

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

<b>ELECTRONIC APPLICATION OF</b>	<b>)</b>	
<b>WARREN COUNTY WATER</b>	<b>)</b>	
<b>DISTRICT FOR A CERTIFICATE OF</b>	<b>)</b>	
<b>PUBLIC CONVENIENCE AND</b>	<b>)</b>	<b>CASE NO.</b>
<b>NECESSITY TO CONSTRUCT THE</b>	<b>)</b>	<b>2025-00351</b>
<b>ALVATON AREA CAPACITY</b>	<b>)</b>	
<b>IMPROVEMENT PROJECT</b>	<b>)</b>	
<b>PURSUANT TO THE PROVISIONS</b>	<b>)</b>	
<b>OF KRS 278.020 AND KAR 5:001.</b>	<b>)</b>	

**VERIFIED APPLICATION**

Pursuant to KRS 278.020(1) and 807 KAR 5:001, Warren County Water District (“Warren District”) applies to the Public Service Commission (“Commission”) for an Order by **Friday, January 9, 2026**, granting Warren District a certificate of public convenience and necessity (“CPCN”) for the Alvaton Area Capacity Improvement Project (“Alvaton Project” or “the Project”), which consists of installing approximately 16,900 linear feet of 16-inch diameter ductile iron transmission main and all necessary appurtenances in the southeastern portion of Warren District’s water system. Appurtenances to be installed include reconnecting or relocating approximately 100 customer services and installing nine fire hydrants.

Because the bids to complete the Project will expire on Tuesday, January 13, 2026, and as further explained below, Warren District must fully expend all

funds from Grant No. 22CWW036 by December 31, 2026, the District respectfully requests that the Commission issue a decision in this matter by Friday, **January 9, 2026**. In support of its Application,<sup>1</sup> Warren District provides the following:

#### **A. General Information**

1. Warren District's full name and post office address are: Warren County Water District, P.O. Box 10180, Bowling Green, Kentucky 42102-4780. Its physical address is 523 U.S. 31-W Bypass, Bowling Green, KY 42101. Its web address is: [www.warrenwater.com](http://www.warrenwater.com), and its electronic mail address is [jacobc@warrenwater.com](mailto:jacobc@warrenwater.com).

2. Copies of all orders, pleadings and other communications related to this proceeding<sup>2</sup> should be directed to:

Jacob Cuarta, General Manager  
P.O. Box 10180  
523 US 31-W Bypass  
Bowling Green, KY 42102  
(270) 842-0052  
[jacobc@warrenwater.com](mailto:jacobc@warrenwater.com)

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<sup>1</sup> To facilitate the Commission's initial review of this Application, Warren District has attached to this Application **Exhibit 1**, a "Filings Requirements List" that consists of four pages, lists each statutory and regulatory requirement for an application for a certificate of public convenience and necessity and identifies the exhibit or paragraph that satisfies the requirement.

<sup>2</sup> On October 22, 2025, pursuant to 807 KAR 5:001, Section 8, Warren District notified the Commission of its election of the use of electronic filing procedures for this proceeding.

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3. Warren District is not a corporation, limited liability company or limited partnership. It has no articles of incorporation or partnership agreements.
4. Warren District is a water district created under the provisions of KRS Chapter 74 by the Warren County Fiscal Court.
5. As of December 31, 2024, Warren District provided retail water service to approximately 32,056 residential, 2,543 commercial, and 67 industrial customers in Warren County, Kentucky.<sup>3</sup>
6. Warren District is engaged in the distribution and sale of water. Warren District does not produce its own water, but rather purchases water from the city of

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<sup>3</sup> *Annual Report of Warren County Water District, Water Division, to the Kentucky Public Service Commission for the Year-Ended December 31, 2025* (“2024 Annual Report”) at 12 and 49.

Bowling Green, Kentucky. The District owns and operates 26 pumping stations, 29 water storage tanks, and approximately 1,219 miles of water mains.

7. On October 22, 2025, Warren District's Board of Commissioners adopted Resolution No. 2025-10-02 authorizing the District's General Manager to prepare, execute, verify, and submit this Application. A copy of the Resolution is attached as **Exhibit 2**.

### **B. The Alvaton Area Capacity Improvement Project**

8. **Overview of the Project.** Warren District is proposing to construct approximately 16,900 linear feet of 16-inch diameter ductile iron transmission main and all necessary appurtenances in the southeastern section of its system near the unincorporated community of Alvaton, Kentucky. Appurtenances to be installed include nine fire hydrants and reconnecting or relocating approximately 100 customer services. The Project is necessary to provide the required capacity to serve the demand for water in the southeastern area of Warren District's system. The estimated cost to construct the Project, including a three percent contingency, is **\$3,224,931**. A breakdown of this estimate is attached as **Exhibit 3**.

9. **Location of the Project.** The Project consists of installing a new transmission main along Greathouse Road and Old Scottsville Road to provide needed capacity to serve the southeastern section of Warren District's system in southeastern Warren County. Warren District has included a project to address this

need for additional capacity in its Capital Improvement plan since 2008 because of continued population growth in the area. In 2008, Warren District projected that a project to increase capacity in the Project area would need to be built sometime between 2021 and 2030. However, the establishment of sanitary sewer service in the area in 2016 drove even more development in the area and the District began to evaluate alternatives to meet the growing demand for water.

### **C. Need for Project**

10. As a short-term measure to increase capacity, Warren District supplemented water available in this area, known in Warren District's system as the "Drakes Creek Zone," by moving water into the area from another area of its system, known as the "Plano Zone." This can only be a short-term solution because the Plano Zone operates at a lower hydraulic grade than the Drakes Creek Zone and because new development is also increasing the demand for capacity in the Plano Zone. A valve was installed to permit water from the Plano Zone to feed the Drakes Creek Zone only when demand in the Drakes Creek Zone was high enough that pressure in the Drakes Creek Zone had dropped. Demand from the Drakes Creek Zone has increased to such a level currently that the Drakes Creek Zone is dependent on water from the Plano Zone to supply the demand on a daily basis. This leads to a reduced level of service to customers in both zones and reduces fire flow capacity. Construction of the Project will eliminate the need to move water from the Plano

Zone into Drakes Creek Zone, thereby increasing capacity available to feed development in the Plano Zone. A map of the general Project area is attached as **Exhibit 4**. Additional detailed maps of the specific sections of the Project are included in **Exhibit 5**, Plans, Specifications, and Drawings, which is signed, sealed and dated by an engineer registered in Kentucky as required by KRS 322.340.

11. **Impact on Approved Development.** In 2023, Warren County Fiscal Court amended its ordinance regarding fire protection for new development within the county. The amended ordinance increased fire protection requirements in **residential** developments to 600 gallons per minute. The former requirement was 250 gallons per minute. The City-County Planning Commission of Warren County has informed Warren District that some development projects planned for the Project area have been unable to meet the new minimum fire protection requirements and those construction projects are dependent upon Warren District providing increased capacity to meet this demand. A letter from Ben Peterson, Executive Director of the City-County Planning Commission to Clint Harbison, P.E. at Warren District explaining this situation and a map illustrating the area and amount of planned development is attached as **Exhibit 6**.

12. There have been 265 building permits issued, nine zoning changes approved, and four development plans approved in the Project area in the past five years. Warren County is the fastest growing community in Kentucky and the

numbers cited above pertain only to the Project area, not the entire county. The numbers are much higher county-wide. As the water provider to all of Warren County, except the city of Bowling Green, Warren District must construct adequate infrastructure to meet its statutory requirement of providing adequate, efficient and reasonable service.<sup>4</sup> The proposed Project is necessary for Warren District to meet its statutory obligation.

#### **D. Alternatives Considered**

13. **Alternatives Considered.** Warren District considered three alternatives to increase water capacity in the area: (1) the construction of a new 500,000-gallon elevated storage tank and a 10-inch water main; (2) installing a 12-inch water main, but no storage tank; and (3) installing a 16-inch water main, but no storage tank. For the reasons explained below and discussed more fully in **Exhibit 7**, a Project Need Memo prepared by Warren District's Manager of Engineering, Clint Harbison, P.E., Warren District elected to construct a 16-inch water main.

14. **First Alternative.** Early in the planning process, Warren District considered increasing capacity in the area by constructing a 500,000-gallon water storage tank and a 10-inch transmission line. The estimated cost to construct this alternative is **\$5,231,915**. A complete breakdown of the cost estimates for **all** alternatives considered is attached in **Exhibit 7**.

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<sup>4</sup> KRS 278.030.

15. **Second Alternative.** Because adding a water storage tank to the system was expensive and would create the potential of reduced water quality due to water age, Warren District began exploring ways to increase capacity without adding water storage. Warren District considered forgoing construction of a water storage tank and instead opting to construct a larger 12-inch transmission main. The estimated cost to construct this alternative is **\$4,149,400** *see, Exhibit 7*.

16. **Final and Preferred Alternative.** The final alternative Warren District considered was constructing a new 16-inch transmission main. Although this alternative was anticipated to be more expensive than constructing a 12-inch main, it has the added advantage of providing adequate water at an adequate flow-rate to meet the new county-wide fire protection requirements imposed by Warren County Fiscal Court. This increase in the volume of water that Warren District must provide and the flow-rate at which it must be provided was the major deciding factor in Warren District opting to construct the Project as proposed. The smaller 12-inch main would provide water at a flow-rate to meet the fire protection requirements for residential development to a **much smaller area** than the preferred 16-inch main and would still **limit** developments in the area. The estimated cost to construct the Project, including

a three percent contingency is **\$3,224,931**,<sup>5</sup> which is lower than the pre-bid anticipated cost.<sup>6</sup>

17. **Contract Specifications and Plans.** The contract specifications are attached to this Application as **Exhibit 8**. A copy of the Plans, Specifications and Drawings for the proposed Project signed, sealed, and dated by an engineer registered in Kentucky are attached as **Exhibit 5**.

### **E. Proposed Financing and Other Requirements**

18. **Proposed Financing for Proposed Construction.** Warren District proposes to partially finance the Project with **\$2,486,720** of Cleaner Water Program (“CWP”) grant funds from CWP Grant 22CWW036. Initially, Warren District will pay the remaining estimated **\$738,211** of construction costs with interim financing funds but will seek permanent financing of the construction costs that exceed the amount of grant funds available at a later date.<sup>7</sup> Warren District will submit its application for financing approval once long-term financing has been arranged.

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<sup>5</sup> Warren District will have no administrative, engineering design, or inspection costs associated with this Project because it was designed in-house by Warren District’s engineering department, which will also oversee and inspect the Project.

<sup>6</sup> Exhibit 7 contains the pre-bid estimated costs to construct the three options Warren District considered. The pre-bid anticipated cost to construct the 16-inch main was \$4,613,725.

<sup>7</sup> Warren District secured construction financing (interim financing) funds from the Rural Water Financing Agency (the “RWFA”) via the RWFA Series 2025D Loan dated July 17, 2025, in the amount of \$22,985,000. The RWFA Series 2025D Loan matures on July 15, 2027, which is slightly less than 24 months. The purpose of the RWFA Series 2025D Loan is to provide interim financing for the construction of Warren District’s new Customer Service and Operation Facility, the Alvaton Project, and other smaller capital projects. Warren District obtained a CPCN from the Commission to construct the Customer Service and Operation Facility by Order dated February 18, 2025, in Case No. 2024-00286.

19. **Need to Expend Grant Funds No Later Than December 31, 2026.**

Attached as **Exhibit 9** are the documents from the Kentucky Infrastructure Authority (“KIA”) concerning CWP Grant 22CWW036. The documents included in **Exhibit 9** are: (1) the November 21, 2022 original Conditional Commitment Letter from KIA; (2) the KIA Conditional Supplemental Commitment Letter dated September 3, 2024, increasing the CWP grant funds awarded to Warren District to **\$2,486,720**; and (3) the signed Amended and Restated Supplemental Grant Assistance Agreement for CWP Grant 22CWW036. These documents set forth the requirement that funds from CWP Grant 22CWW036 be **fully expended** by December 31, 2026, or be **forfeited**. Initially, KIA awarded Warren District \$2,200,000 in CWP grant funds for the Project but increased this amount by \$286,720 in September 2024.

20. **Division of Water.** The Kentucky Division of Water (“KDOW”) has reviewed the plans for the proposed Alvaton Area Capacity Improvement Project and has approved them with respect to the sanitary features of design. A copy of the letter in which KDOW stated its approval is attached to this Application as **Exhibit 10**.

21. **Kentucky Department of Highways.** The Kentucky Department of Highways has issued Warren District an Encroachment Permit for the Project. It is attached to this Application as **Exhibit 11**.

22.     **Easements.**     Warren District will not need to obtain additional easements to construct the Project.

23.     **Advertisement for Bids.**     In accordance with the provisions of KRS 45A.365, Warren District published on its website an advertisement for bids for the construction of the Alvaton Area Capacity Improvement Project. This advertisement was also published on websites maintained by the Kentucky Bid Network, DODGE Construction Network, and BidPrime. Additionally, Warren District caused the advertisement for bids to be published in the September 24, 2025 digital edition of *The Bowling Green Daily News*. A copy of the advertisement that appeared on the websites mentioned above and an affidavit of publication from *The Bowling Green Daily News* is attached to this Application as **Exhibit 12**.

24.     **Bids Received.**     The District received six (6) bids to complete the Alvaton Project. The **\$3,131,001** bid of Smith Brothers, LLC (“Smith Brothers”) of Alvaton, Kentucky was selected as the lowest and best bid of a responsive and responsible bidder. A copy of the bid tabulation and Warren District’s Engineer’s Recommendation of Award Letter is attached as **Exhibit 13**.

25.     **Board Resolution.**     On October 22, 2025, Warren District’s Board of Commissioners adopted Resolution No. 2025-10-01 awarding a contract to construct the Project to Smith Brothers contingent upon the Commission granting the District a CPCN for the Project. A copy of the Resolution is attached as **Exhibit 14**.

26. **Estimated Cost to Construct.** The estimated total cost to construct the Project is **\$3,224,931** including a three percent contingency. **Exhibit 3** contains a breakdown of the estimated costs.

27. **Estimated Annual Cost to Operate.** As shown in **Exhibit 15**, Warren District estimates that the annual cost to operate the Project will be limited to the depreciation expense of approximately **\$51,599**. The Project is being constructed to alleviate the need to use the temporary control valve that was installed to allow water to flow from the Plano Zone into the Drakes Creek Zone. This will improve service to customers in both zones. Warren District does not expect increased purchased water or purchased power costs associated with the Project because the amount of water flowing in the system is not expected to change; it will simply flow more efficiently to the areas in which it is needed via the Project. Additionally, water will be available to serve expected growth and a flow-rate sufficient to provide fire protection will be achieved.

28. **Competition with Other Public Utilities.** The proposed Project will not compete with the facilities of another public utility. There is no other water distribution system located in the area of the Project. Its construction will not result in wasteful duplication of utility facilities or inefficient investment.

29. The proposed construction will **not** require Warren District to seek a rate adjustment.

30. A detailed estimate of the acquired property, arranged according to the Uniform System of Accounts for Class A and B Water Districts and Associations is attached to this Application as **Exhibit 16**.

31. As stated above, Warren District will finance the construction of the Project with \$2,486,720 in CWP grant funds and an estimated \$738,211 of interim financing funds. Warren District **will seek Commission approval for permanent financing** of the estimated **\$738,211** in construction costs not covered by grant funds **when such permanent financing has been identified and arranged**.

32. The bids to complete the Project expire on Tuesday January 13, 2026. Therefore, Warren District respectfully requests a decision by Friday, **January 9, 2026**, to permit it time to prepare the Notice of Award and for the Bidder to obtain its Payment and Performance Bonds.

**Wherefore**, Warren County Water District requests that the Commission:

1. Place this Application at the head of the Commission's docket and issue a decision in this matter by **January 9, 2026**.
2. Grant Warren District a CPCN to construct the Alvaton Area Capacity Improvement Project.
3. Grant any and all such other relief to which Warren District may be entitled.

