.00	\$350.00	\$500.00	\$500.00	\$475.00	\$475.00
22	11.09 REDUCER (8" x 12")	EA	2	\$250.00	\$500.00	\$200.00	\$400.00	\$200.00	\$400.00	\$200.00	\$400.00	\$200.00	\$400.00	\$300.00	\$600.00	\$675.00	\$1,350.00	\$405.00	\$810.00	\$285.00	\$570.00	\$410.00	\$820.00	\$400.00	\$800.00
23	11.11 TEST TAP	EA	1	\$1,400.00	\$1,400.00	\$500.00	\$500.00	\$1,800.00	\$1,800.00	\$500.00	\$500.00	\$250.00	\$250.00	\$250.00	\$250.00	\$1,500.00	\$1,500.00	\$300.00	\$300.00	\$250.00	\$250.00	\$350.00	\$350.00	\$2,500.00	\$2,500.00
24	11.15 SLEEVE OUT EXISTING TEE/CROSS/VALVE	EA	1	\$5,800.00	\$5,800.00	\$4,500.00	\$4,500.00	\$4,250.00	\$4,250.00	\$3,500.00	\$3,500.00	\$2,500.00	\$2,500.00	\$2,000.00	\$2,000.00	\$3,825.00	\$3,825.00	\$7,610.00	\$7,610.00	\$500.00	\$500.00	\$1,500.00	\$1,500.00	\$2,540.00	\$2,540.00
25	12.05 ASPHALTIC CONCRETE MILLING AND PAVING	SY	1,944	\$15.76	\$30,637.44	\$18.00	\$34,992.00	\$16.50	\$32,076.00	\$15.00	\$29,160.00	\$15.45	\$30,034.80	\$13.00	\$25,272.00	\$16.25	\$31,590.00	\$14.00	\$27,216.00	\$16.00	\$31,104.00	\$17.65	\$34,311.60	\$14.15	\$27,507.60
26	12.06 ASPHALTIC CONCRETE	SY	396	\$66.55	\$26,353.80	\$11.36	\$4,498.56	\$45.00	\$17,820.00	\$60.00	\$23,760.00	\$0.01	\$3.96	\$60.00	\$23,760.00	\$75.00	\$29,700.00	\$80.00	\$31,680.00	\$27.00	\$10,692.00	\$52.00	\$20,592.00	\$60.00	\$23,760.00
27	12.07 ASPHALTIC CONCRETE - DRIVEWAY	SY	184	\$66.55	\$12,245.20	\$16.30	\$2,999.20	\$72.00	\$13,248.00	\$120.00	\$22,080.00	\$45.00	\$8,280.00	\$45.00	\$8,280.00	\$54.00	\$9,936.00	\$50.00	\$9,200.00	\$90.00	\$16,560.00	\$58.00	\$10,672.00	\$60.00	\$11,040.00
28	12.09 CONCRETE PAVEMENT	SY	122	\$48.87	\$5,962.14	\$32.78	\$3,999.16	\$135.00	\$16,470.00	\$110.00	\$13,420.00	\$90.00	\$10,980.00	\$72.00	\$8,784.00	\$117.25	\$14,304.50	\$79.00	\$9,638.00	\$160.00	\$19,520.00	\$117.00	\$14,274.00	\$50.00	\$6,100.00
29	12.10 CONCRETE DRIVEWAY	SY	570	\$108.00	\$61,560.00	\$70.18	\$40,002.60	\$135.00	\$76,950.00	\$100.00	\$57,000.00	\$75.00	\$42,750.00	\$54.00	\$30,780.00	\$96.00	\$54,720.00	\$50.00	\$28,500.00	\$125.00	\$71,250.00	\$75.00	\$42,750.00	\$65.00	\$37,050.00
30	12.12 CONCRETE SIDEWALK	SY	10	\$108.00	\$1,080.00	\$100.00	\$1,000.00	\$108.00	\$1,080.00	\$90.00	\$900.00	\$45.00	\$450.00	\$36.00	\$360.00	\$293.75	\$2,937.50	\$200.00	\$2,000.00	\$92.00	\$920.00	\$75.00	\$750.00	\$60.00	\$600.00
31	12.13 GRAVEL DRIVEWAY/PARKING AREA	SY	33	\$45.00	\$1,485.00	\$45.45	\$1,499.85	\$36.00	\$1,188.00	\$10.00	\$330.00	\$5.00	\$165.00	\$10.00	\$330.00	\$37.75	\$1,245.75	\$7.00	\$231.00	\$34.00	\$1,122.00	\$15.00	\$495.00	\$10.00	\$330.00
32	12.14 BEST MANAGEMENT PRACTICE	SY	1	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$12,000.00	\$12,000.00	\$10,000.00	\$10,000.00	\$2,000.00	\$2,000.00	\$1,000.00	\$1,000.00	\$3,000.00	\$3,000.00	\$9,600.00	\$9,600.00	\$3,780.00	\$3,780.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
33	12.15 REPLACE DRIVEWAY CULVERT - (All sizes/materials/lengths)	SY	2	\$1,973.00	\$3,946.00	\$1,500.00	\$3,000.00	\$2,500.00	\$5,000.00	\$500.00	\$1,000.00	\$1,200.00	\$2,400.00	\$3,000.00	\$6,000.00	\$4,000.00	\$8,000.00	\$3,540.00	\$7,080.00	\$2,000.00	\$4,000.00	\$2,500.00	\$5,000.00	\$4,000.00	\$8,000.00
34	12.14 MAINTENANCE OF TRAFFIC	LS	1	\$16,000.00	\$16,000.00	\$40,000.00	\$40,000.00	\$98,000.00	\$98,000.00	\$10,000.00	\$10,000.00	\$45,000.00	\$45,000.00	\$75,000.00	\$75,000.00	\$19,000.00	\$19,000.00	\$10,710.00	\$10,710.00	\$7,000.00	\$7,000.00	\$11,500.00	\$11,500.00	\$25,	