Dated: November 10, 2025

Respectfully submitted,

/s/ Tina C. Frederick

Tina C. Frederick

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*Counsel for Warren County*

*Water District*

## **CERTIFICATE OF SERVICE**

In accordance with the Commission's Order of July 22, 2021 in Case No. 2020-00085 (Electronic Emergency Docket Related to the Novel Coronavirus COVID-19), this is to certify that the electronic filing has been transmitted to the Commission on November 10, 2025; and that there are currently no parties in this proceeding that the Commission has excused from participation by electronic means.

/s/ Tina C. Frederick  
Tina Frederick

## VERIFICATION

COMMONWEALTH OF KENTUCKY )  
 ) SS:  
COUNTY OF WARREN )

The undersigned, **Jacob Cuarta**, being duly sworn, deposes and states that he is the General Manager of the Warren County Water District, the Applicant in the above proceedings; that he has read the Application and has noted its contents; that the same is true and correct to the best of his information, knowledge, and belief.

  
\_\_\_\_\_  
**JACOB CUARTA**

Subscribed, sworn to, and acknowledged before me, a Notary Public in and for said County and State, this 10<sup>th</sup> day of November 2025.

  
\_\_\_\_\_  
Notary Public  
Commission Number: KYNP83464  
My Commission Expires: 12-07-2027



**Table of Exhibits**  
**Case No. 2025-00351**

<u>Exhibit No.</u>	<u>Description</u>
1	Filings Requirements
2	Board Resolution Authorizing Application
3	Detailed Estimate of Cost to Construct
4	Project Area Map
5	Engineering Plans, Specifications and Drawings
6	Letter from City-County Planning Commission and Map
7	Project Need Memorandum, Prepared by Clint Harbison, P.E.
8	Contract Specifications
9	CWP Grant 22CWW036 Documents
10	Division of Water Approval
11	Department of Highways Encroachment Permit
12	Copy of Bid Advertisement and Affidavit of Publication
13	Bid Tabulation and Engineer's Recommendation of Award
14	Board Resolution Awarding the Contract, Contingent to Commission Granting A CPCN
15	Estimated Annual Cost to Operate
16	Detailed Estimate of Acquired Property by USoA Account Number

# **Exhibit 1**

Filing Requirements

**FILING REQUIREMENTS**  
**FILING REQUIREMENTS FOR AN APPLICATION FOR A**  
**CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY**

**The Alvaton Area Capacity Improvement Project**

**2025-00351**

<b>Source Authority</b>	<b>Requirement</b>	<b>Location</b>
807 KAR 5:001, § 14(1)	Applicant's name, mailing address and e-mail address	Page 2, Para 1
807 KAR 5:001, § 14(1)	Statutory Reference – KRS 278.020	Page 1
807 KAR 5:001, § 4(3)	Signature of Applicant's Attorney	Page 13
807 KAR 5:001, § 4(3)	Name, Address, Telephone Number, Fax Number, and e-mail address of Applicant's Attorney	Page 3, Para 2
807 KAR 5:001, § 14(2)	If Applicant is corporation: State and date of incorporation, attestation of good standing in state of incorporation, statement regarding authorization to transact business in Kentucky	Page 3, Para 3 <b>Not Applicable</b>
807 KAR 5:001, § 14(3)	If Applicant is a limited liability company: State and date of organization, attestation of good standing in state of incorporation, statement regarding authorization to transact business in Kentucky	Page 3, Para 3 <b>Not Applicable</b>
807 KAR 5:001, § 14(4)	If the Applicant is a limited partnership: a certified copy of limited partnership agreement and all amendments or statement identifying prior Commission proceedings in which limited partnership agreement and all amendments filed	Page 3, Para 3 <b>Not Applicable</b>
807 KAR 5:001, § 15(2)(a)	The facts relied upon to show that the public convenience and necessity requires the proposed construction	Pages 4-8, Paras 8-16 Exhibits 6 & 7
807 KAR 5:001, § 15(2)(b)	Copies of franchises or permits for the proposed construction or extension	Page 10 , Paras 20 & 21 Exhibits 10 & 11
807 KAR 5:001, § 15(2)(c)	A full description of the proposed location, route, or routes of the proposed construction or extension, including a description of the manner in which same will be constructed, and the names of all public utilities, corporations, or persons with whom the proposed construction or extension is likely to compete	Pages 4 & 5, Para 9 Page 12 , Para 28 Exhibits 4 & 5

<b>Source Authority</b>	<b>Requirement</b>	<b>Location</b>
807 KAR 5:001, § 15(2)(d)(1)	Maps to suitable scale showing the location or route of the proposed construction or extension, as well as the location to scale of like facilities owned by others located anywhere within the map area with adequate identification as to the ownership of the other facilities (Only one copy submitted pursuant to Commission order of July 28, 2017)	Exhibits 4 & 5
807 KAR 5:001, § 15(2)(d)(2)	Plans and specifications and drawings of the proposed plant, equipment, and facilities	Exhibit 5
807 KAR 5:001, § 15(2)(e)	The manner in detail in which the Applicant proposes to finance the proposed construction or extension.	Pages 9 & 10, Paras 18 & 19 Pages 12 & 13, Para 31 Exhibit 9
807 KAR 5:001, § 15(2)(f)	An estimated annual cost of operation after the proposed facilities are placed into service	Pages 11 & 12, Para 27 Exhibit 15
KRS 322.340	Engineering plans, specifications, drawings, plats and reports for the proposed construction or extension prepared by a registered engineer, must be signed, sealed, and dated by an engineer registered in Kentucky	Pages 5&6, Para 10 Page 9, Para 17 Exhibit 5

# **Exhibit 2**

Resolution Authorizing Application

**RESOLUTION NO. 2025-10-02**

**RESOLUTION OF WARREN COUNTY WATER DISTRICT  
AUTHORIZING GENERAL MANAGER TO APPLY TO  
THE KENTUCKY PUBLIC SERVICE COMMISSION FOR  
A CERTIFICATE OF PUBLIC CONVENIENCE AND  
NECESSITY TO CONSTRUCT A WATER LINE  
CAPACITY IMPROVEMENT PROJECT**

**WHEREAS**, Warren County Water District (“the District”) is a water district organized pursuant to the provisions of KRS Chapter 74;

**WHEREAS**, KRS 278.015 provides that a water district is a utility and is subject to the jurisdiction of the Kentucky Public Service Commission (the “Commission”) in the same manner and to the same extent as any other utility;

**WHEREAS**, KRS 278.020(1) prohibits any utility from commencing the construction of any plant or facility or installing any equipment to provide utility service, except for extensions in the ordinary course of business or other statutory exceptions, until that utility has obtained a certificate of public convenience and necessity (the “CPCN”) from the Commission;

**WHEREAS**, the District proposes to install approximately 16,900 linear feet of 16-inch diameter ductile iron pipe waterline and reconnect or relocate 13 customer connections and associated appurtenances (“the Alvaton Area Capacity Improvements” or the “Project”);

**WHEREAS**, the District’s engineering staff has designed the Project and will perform the usual and customary duties of engineers, including Construction Administration and Inspection Services;

**WHEREAS**, the estimated cost to construct the Project and other relevant factors indicate that the Project is not an extension in the ordinary course of business and no other statutory exception applies; and

**WHEREAS**, the District has, or soon will have, obtained all the necessary approvals to construct the Project, except for a CPCN.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF WARREN COUNTY WATER DISTRICT AS FOLLOWS:**

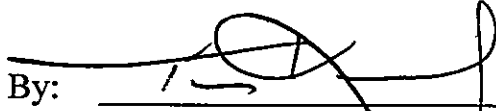
**Section 1.** The facts, recitals, and statements contained in the foregoing preamble of this Resolution are true and correct and are hereby affirmed and incorporated as a part of this Resolution.

**Section 2.** The General Manager is authorized and directed to take any and all actions reasonably necessary to prepare, execute, verify, and submit an application to the Commission for a CPCN to construct the Project.

**Section 3.** This Resolution shall take effect upon its adoption

**Adopted by the Board of Commissioners of Warren County Water District at a meeting held on October 22, 2025, signed by the Chairman and attested by the Secretary.**

**WARREN COUNTY WATER DISTRICT**

By:   
\_\_\_\_\_  
**Tim Kanaly, Chairman**

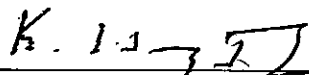
**ATTEST:**

  
\_\_\_\_\_  
**R. Harvey Johnston III., Secretary**

### **CERTIFICATION**

The undersigned Secretary of Warren County Water District (the "District") does hereby certify that the foregoing is a true copy of a Resolution duly adopted by the District's Board of Commissioners at a meeting properly held on October 22, 2025, signed by the Chairman of the Board of Commissioners, attested by the Secretary of the Board of Commissioners, and now in full force and effect.

WITNESS my hand this 22<sup>nd</sup> day of October 2025.

  
\_\_\_\_\_  
R. Harvey Johnston III., Secretary

# **Exhibit 3**

Detailed Estimate of Cost to Construct



Alvaton Area Capacity Improvements  
Project Need

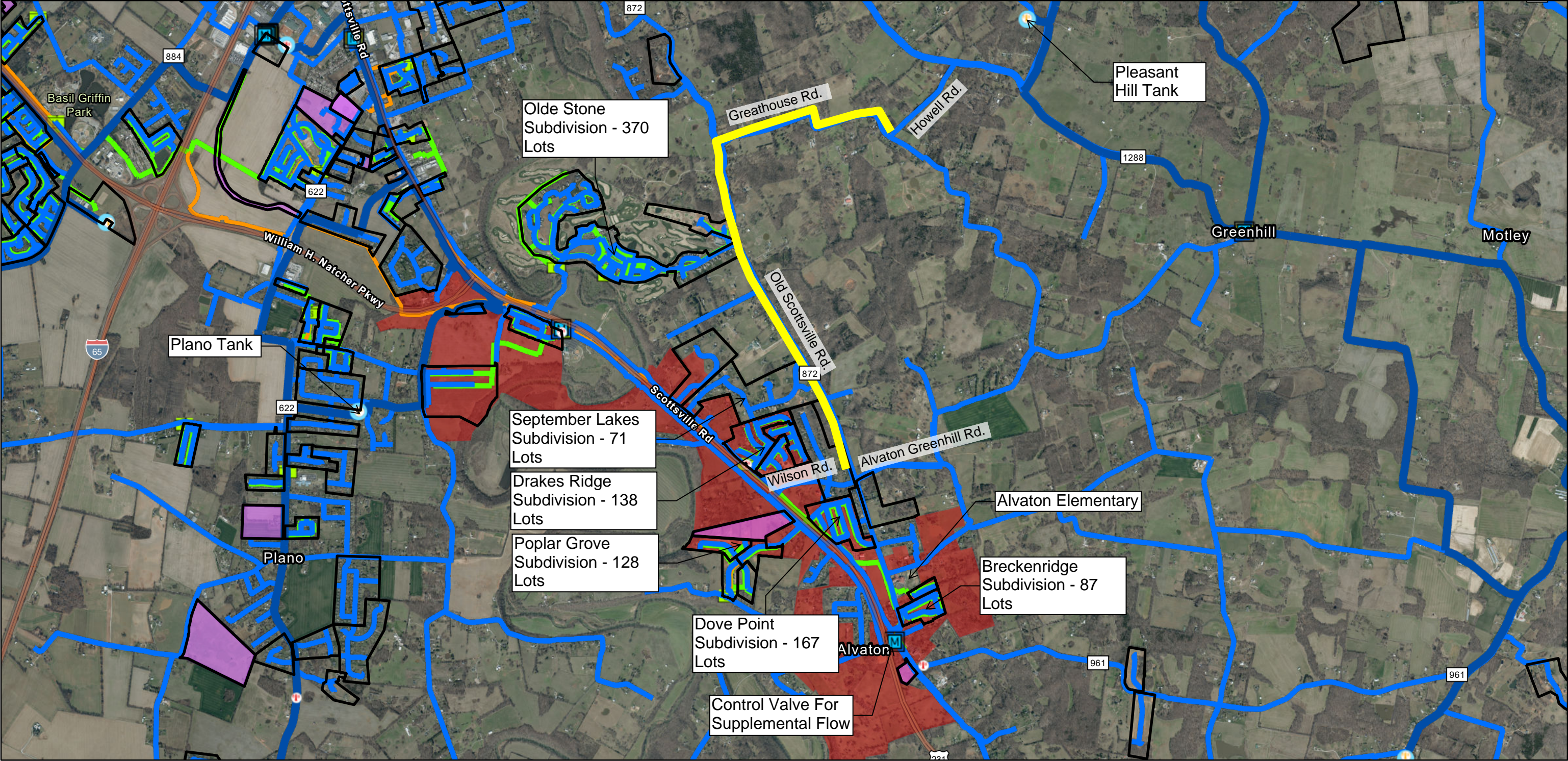
## 16-inch Water Main

Alvaton Area Capacity Improvements					
As-Bid Cost to Construct					
Warren County Water District					
16-inch Transmission Line					
ITEM		EST.		UNIT	
NO.	DESCRIPTION	QTY.	UNIT	PRICE	AMOUNT
1	10" x 10" Tapping Sleeve & Valve on PVC	2	EA	\$8,800.00	\$17,600.00
2	6" x 6" Tapping Sleeve & Valve on PVC	1	EA	\$5,500.00	\$5,500.00
3	12" x 12" Tapping Sleeve & Valve on PVC	1	EA	\$9,700.00	\$9,700.00
4	16" Butterfly Valve	11	EA	\$14,000.0	\$154,000.00
5	Blow-off Assembly	1	EA	\$2,600.00	\$2,600.00
6	5 1/4" Fire Hydrant Assembly	9	EA	\$9,315.00	\$83,835.00
7	Automatic Air Release Valve	5	EA	\$3,700.00	\$18,500.00
8	Ductile Iron Fittings	8,000	LBS	\$12.00	\$96,000.00
9	Relocate Exist 5/8" x 3/4" Water Meter	1	EA	\$1,100.00	\$1,100.00
10	Reconnect Exist 5/8" x 3/4" Water Meter	15	EA	\$895.00	\$13,425.00
11	3/4" Service Line	50	LF	\$33.00	\$1,650.00
12	1" Service Line	700	LF	\$45.00	\$31,500.00
13	Customer Service Line	50	LF	\$33.00	\$1,650.00
14	24" Steel Casing by Bore w/ 16" Rest.	335	LF	\$755.00	\$252,925.00
15	24" Steel Casing by Bore w/ 16" DIP	385	LF	\$740.00	\$284,900.00
16	16" Class 250 Rest. Joint DIP Water line	1,235	LF	\$151.00	\$186,485.00
17	16" Class 250 DIP Water Line	14,984	LF	\$121.00	\$1,808,708.00
18	10" DIP Water Line	50	LF	\$77.00	\$3,850.00
19	6" DIP Water Line	50	LF	\$66.00	\$3,300.00
20	6" Gate Valve	2	EA	\$2,000.00	\$4,000.00
21	Miscellaneous Concrete	20	CY	\$370.00	\$7,400.00
22	Full Depth Crushed Stone Backfill	250	TN	\$26.00	\$6,500.00
23	Rock Check Dam	100	TN	\$40.00	\$4,000.00
24	Silt Fencing	1,000	LF	\$2.75	\$2,750.00
25	Channel Lining	50	TN	\$47.00	\$2,350.00
26	Final Cleanup	16,903	LF	\$7.50	\$126,772.50
	Item Summary				\$3,131,001.00
	Contingency 3%				\$ 93,930.00
	<b>Total Project Cost</b>				<b>\$3,224,931.00</b>

# **Exhibit 4**

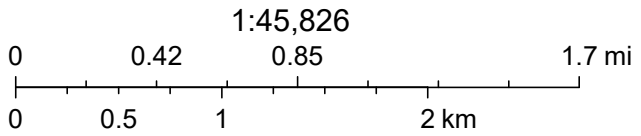
Project Area Map

# Alvaton Area Capacity Improvements - Overview Map



11/7/2025, 3:15:26 PM

- |                        |                         |              |                    |                   |
|------------------------|-------------------------|--------------|--------------------|-------------------|
| Proposed Water Line    | Water Asbuilt Drawings  | Water Main   | Water Pump Station | Repeater          |
| Water Tank Information | Gravity Main            | Distribution | Water Master Meter | Development Areas |
| Subdivision Boundaries | Force Main              | Transmission | AMI Sites          | SICRA             |
| Sewer Asbuilt Drawings | Sewer Network Structure | Water Tank   | Collector          | County Boundaries |



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

# **Exhibit 5**

Engineering Plans, Specifications & Drawings

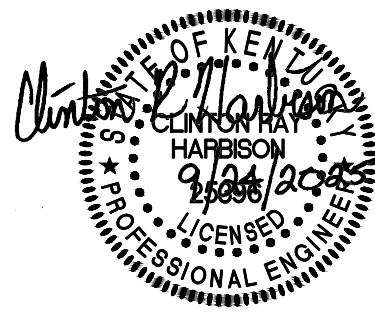
# ALVATON AREA CAPACITY IMPROVEMENTS



VICINITY MAP  
(N.T.S.)



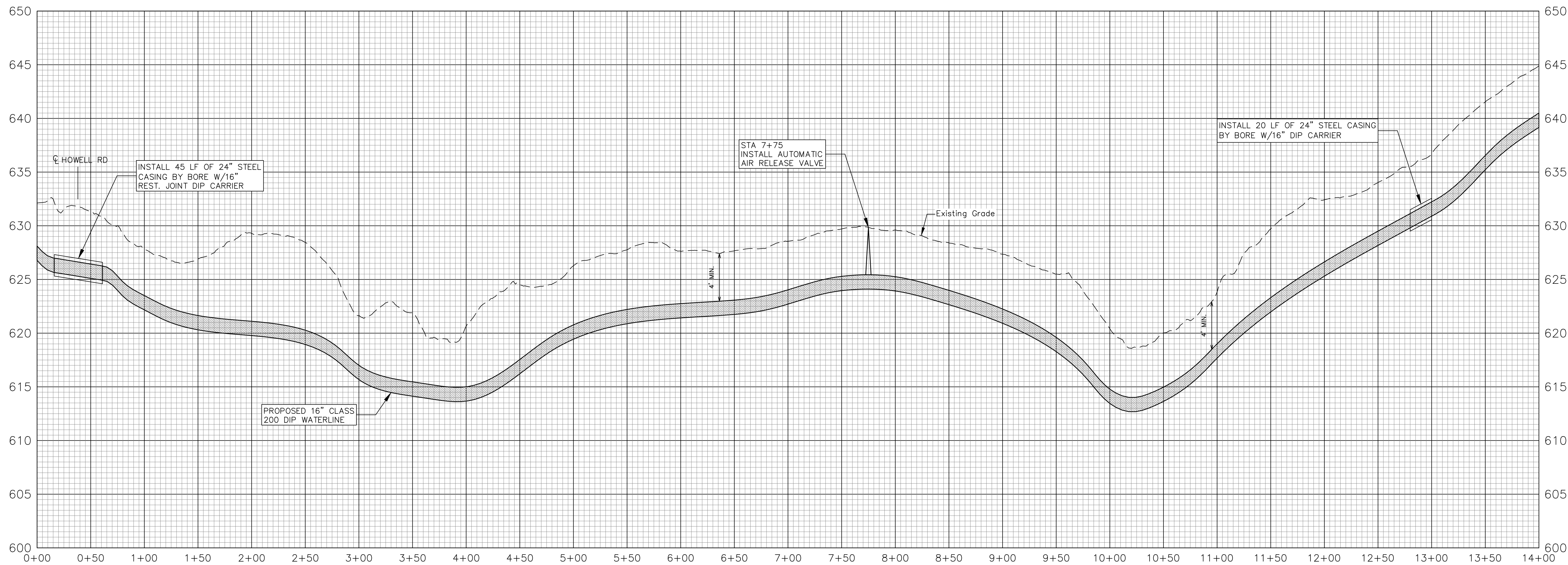
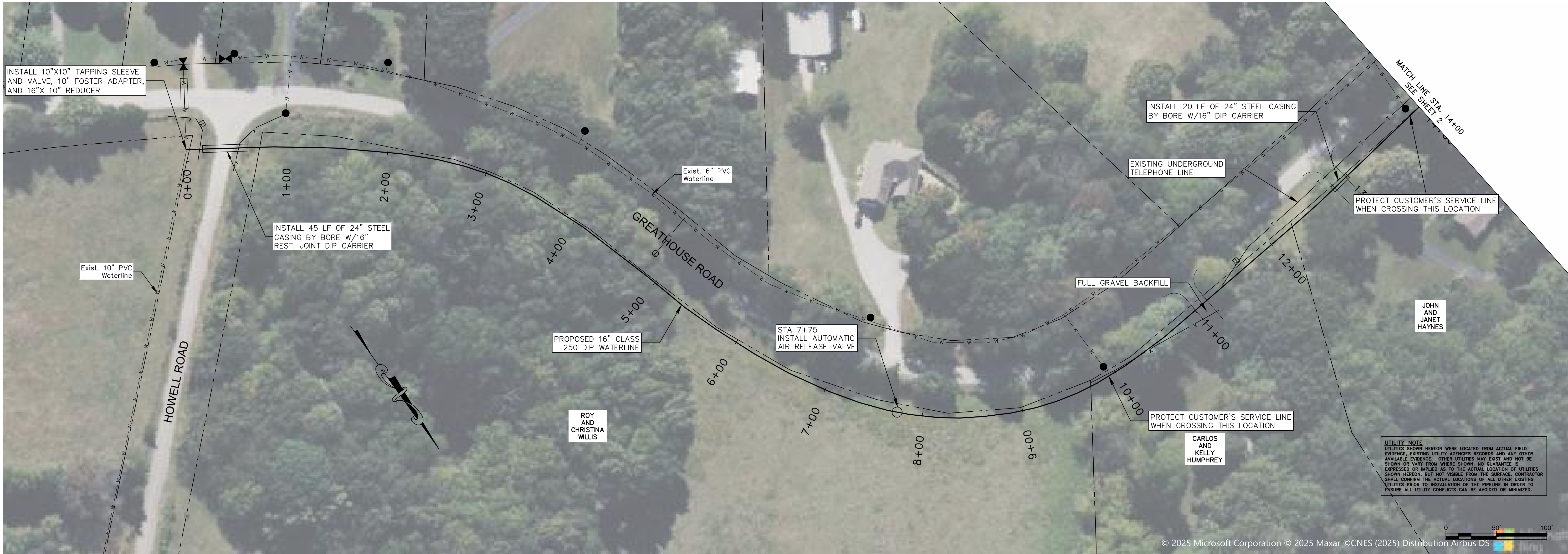
Warren County  
Water District




523 US Hwy 31-W Bypass / P.O. Box 10180  
Bowling Green, KY 42102-4780  
TEL 270.842.0052  
FAX 270.842.8360  
[www.warrenwater.com](http://www.warrenwater.com)

INDEX OF DRAWINGS

SHEET #	DESCRIPTION
1	GREATHOUSE ROAD STA. 0+00 TO STA. 14+00
2	GREATHOUSE ROAD STA. 14+00 TO STA. 29+00
3	GREATHOUSE ROAD STA. 29+00 TO STA. 43+00
4	GREATHOUSE ROAD STA. 43+00 TO STA. 57+50
5	GREATHOUSE ROAD AND OLD SCOTTSVILLE ROAD STA. 57+50 TO STA. 71+00
6	OLD SCOTTSVILLE ROAD STA. 71+00 TO STA. 86+00
7	OLD SCOTTSVILLE ROAD STA. 86+00 TO STA. 100+00
8	OLD SCOTTSVILLE ROAD STA. 100+00 TO STA. 115+00
9	OLD SCOTTSVILLE ROAD STA. 115+00 TO STA. 129+50
10	OLD SCOTTSVILLE ROAD STA. 129+50 TO STA. 143+50
11	OLD SCOTTSVILLE ROAD STA. 143+50 TO STA. 157+00
12	OLD SCOTTSVILLE ROAD STA. 157+00 TO STA. EOL
WD1	STANDARD WATERWORKS DETAILS
WD2	STANDARD WATERWORKS DETAILS
ECD	EROSION PREVENTION & SEDIMENT CONTROL DETAILS





ALVATON CAPACITY IMPROVEMENTS  
PROJECT NUMBER 593019  
STA. 0+00 - 14+00

SCALE: 1"=50'

DATE: 09/24/2025

PROJECT #: 593019


DESIGNED: TKM

DRAWN: KDH

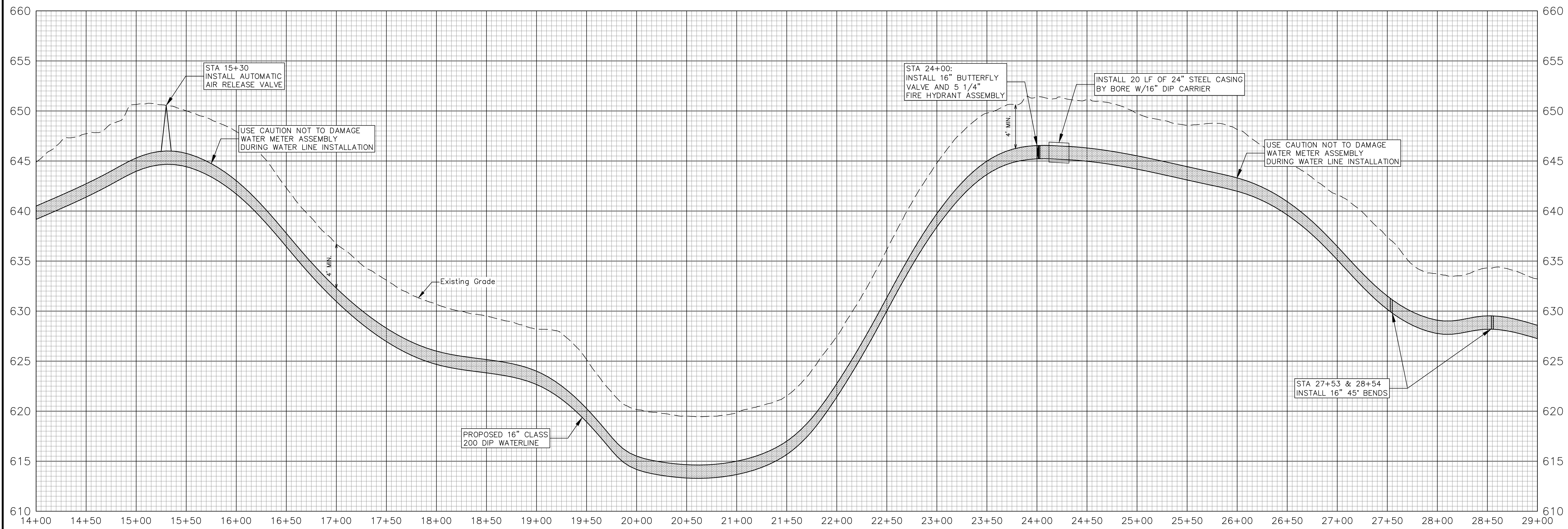
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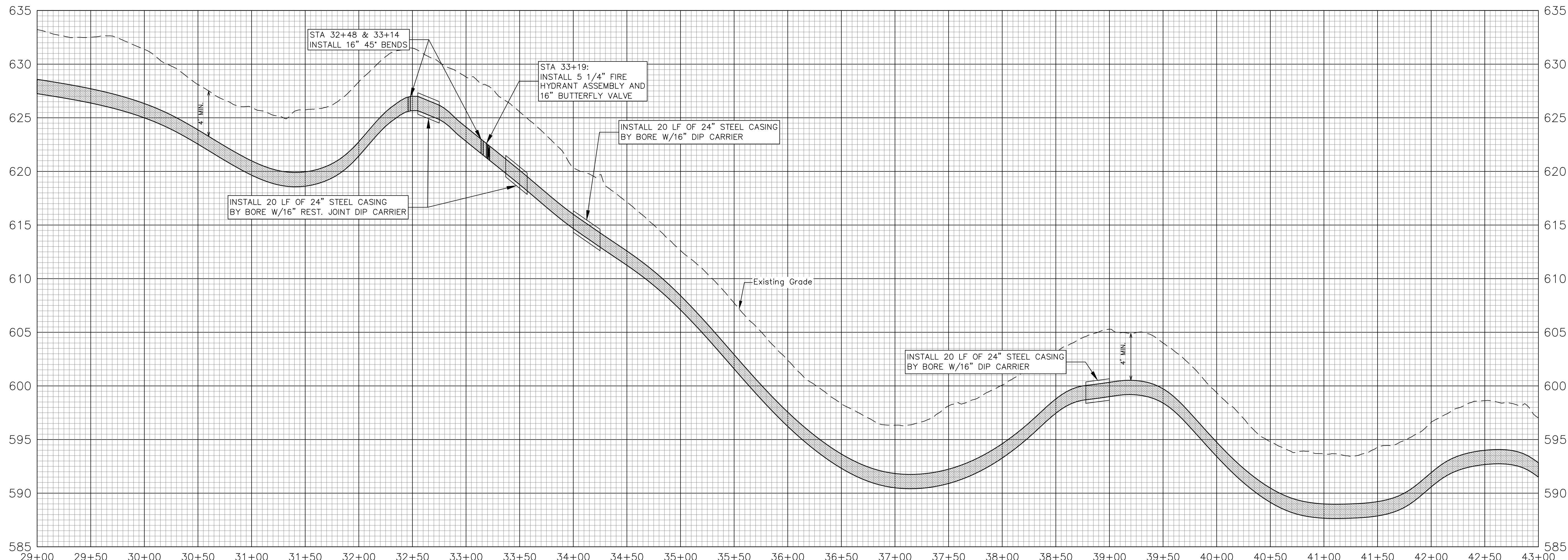
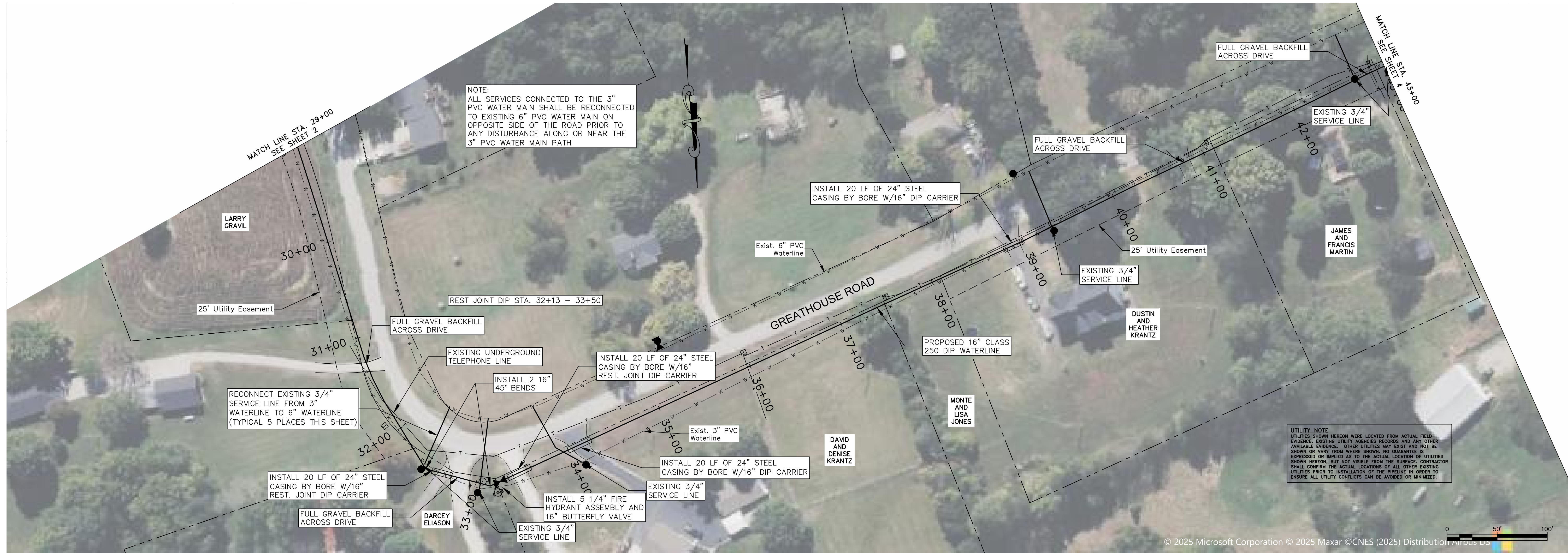
REVISIONS:

NO.:	DATE:



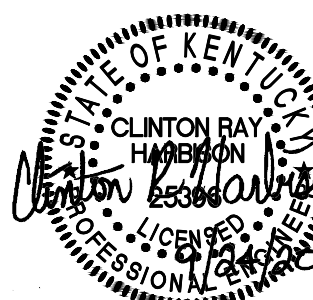
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1  
OF 12



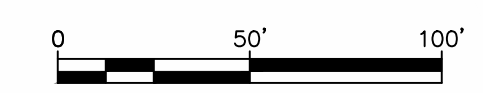
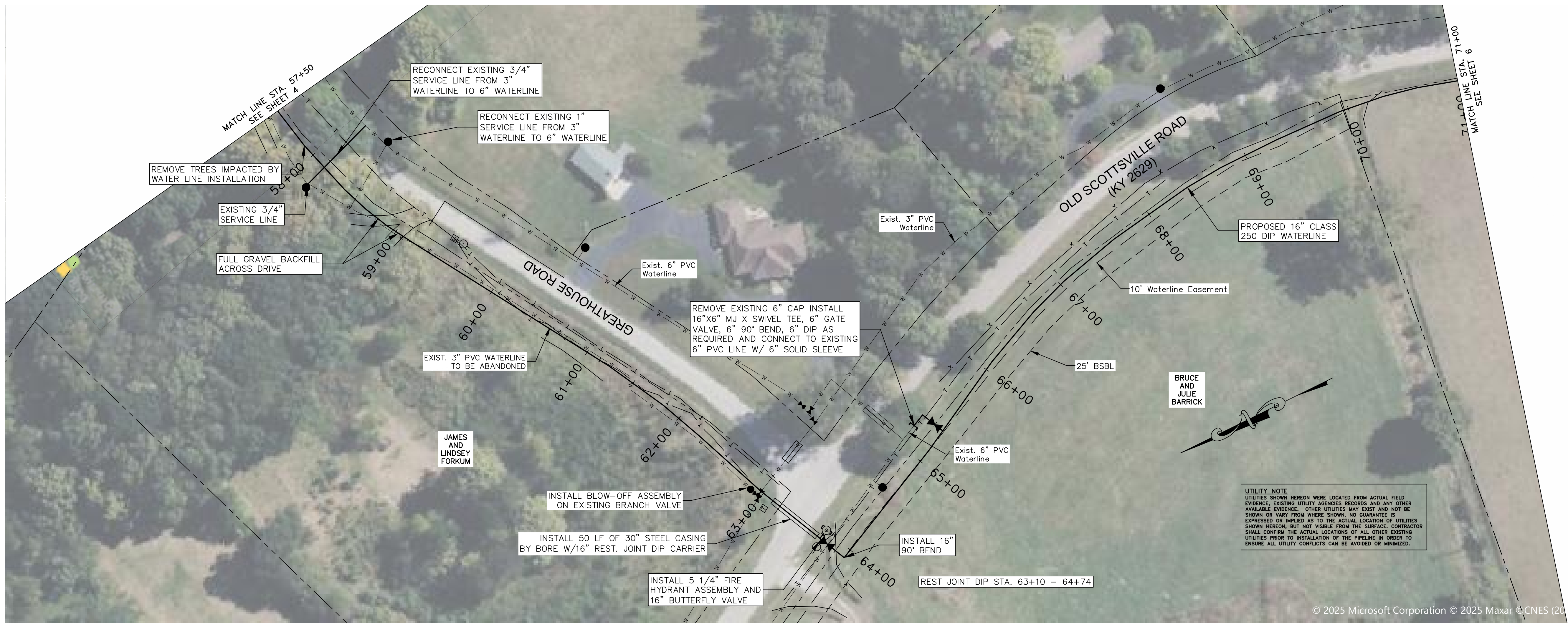


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DATE: 09/24/2025  
PROJECT #: 593019  
DESIGNED: TKM  
DRAWN: KDH  
CHECKED: CRH

REVISIONS:	
NO.:	DATE:







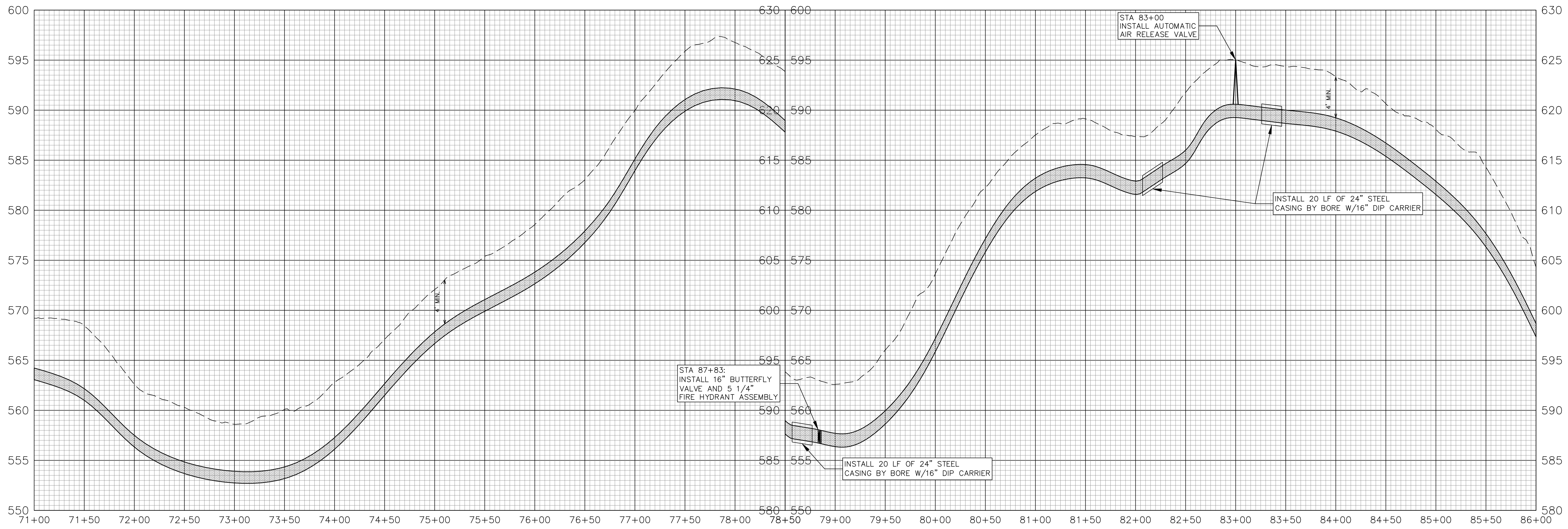
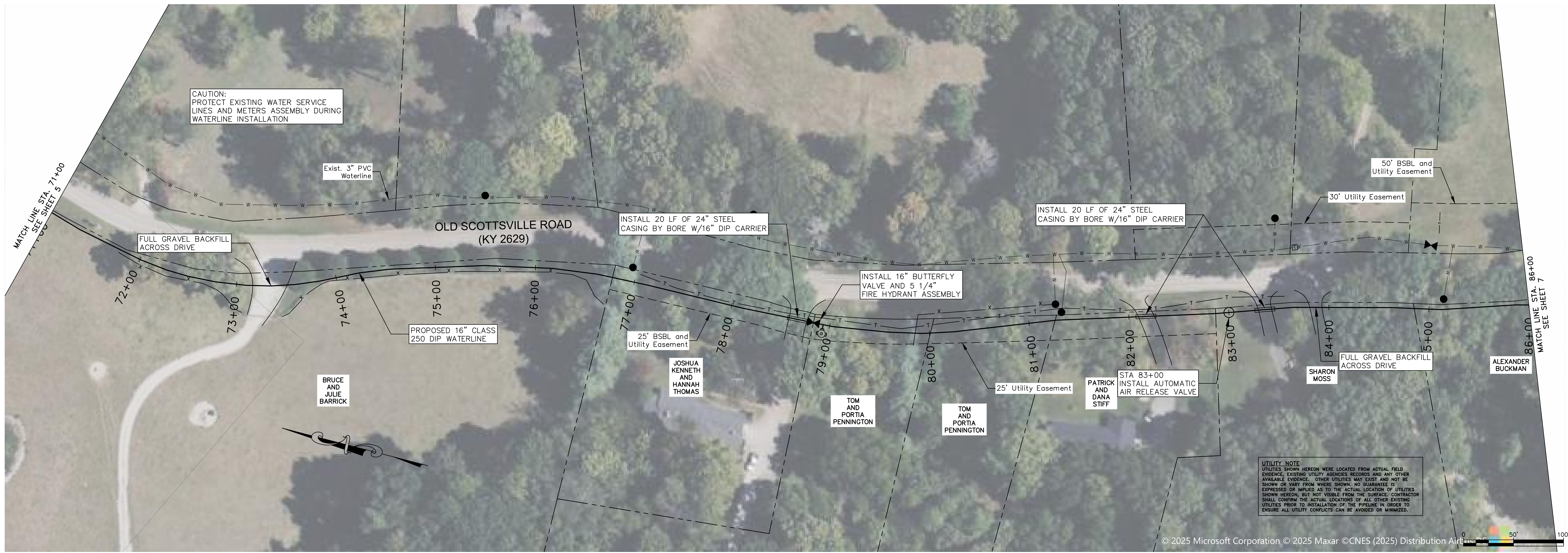
© 2025 Microsoft Corporation © 2025 Maxar © CNES (20