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

Engineer's Recommendation of Award



November 7, 2018

Mr. Steve Broering
Engineering Technician
Northern Kentucky Water District
2835 Crescent Springs Road
Erlanger, KY 41018

RE: Recommendation of Award
Cox Road and Oliver Road (KY 2045) 12-inch Water Main Replacement
Northern Kentucky Water District

Dear Steve,

As you are aware, bids were received for the referenced project on Thursday, November 1, 2018. Northern Kentucky Water District (NKWD) received eleven (11) bids from contractors interested in performing the work. All of the bidders that submitted are regularly engaged in this type of municipal utility construction work and all were considered to be generally suitable for performing the project. The bidders and their bid amounts to perform the work are provided below with additional details shown on the attached bid tabulations.

Bidder	Bid Amount
Adleta Construction	\$1,622,933.48
Harrison Excavating & Hauling LLC	\$1,069,556.37
Hartman & Smith Construction Co.	\$1,236,807.00
Howell Contractors, INC.	\$1,118,775.00
JNT Excavating LLC	\$1,002,923.76
Larry Smith, INC.	\$1,295,521.00
Lonkard Construction Co.	\$1,658,443.00
Lykins Contracting, INC.	\$1,528,185.00
Smith & Brown Contractors, INC.	\$1,216,472.00
Tribute Contracting & Consultants, LLC	\$940,926.60
Welsh Excavating Co., INC.	\$1,056,715.10

HDR has reviewed all the bids submitted and have found three bidders had mathematical errors (See Bid Tab). These mathematical errors did not affect the two lowest bidders. The published engineer's estimate for the construction project was \$919,235. As you can see, the project received significant interest from contractors with multiple competitive bids.

HDR is aware that NKWD has not previously worked with Tribute Contracting & Consultants. HDR has previously worked with Tribute Contracting & Consultants in the City of Ashland on a storm water separation project. Ryan Eastwood, Ashland's city engineer provided a good review of the contractor and stated he would use them again.



Based on this information, HDR finds no reason that Tribute Contracting & Consultants should not be awarded the contract for the construction of the Cox Road & Oliver Road (KY 2045) 12-inch Water Main Replacement and recommends award of the same. If you have any questions regarding this matter, please call me at (859) 629.4825.