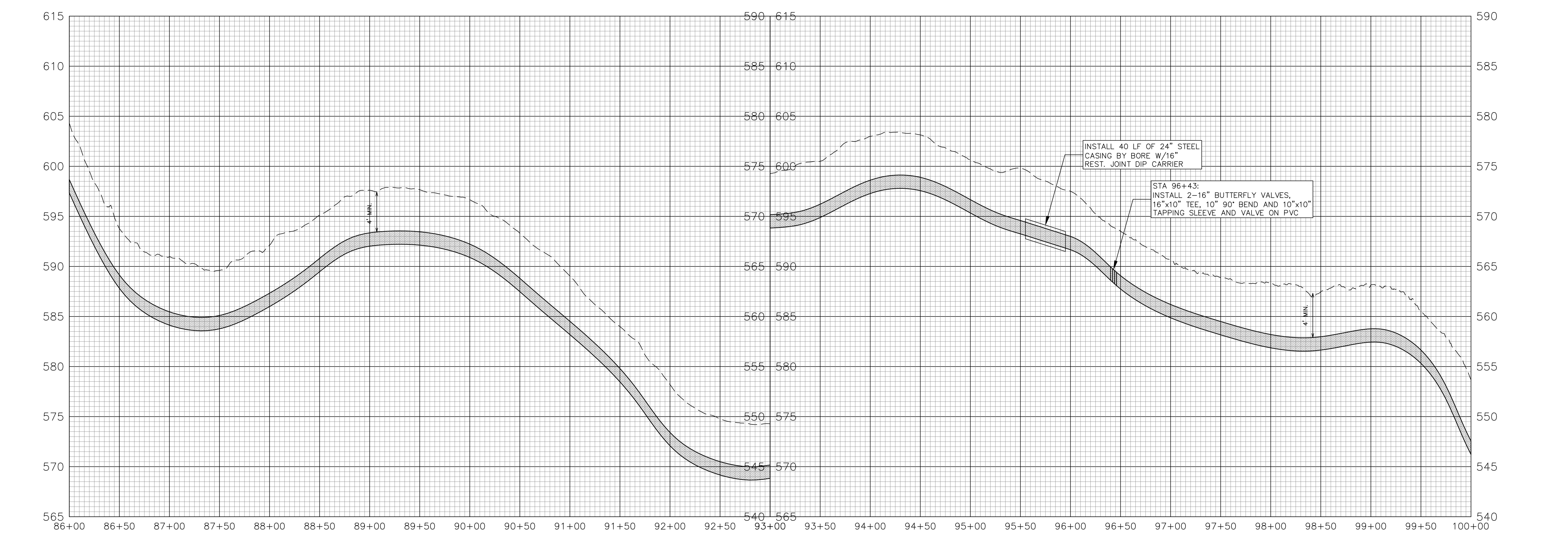
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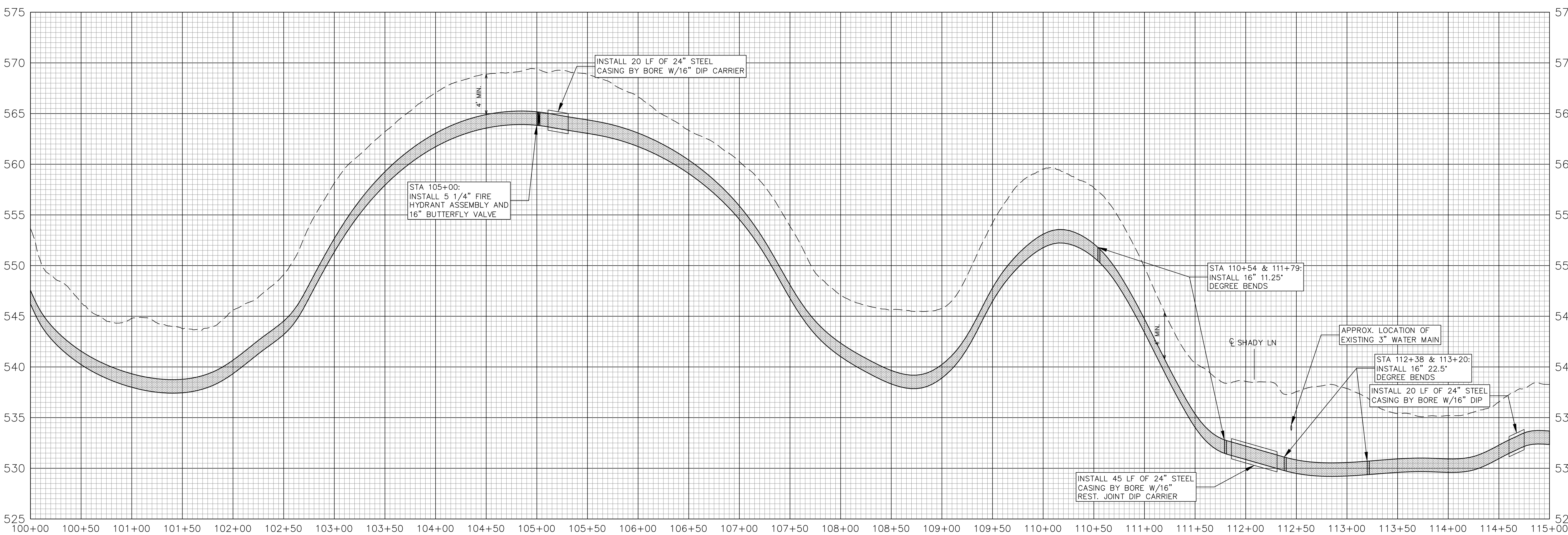
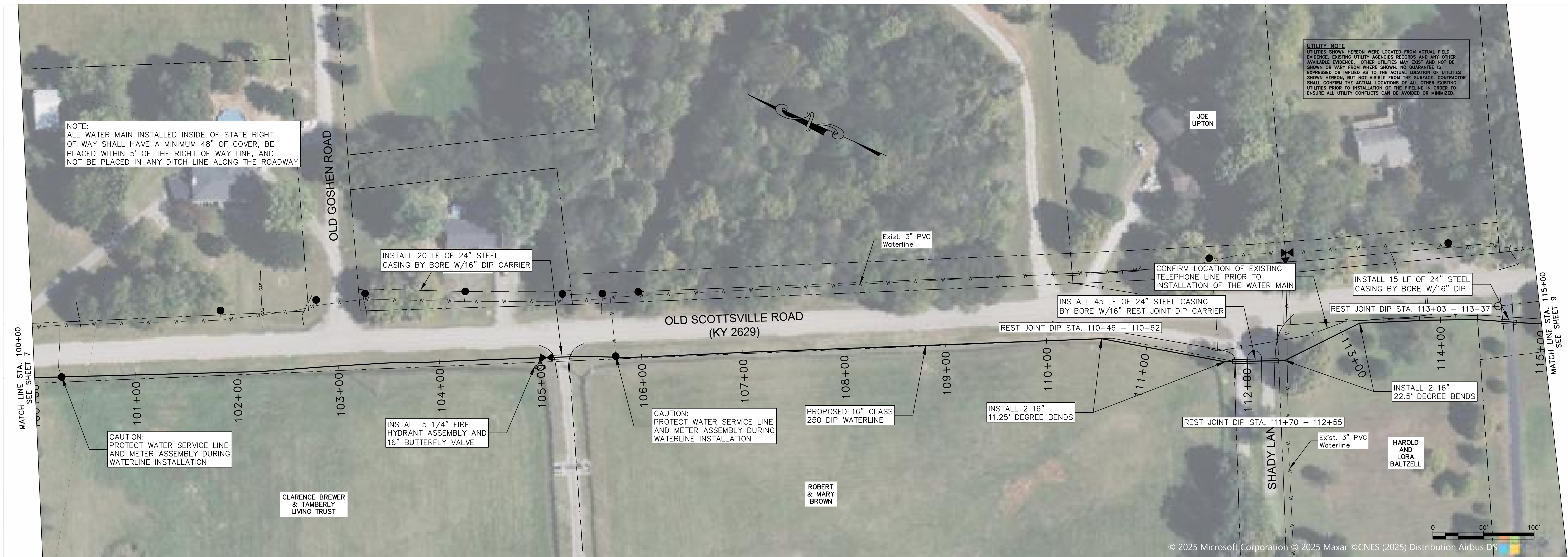
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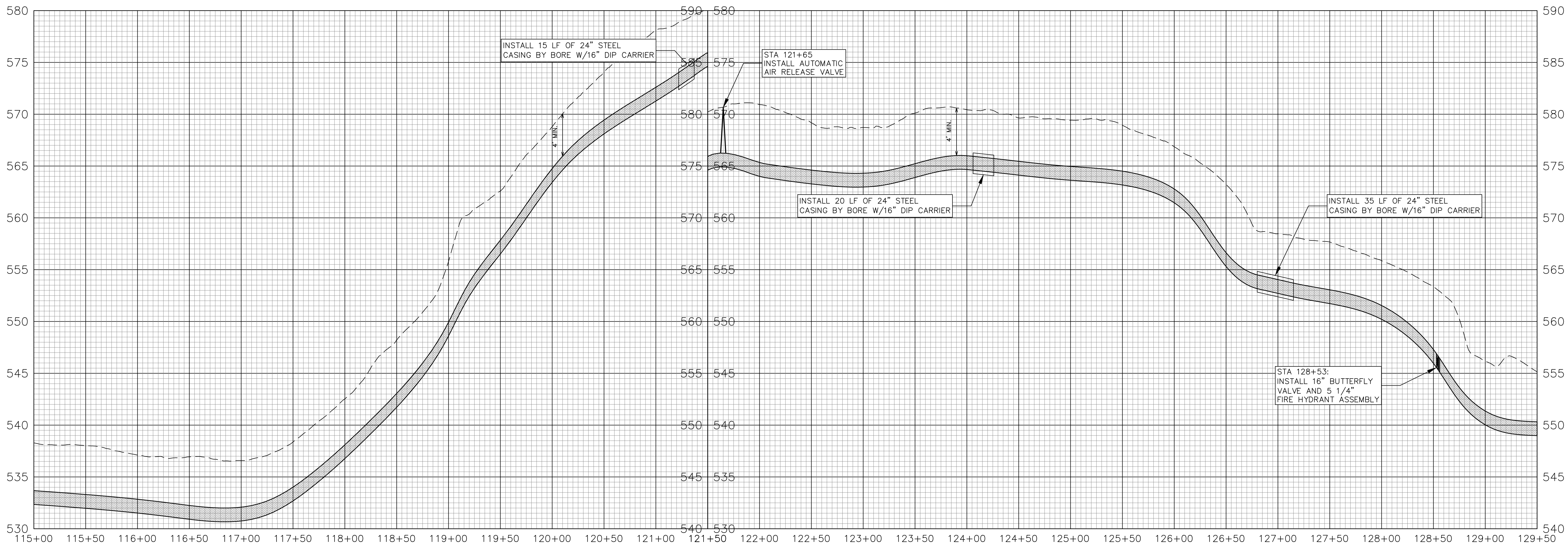
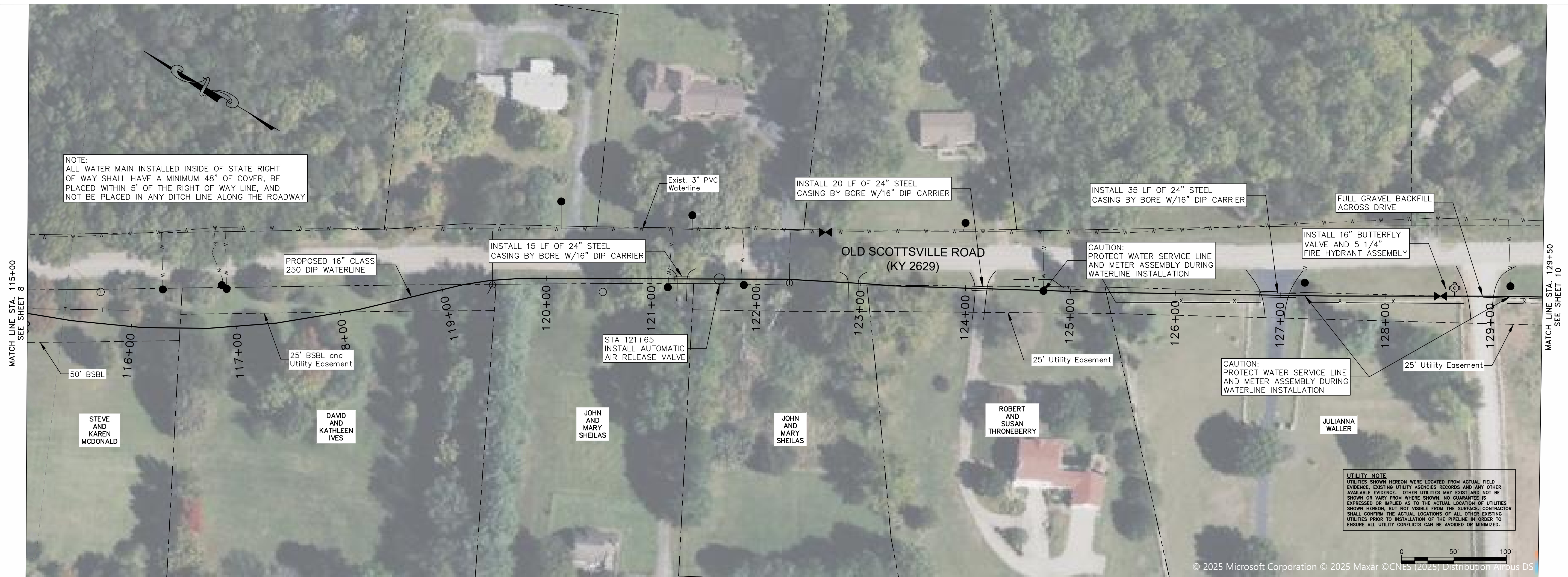
*Clinton Harrison*  
CLINTON HARRISON  
25396  
PROFESSIONAL ENGINEER

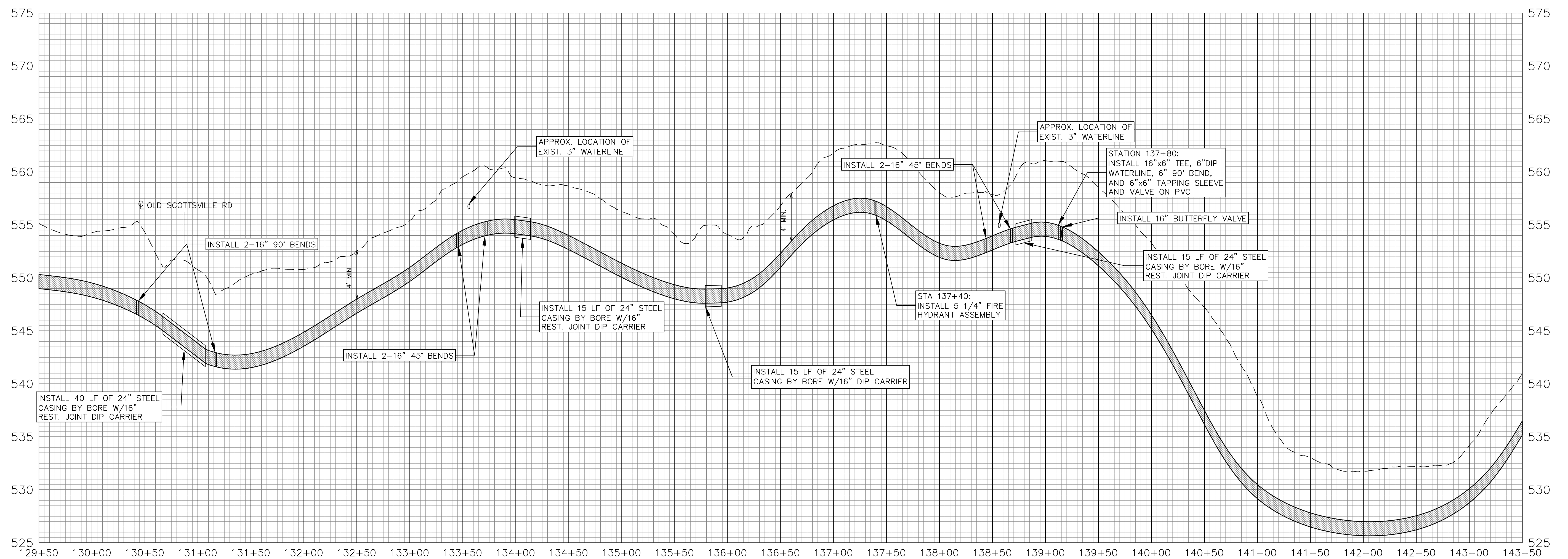
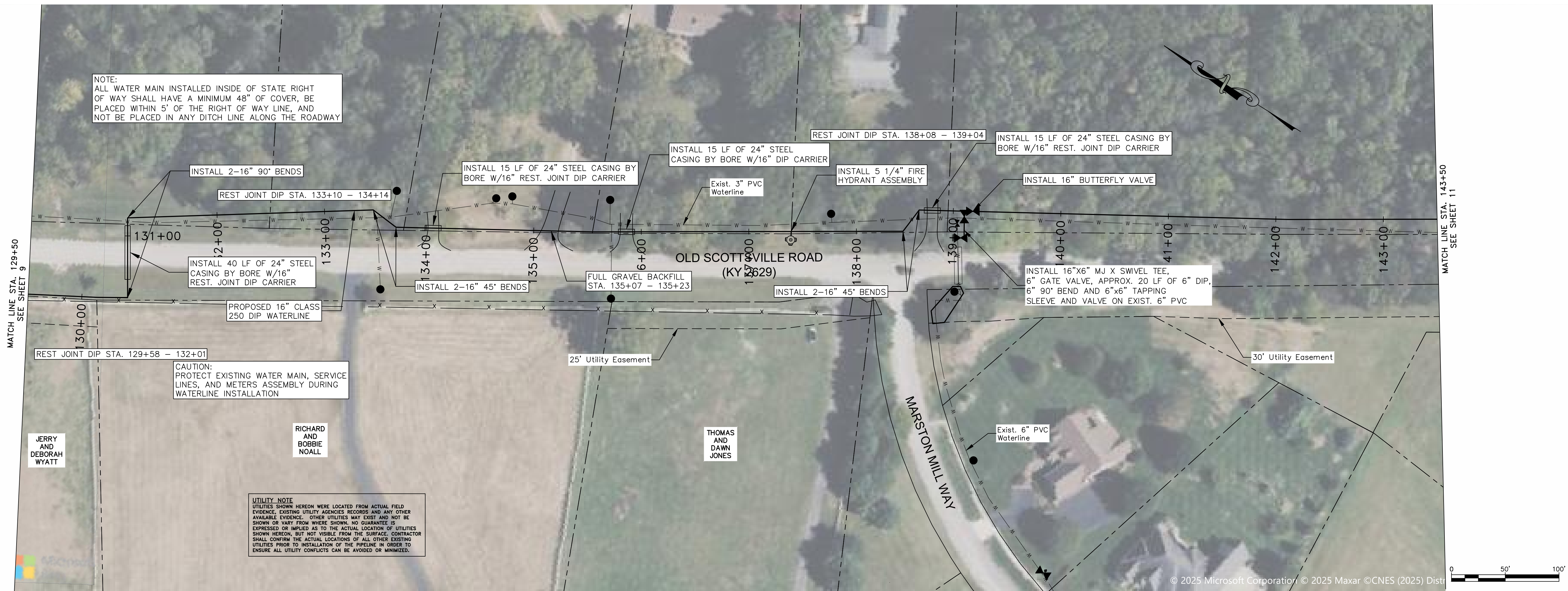
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OF 12

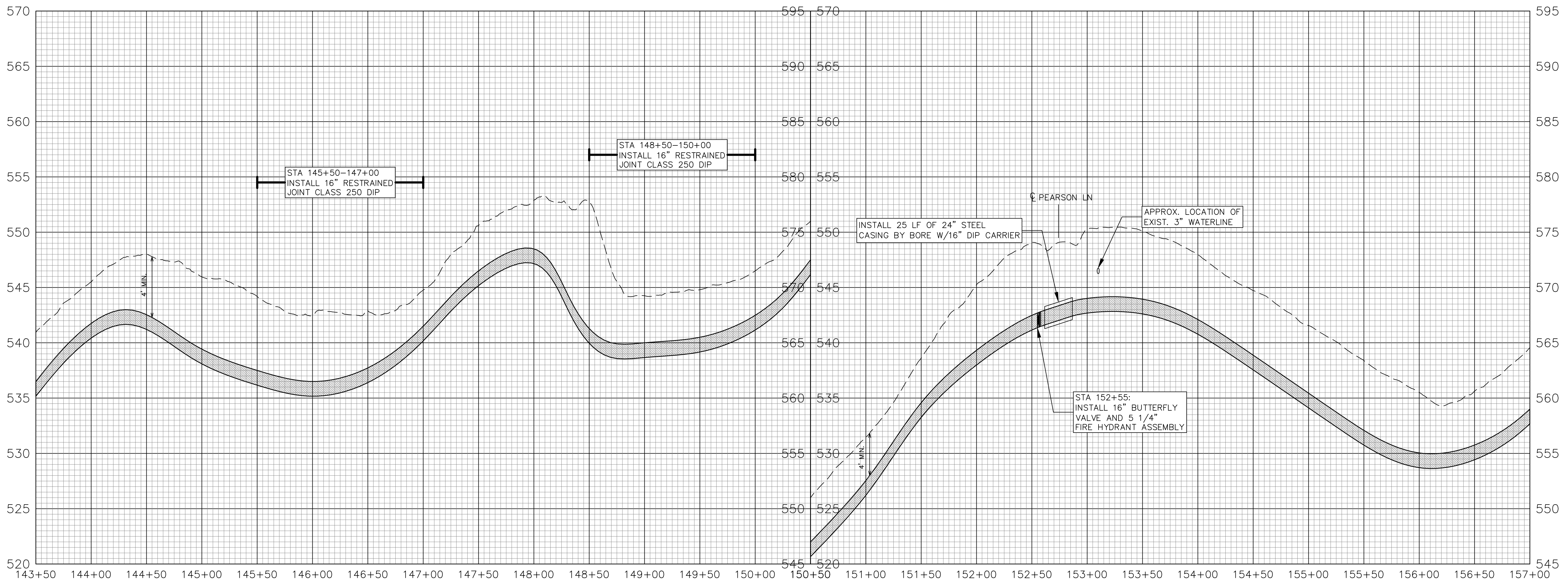


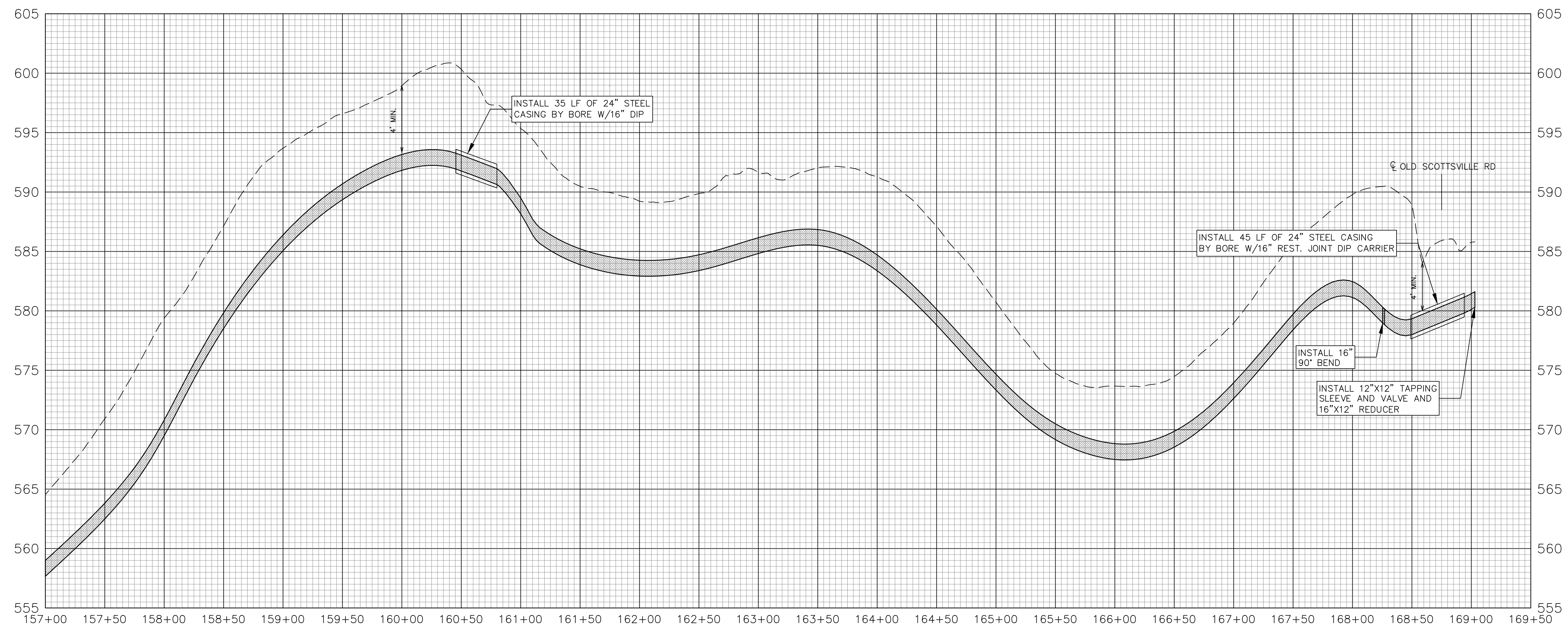
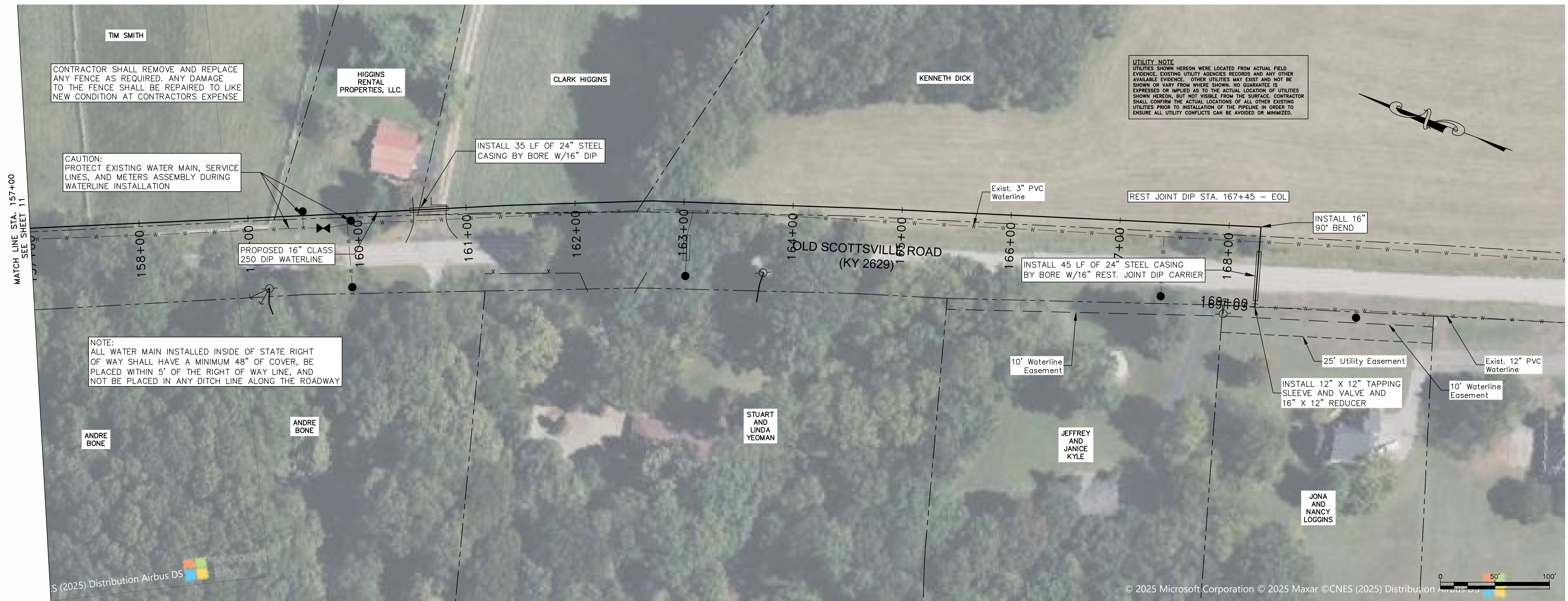


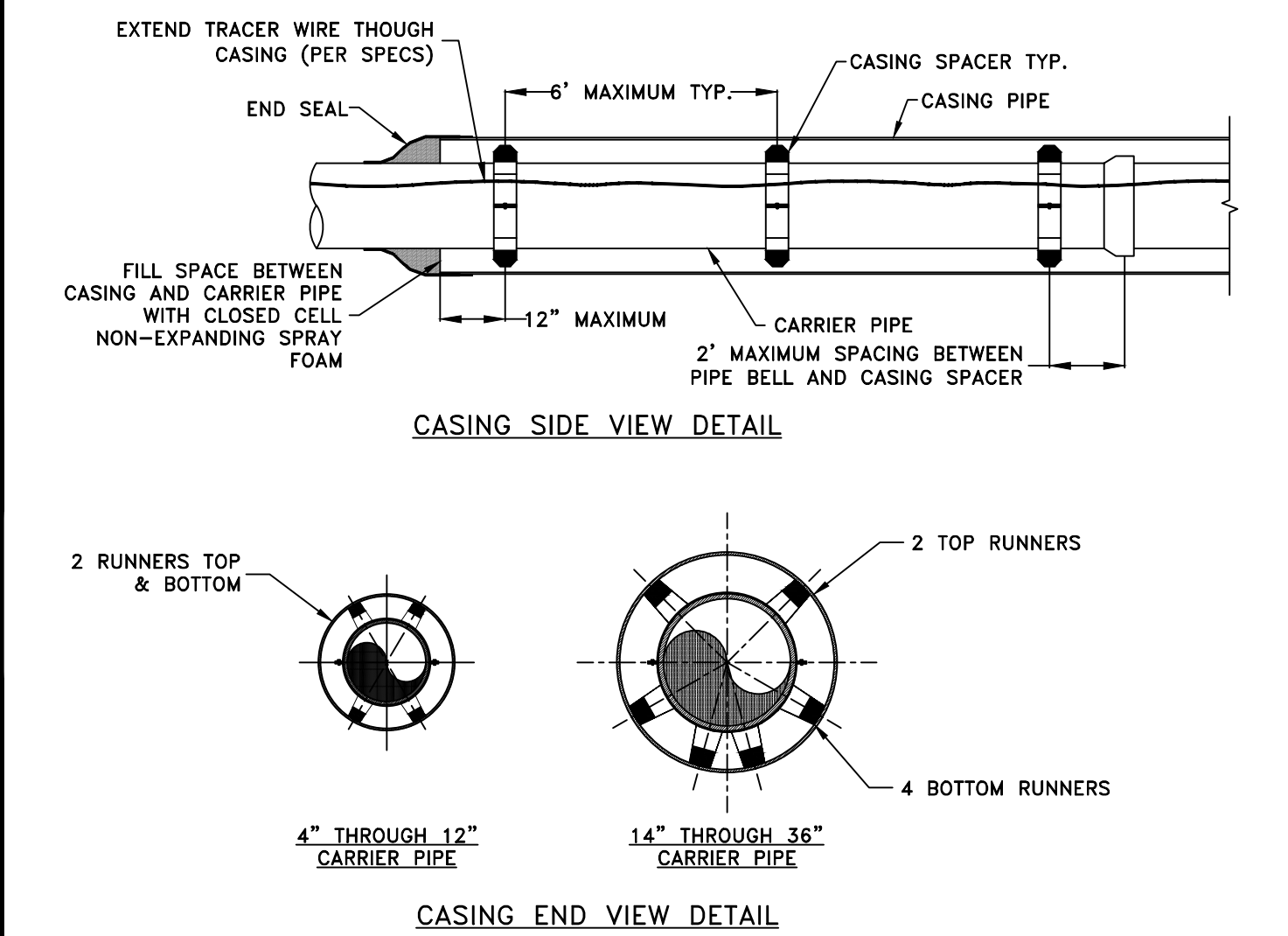
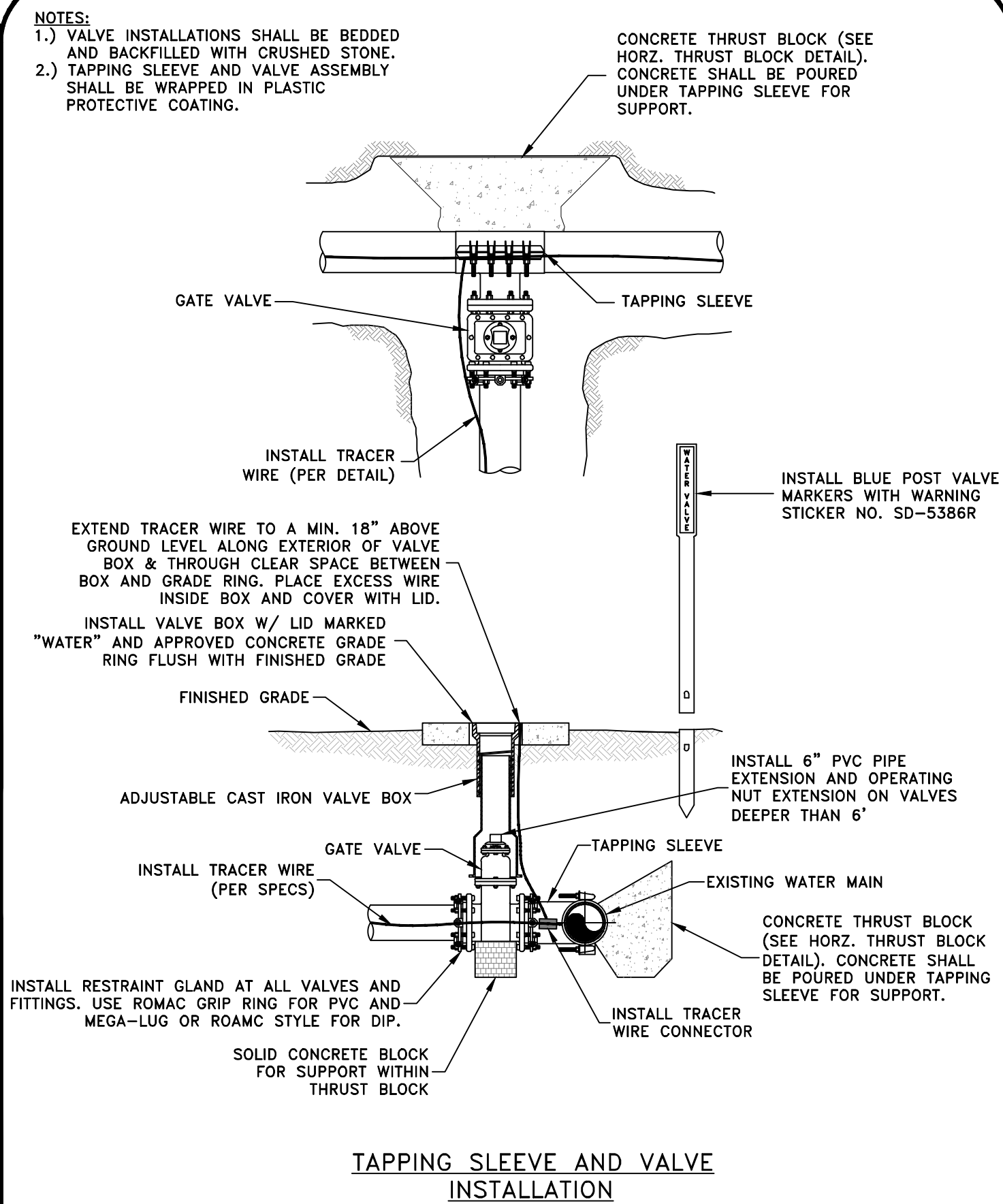
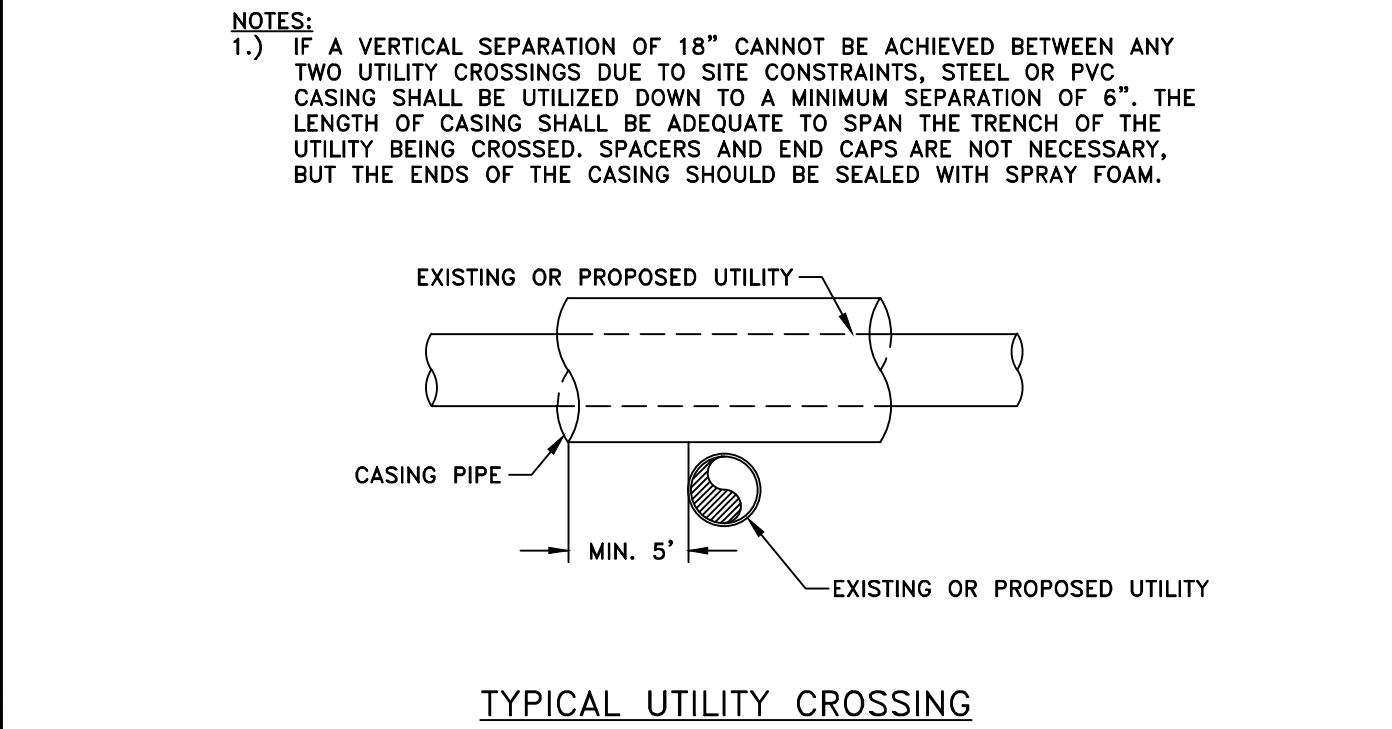
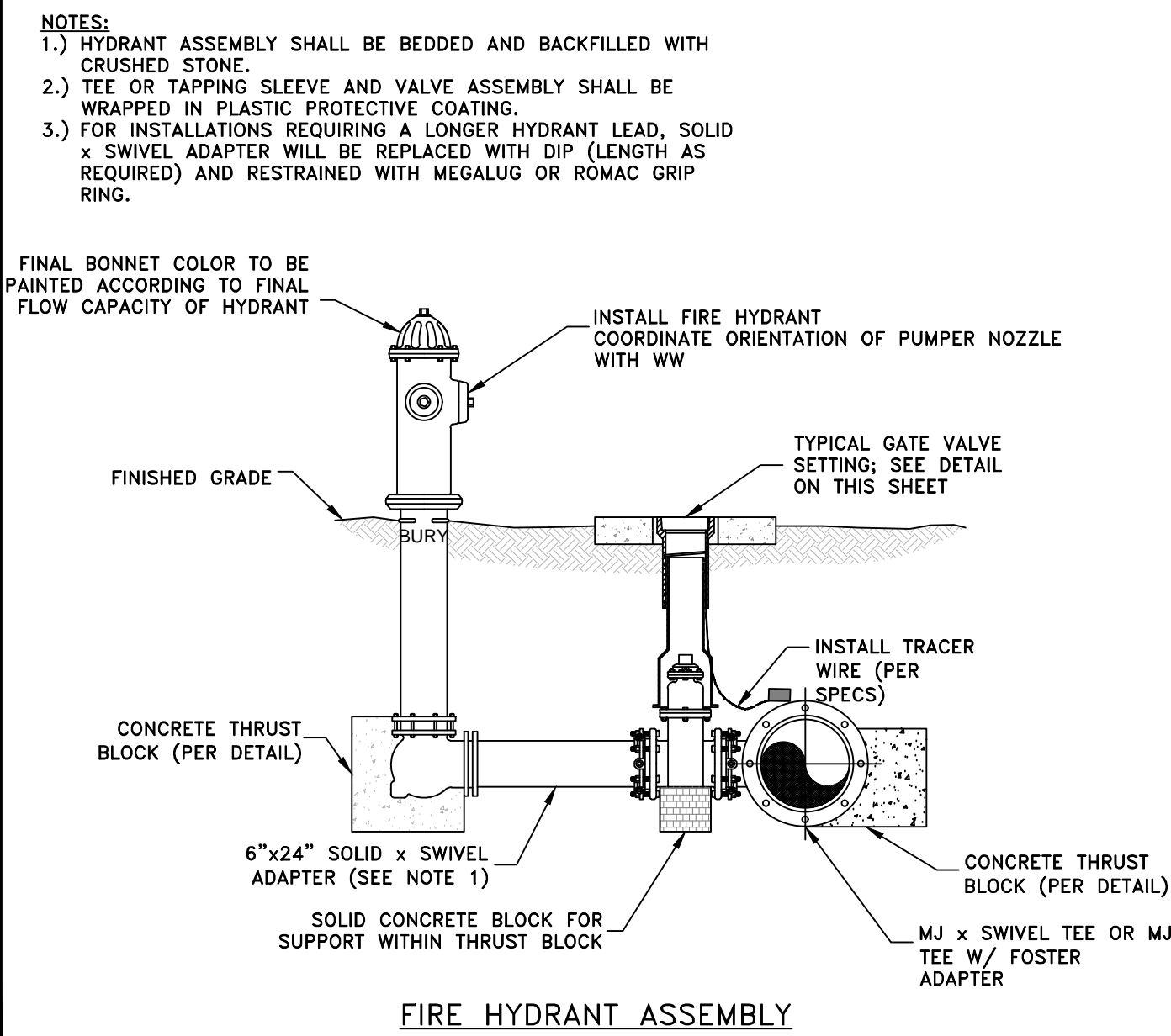
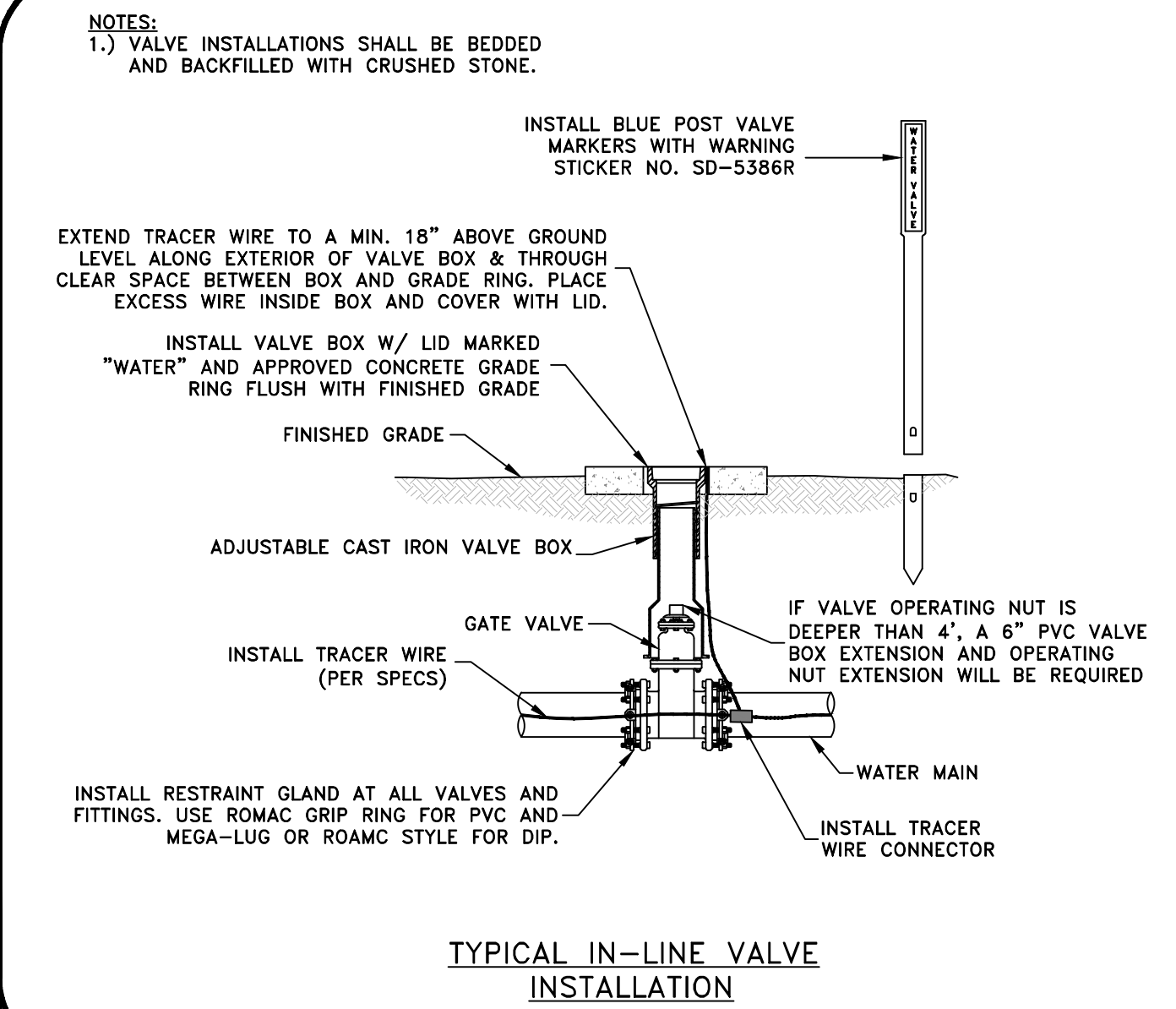