Kindest regards,

A handwritten signature in blue ink, appearing to read 'Ross Guffey'.

Ross Guffey, P.E.
Civil Engineer

Attachment

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

Board Meeting Minutes

**Northern Kentucky Water District
Board of Commissioners
Regular Meeting
November 15, 2018**

A regular meeting of the Board of Commissioners of the Northern Kentucky Water District was held on November 15, 2018 at the District's facility located at 2835 Crescent Springs Road in Erlanger, Kentucky. All Commissioners were present, except for Commissioner David Spaulding. Also present were Ron Lovan, Lindsey Rehtin, Amy Kramer, Alex Mattingly, Kim Clemons, Steve Broering, Mary Carol Wagner, David Peat, Megan Scholten, Stacey Kampsen, Jason Miller, and Jeff Schuchter.

Commissioner Clyde Cunningham, Board Chair, called the meeting to order at 12:08 p.m., and Stacey Kampsen led the pledge of allegiance.

The Commissioners reviewed correspondence received and articles published since the last regular Board meeting on September 20, 2018.

On motion of Commissioner Douglas Wagner, seconded by Commissioner Joseph Koester, the Commissioners unanimously approved the minutes for the regular Board meeting held on September 20, 2018.

The Board was provided a copy of the District's check registers, which included the check number, check date, payee, check amount and description of the reason for each payment, detailing the District's expenditures for the period September 1, 2018 through October 31, 2018. On motion of Commissioner Patricia Sommerkamp, seconded by Commissioner Koester, and after discussion, the Commissioners unanimously approved the expenditures of the District for the months of September and October.

On motion of Commissioner Wagner, seconded by Commissioner Sommerkamp, the Board unanimously accepted the bid of \$940,926.60 from and awarded a contract to Tribute Contracting & Consultants, LLC, for the Cox Road and Oliver Road 12-inch Water Main Replacement with a total project budget of \$1,300,000 and authorized staff to execute the appropriate contract documents.

On motion of Commissioner Fred Macke, seconded by Commissioner Sommerkamp, the Board unanimously accepted the bid of \$76,949.81 from and awarded a contract to Agilent Technologies to purchase and deliver the Atomic Absorption Spectrophotometer because the system is necessary for reliable analytical testing in the District's laboratory.

On motion of Commissioner Sommerkamp, seconded by Commissioner Koester, the Board unanimously approved the bid of \$90,531.87 from and awarded a contract to Thermo Electron North America, LLC to purchase and deliver an Ion Chromatograph System.

On motion of Commissioner Wagner, seconded by Commissioner Macke, the Board unanimously approved and authorized staff to execute the engineering services agreement with Johnson, Mirmiran, & Thompson, Inc. to design the MPTP Clearwell Rehabilitation and Painting Project.

On motion of Commissioner Wagner, seconded by Commissioner Koester, the Board unanimously approved the 2019 Operating and Maintenance (O&M), 2019 Operating Capital, and the Five-Year Capital Projects Budgets (2019-2023). Prior to approval by the Board, Vice President of Finance and Support Services Lindsey Rehtin provided an overview of the proposed budgets. And, on November 14, 2018, Rehtin and President/CEO Ron Lovan met with Board Chair Cunningham and Treasurer Koester and provided a detailed overview of the proposed budgets to them as well.

On motion of Commissioner Wagner, seconded by Commissioner Koester, the Commissioners unanimously approved the date, time and location of each regular monthly Board meeting in calendar year 2019 as the third Thursday of each month, with the exception of the June 2019 date, which shall be the fourth Thursday of the month or June 27, 2019. All regular monthly meetings will commence at 12:00 pm, at the District's facility located at 2835 Crescent Springs Road in Erlanger, Kentucky.

The Commissioners reviewed the District's financial reports and Department reports. Lindsey Rehtin updated the Board on revenues and expenses and on the District's rate case filed with the Kentucky Public Service Commission. As part of her report, Vice President of Engineering, Distribution, and Production Amy Kramer reviewed with the Board the status of on-going projects within the 2018 5-Year Capital Budget, including highlighting three change orders and expenses incurred to date.