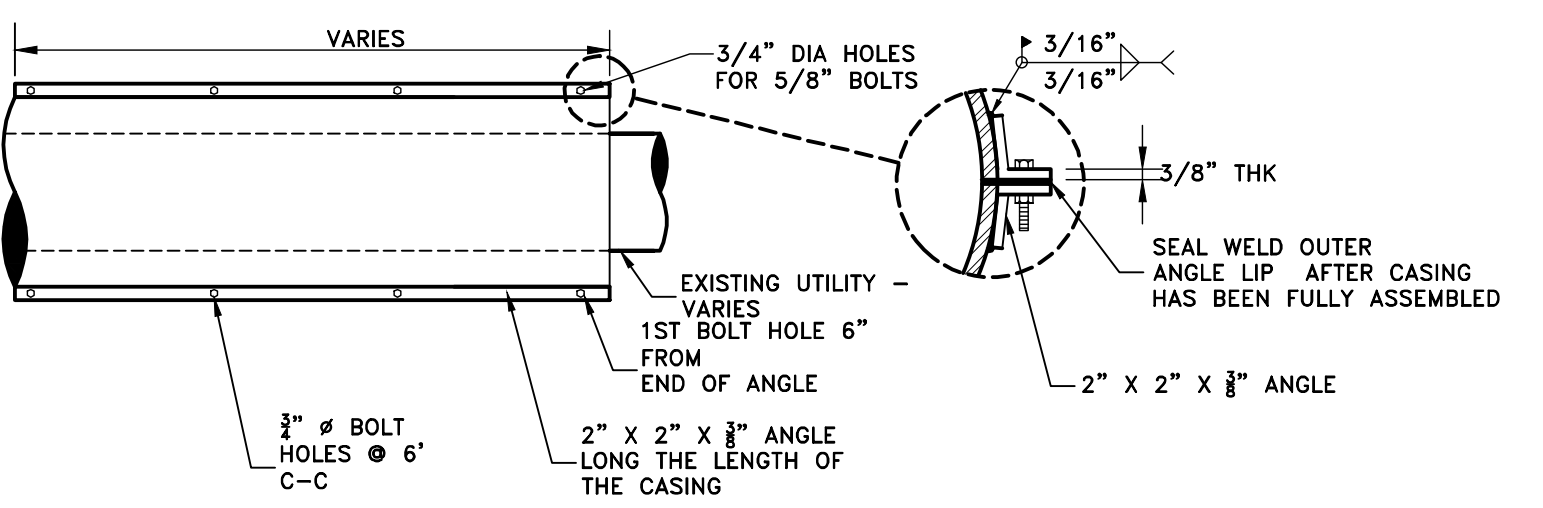
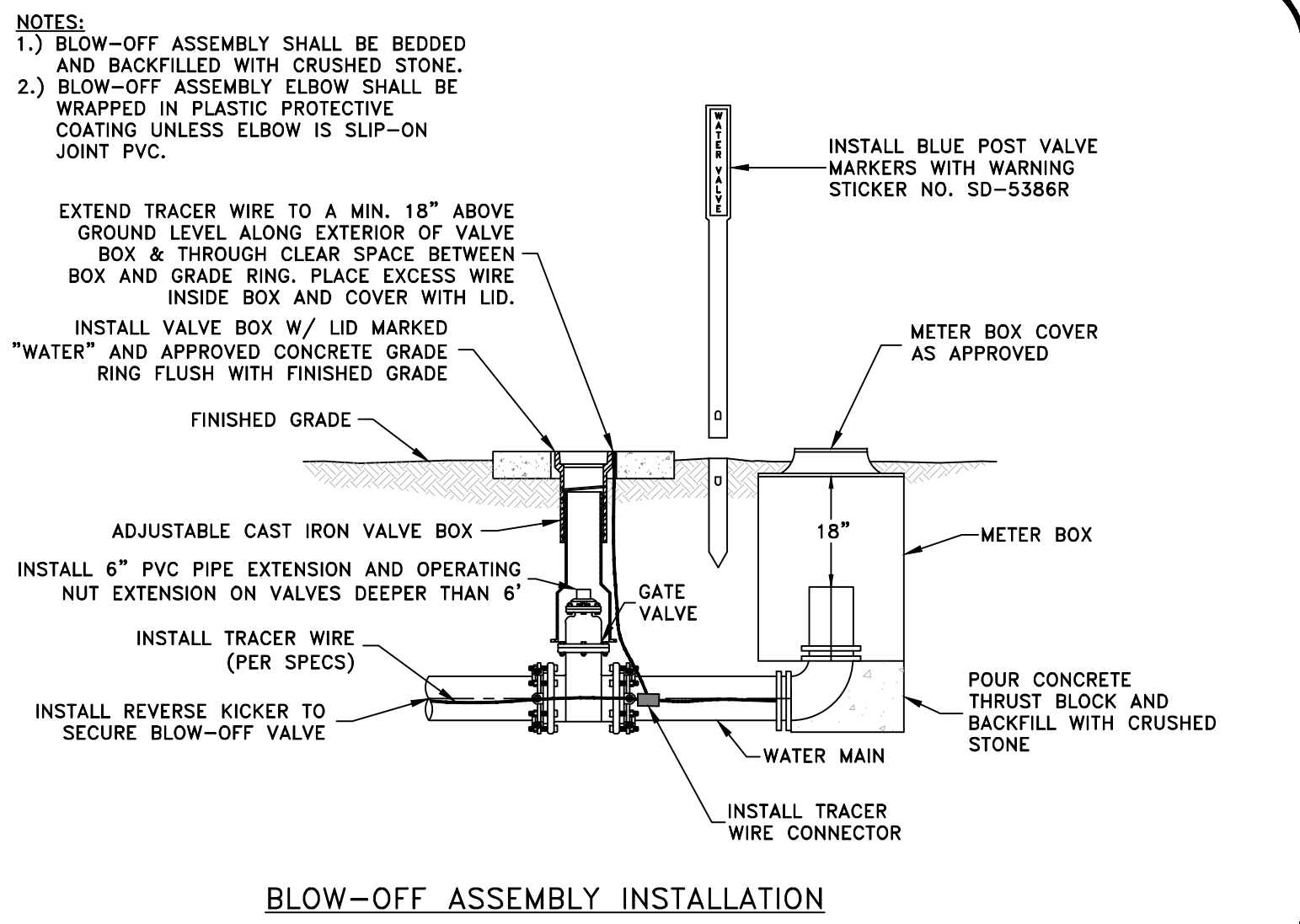




CARRIER TYPE AND CASING PIPE SIZES (MIN) IN INCHES											
CARRIER PIPE NOM. DIA. (D1)	4	6	8	10	12	16	20	24	30		
CASING PIPE NOM. DIA. (D2)	12	12	16	20	20	24	30	36	42		
WALL THICKNESS	0.375	0.375	0.375	0.375	0.375	0.500	0.500	0.500	0.625		