Other matters of a general nature were discussed.

On a motion of Commissioner Macke, seconded by Commissioner Wagner, the Board unanimously agreed to go into executive/closed session under the provisions of KRS 61.810(1)(c) to discuss pending or proposed litigation against or on behalf of the District and to protect the District's legal interests and strategy in connection with such litigation. The executive/closed session commenced at 1:53 p.m. and ended at 2:15 p.m. No action was taken by the Board.

The meeting was adjourned at 2:16 p.m.

CHAIRMAN

SECRETARY

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

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

Exhibit D

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

Debt Issuance and Source of Debt: The project will be funded through the 2019 Operating Capital Budget Line 13-154A/15-157 "Oliver and Cox Water Main Replacement Part B". The total project budget for this project is \$1,300,000 which includes construction cost, engineering, materials, and contingencies. A summary of the project costs is provided below:

○ Engineering Part A & B	\$ 93,444.00
○ Contractor Cost Part A (constructed 2009)	\$ 251,734.20
○ Contractor Bid Part B	\$ 940,926.60
○ Misc. & Contingencies	<u>\$ 13,895.20</u>
Total Project Cost	\$ 1,300,000.00

USoA Accounts: The anticipated amounts for the project cost of \$1,300,000.00 will fall under the following Uniform System of Accounts Codes:

Code 331 "Transmission & Distribution Mains"	\$ 1,165,875
Code 334 "Meter & Meter Installation "	\$ 98,800
Code 335 "Hydrants"	\$ 35,325

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: \$18,654.00/year over 62.5 years for Code 331 "Transmission & Distribution Mains"
\$2,324.71/year over 42.5 years for Code 334 "Meter & Meter Installation"
\$706.50/year over 50 years for Code 335 "Hydrants"

Debt Service: No debt will be incurred for this project

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

SCHEDULE OF MORTGAGES, BONDS, NOTES, AND
OTHER INDEBTEDNESS

Northern Kentucky Water District		
Bonds & Notes		
10/31/2018		
Bonds		
USDA 2000	\$1,741,000	
Series 2003C	\$0	
Series 2004A	\$0	
Series 2006	\$0	
Series 2009	\$0	
Series 2011	\$24,505,000	
Series 2012	\$41,475,000	
Series 2013A	\$23,160,000	
Series 2013B	\$15,365,000	
Series 2014A	\$1,733,000	
Series 2014B	\$8,135,000	
Series 2016	\$37,540,000	
	\$153,654,000	
KIA Notes Currently Servicing		
F06-03	\$2,301,938	
C08-01	\$1,456,673	
F08-07	\$2,978,310	
F9-02	\$18,863,741	
F13-012	\$4,523,000	
F-14-015	\$3,545,910	
F-15-011	\$3,535,094	
B-15-003	\$1,361,378	
Total KIA	\$38,566,044	
Other Notes		
Deferred Note Kenton County	\$100,000	

NORTHERN KENTUCKY
WATER DISTRICT

Project

Cox Road & Oliver Road (KY 2045)
12-inch Water Main Replacement
Kenton County, Kentucky

184-0613

CURRENT BALANCE SHEET AND
INCOME STATEMENT

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENT OF NET POSITION
OCTOBER 31, 2018**

ASSETS AND DEFERRED OUTFLOWS OF RESOURCES

Current Assets

Cash and Cash Equivalents	\$ 27,483,368
Investments	899,229
Accounts Receivable	
Customers, Net	4,464,279
Unbilled Customers	6,100,000
Others	220,023
Assessments Receivable	142,896
Inventory Supplies for New Installation and Maintenance, at Cost	1,527,891
Prepaid Items	609,121
Restricted Assets - Cash and Cash Equivalents	
Bond Proceeds Fund	2,912
Debt Service Account	2,161,901
Improvement, Repair & Replacement	101,370
	<u>43,712,990</u>
Total Current Assets	

Noncurrent Assets

Restricted Assets - Cash and Cash Equivalents	
Bond Proceeds Fund	15,728,144
Debt Service Account	19,389,482
Improvement, Repair and Replacement	4,622,383
Customer Deposits Fund	1,027,546
Restricted Assets - Investments	
Debt Service Reserve Account	18,938,130
Miscellaneous Deferred Charges	4,069,915
	<u>408,977,861</u>
Capital Assets	
Land, System, Buildings and Equipment	483,198,554
Construction in Progress	22,930,743
	<u>506,129,297</u>
Total Capital Assets	
Less Accumulated Depreciation	160,927,036
	<u>345,202,261</u>
Total Capital Assets, Net of Accumulated Depreciation	
Total Noncurrent Assets	<u>408,977,861</u>
Total Assets	<u>452,690,851</u>

Deferred Outflows of Resources

Deferred Outflows Related to Pension	5,586,334
Deferred Loss on Refundings	4,459,076
	<u>10,045,410</u>
Total Deferred Outflows of Resources	
Total Assets and Deferred Outflows of Resources	\$ <u>462,736,261</u>

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENT OF NET POSITION
OCTOBER 31, 2018**

LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION

Liabilities and Deferred Inflows of Resources

Current Liabilities

Bonded Indebtedness	\$ 11,813,757
Bond Anticipation Note	26,133,900
Notes Payable	3,044,719
Accounts Payable	679,498
Accrued Payroll and Taxes	449,319
Other Accrued Liabilities	162,443
Liabilities Payable-Restricted Assets	
Accrued Interest Payable	2,161,901
Accounts Payable	104,282
	<hr/>
Total Current Liabilities	44,549,819

Long-Term Liabilities (Net of Current Portion)

Liabilities Payable-Restricted Assets	
Accounts Payable	299,173
Customer Deposits	1,027,546
Compensated Absences	708,261
Arbitrage Liability	536,447
Bond Indebtedness	155,064,178
Notes Payable	35,621,325
Net Pension Liability	18,765,118
	<hr/>
Total Long-Term Liabilities	212,022,048

Total Liabilities 256,571,867

Deferred Inflows of Resources

Deferred Inflows Related to Pension	<hr/> 2,292,472
Total Liabilities and Deferred Inflows of Resources	<hr/> 258,864,339

Net Position

Net Investment in Capital Assets	117,983,460
Restricted For	
Debt Service Funds	38,327,612
Capital Improvement Projects	20,054,265
Unrestricted	<hr/> 27,506,585
Total Net Position	<hr/> 203,871,922

Total Liabilities, Deferred Inflows of Resources, and Net Position **\$ 462,736,261**

**NORTHERN KENTUCKY WATER DISTRICT
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
YEAR ENDED OCTOBER 31, 2018**

Operating Revenues	
Water Sales	\$ 53,448,705
Forfeited Discounts	840,606
Rents From Property	370,022
Other Water Revenues	<u>421,425</u>
 Total Operating Revenues	 <u>55,080,758</u>
Operating Expenses	
Operating and Maintenance Expense	25,721,792
Depreciation Expense	<u>11,931,193</u>
 Total Operating Expenses	 <u>37,652,985</u>
 Net Operating Income	 <u>17,427,773</u>
Non-Operating Income (Expense)	
Investment Income	1,492,626
Miscellaneous Non-Operating Income	540,687
Loss on Abandonment of Mains	(697,743)
Interest on Long-Term Debt	(8,128,927)
Amortization of Debt Premiums and Bond Issuance Cost	1,038,271
Pension Expense	(1,948,542)
Arbitrage Expense	(163,252)
Gain on Sale of Capital Assets	<u>800</u>
 Total Non-Operating Expenses	 <u>(7,866,080)</u>
 Change in Net Position Before Capital Contributions	 9,561,693
 Capital Contributions	 <u>1,348,636</u>
 Change in Net Position	 10,910,329
 Net Position - Beginning of Year	 <u>192,961,593</u>
 Net Position - End of Year	 <u>\$ 203,871,922</u>