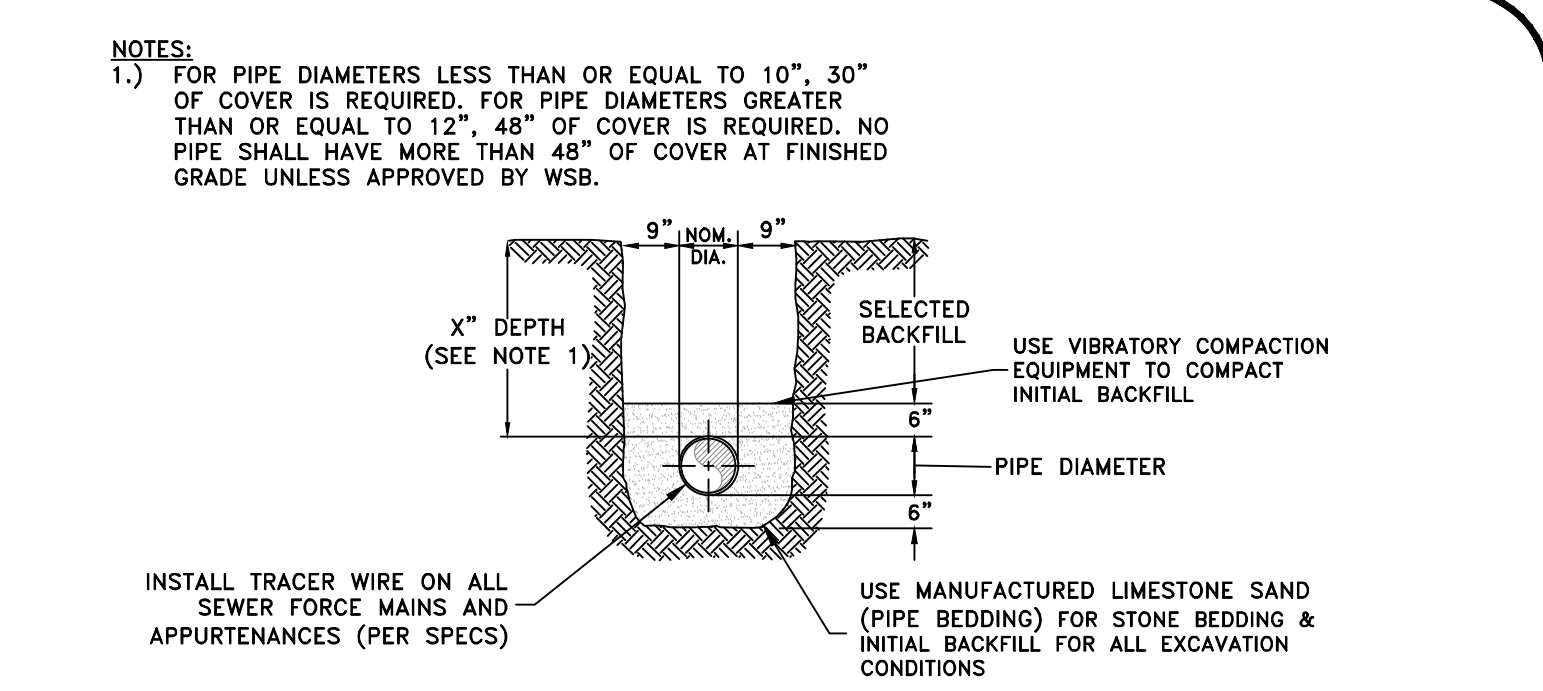
- NOTES
- CASING SIZES ARE BASED ON A TYPICAL TYTON JOINT WITH RESTRAINED JOINT GASKETS. IF A TRADITIONAL RESTRAINED JOINT SIMILAR TO TR FLEX OR EQUIVALENT IS UTILIZED, COORDINATE WITH WSB TO ENSURE SUFFICIENT CASING SIZE IS PROVIDED.
  - MINIMUM COVER AT LOWEST POINT IN RIGHT OF WAY SHOULD BE 4' TO TOP OF CASING FOR KYTC AND COUNTY ROADWAYS AND 5.5' TO BASE OF RAIL ON RAILROADS.
  - ALL CASINGS SHALL EXTEND THROUGH RIGHT OF WAY.
  - THE INSIDE DIAMETER OF THE CASING PIPE SHALL BE A MINIMUM OF 4 INCHES GREATER THAN THE OUTSIDE DIAMETER OF THE CARRIER PIPE BELL OR COUPLING.
  - FOR CASINGS 50 FEET IN LENGTH OR LONGER, ALL CARRIER PIPE SHALL BE DUCTILE IRON PIPE AND HAVE MECHANICAL RESTRAINED JOINTS.
  - STAINLESS STEEL SPACERS SHALL BE USED FOR ALL DUCTILE IRON PIPE OR ANY PIPE 12" IN DIAMETER AND LARGER.
  - PIPE TO BE USED AS A CASING SHALL CONFORM TO ASTM A252 STANDARD SPECIFICATION FOR WELDED & SEAMLESS STEEL PIPE PILES WITH A MINIMUM YIELD STRENGTH OF 35,000 PSI

TYPICAL CASING DETAIL – WATER

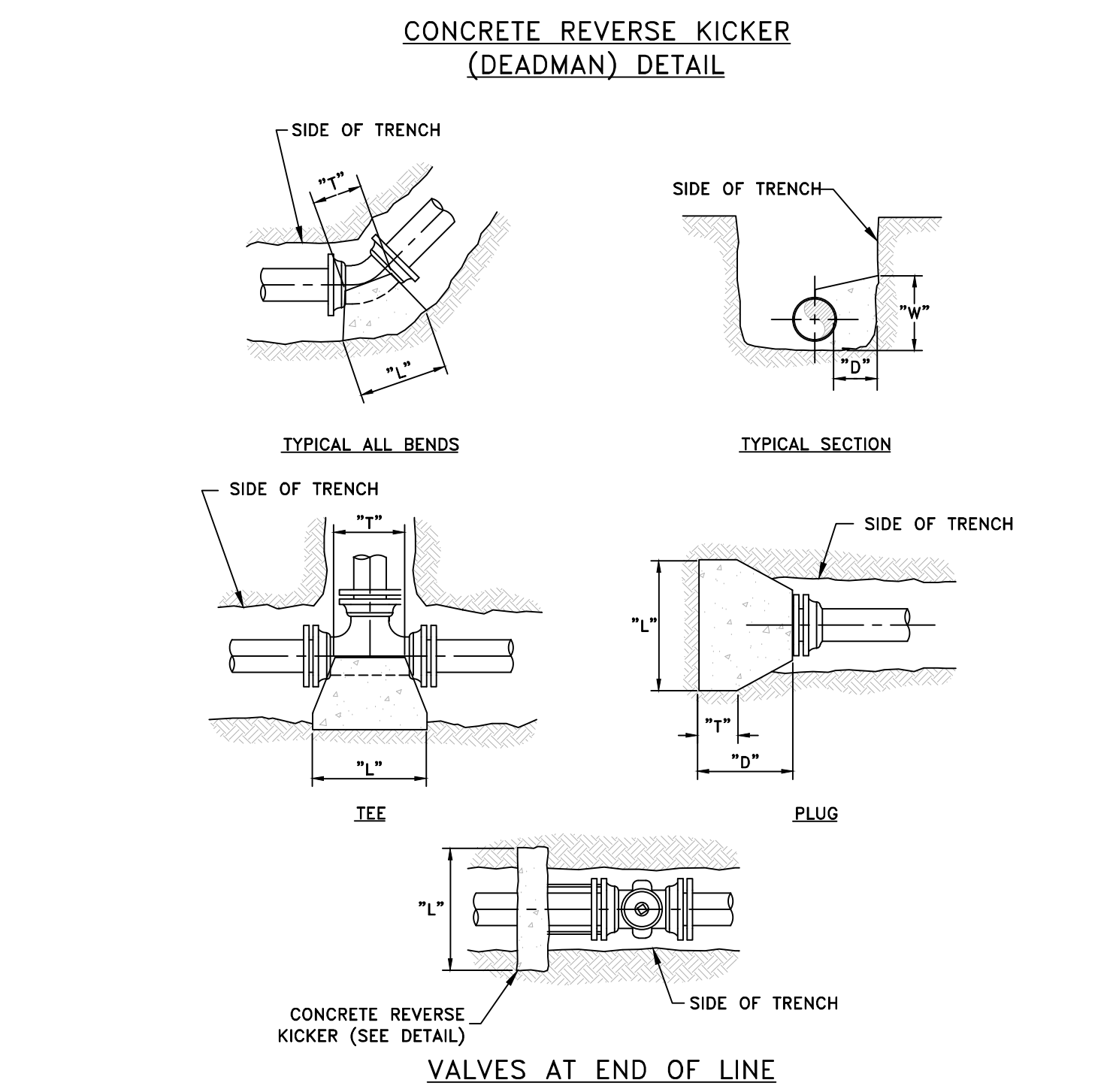
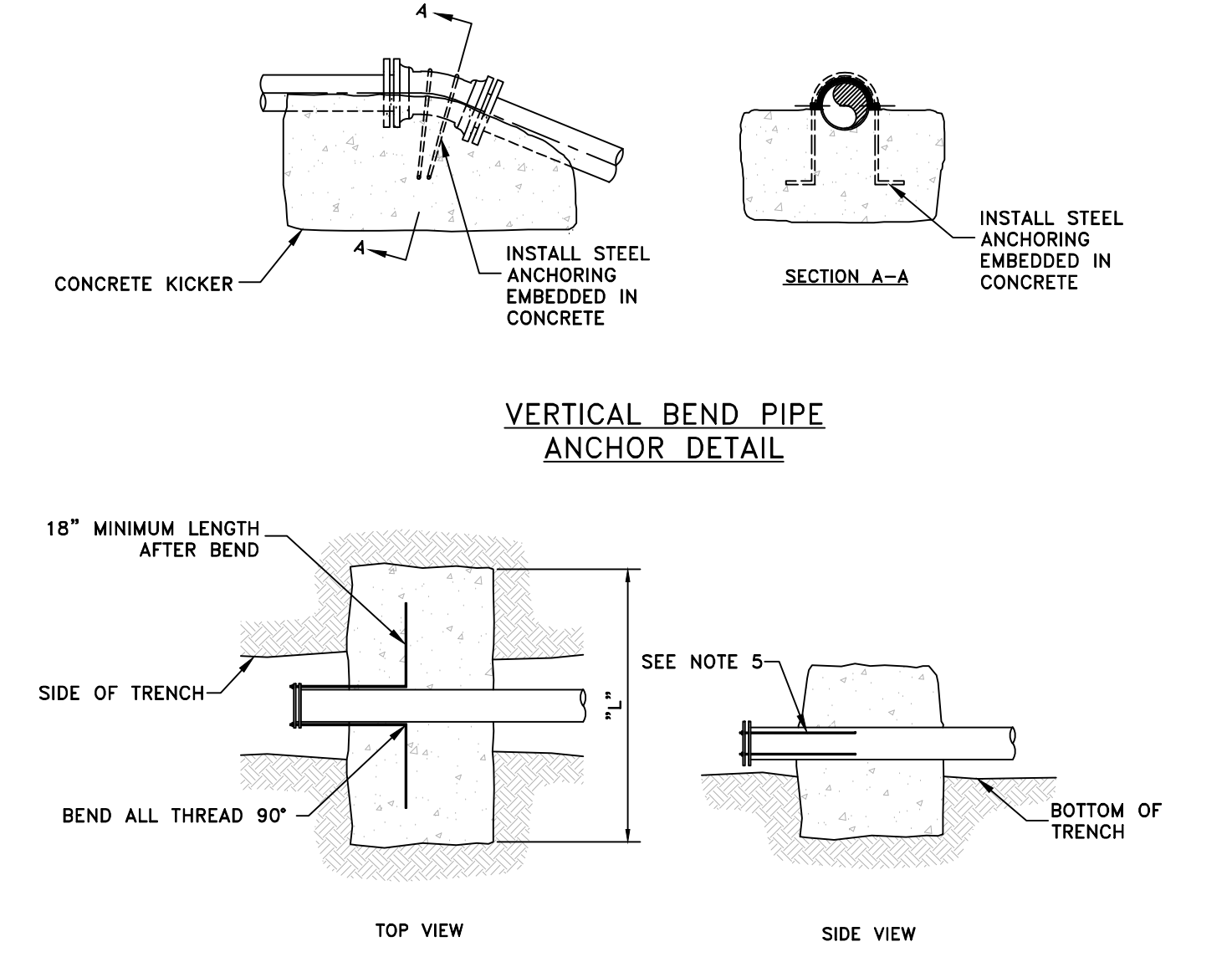
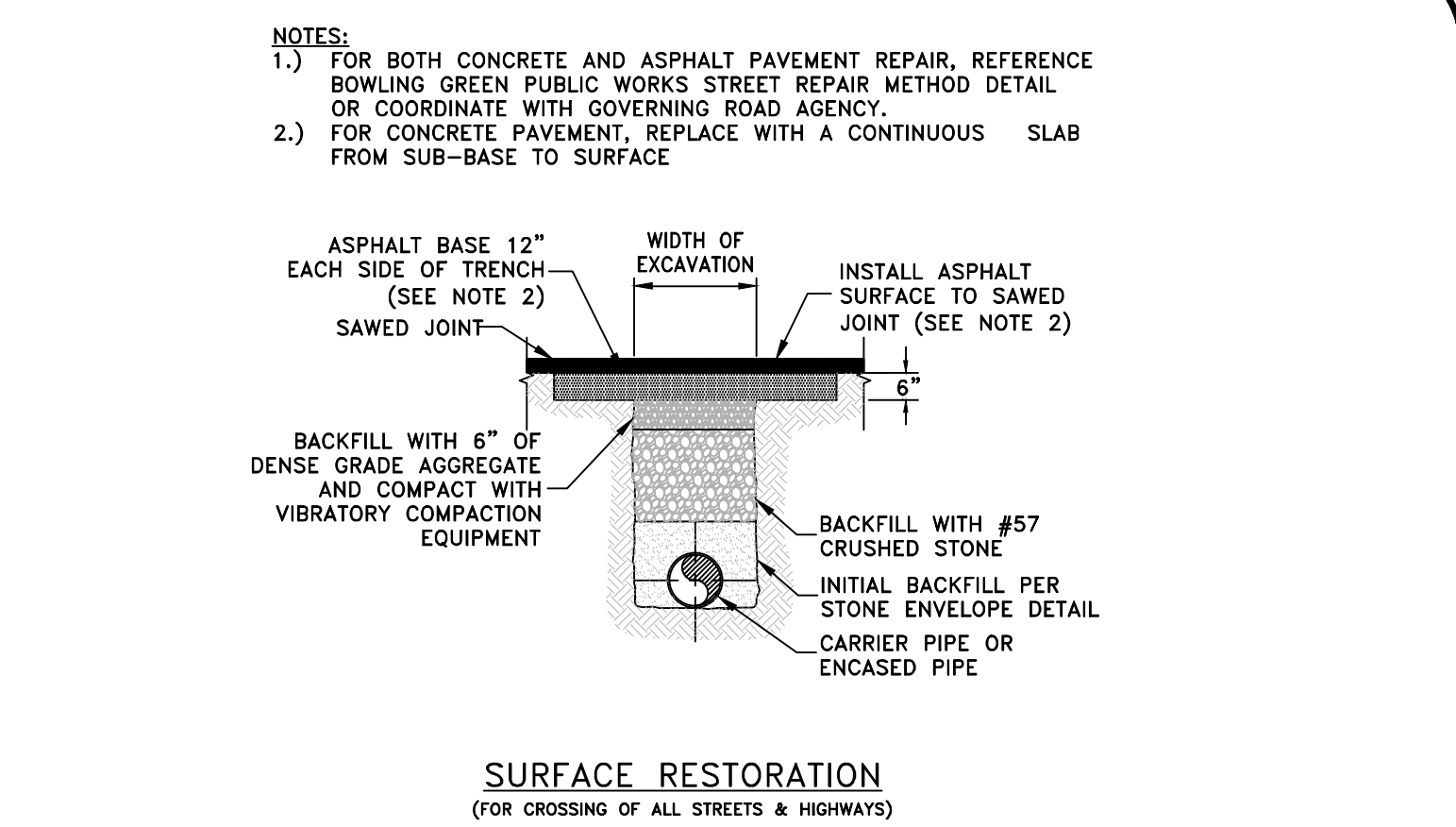


- NOTES
- SPLIT CASINGS ARE INTENDED FOR OPEN CUT INSTALLATIONS ONLY AND PRIMARILY FOR PROTECTING EXISTING UTILITIES.
  - SPLIT CASING WILL NOT BE ACCEPTABLE FOR BORE AND JACK INSTALLATIONS.
  - CASING SPACERS SHALL BE PROVIDED AS SPECIFIED FOR TYPICAL CASING INSTALLATIONS.
  - SIZING AND SPACER CONFIGURATION PER TYPICAL CASING DETAIL.

TYPICAL SPLIT CASING DETAIL



TYPICAL STONE ENVELOPE – WATER



NOTES:  
1.) ALL FITTINGS SHALL INCLUDE RESTRAINT GLANDS: USE ROMAC RESTRAINT FOR PVC. USE ROMAC OR MEGALUG RESTRAINT FOR DIP.  
2.) CONCRETE THRUST BLOCKS TO BE POURED AGAINST UNDISTURBED EARTH.  
3.) PLASTIC BARRIER SHALL BE PLACED BETWEEN ALL CONCRETE AND PIPE AND/OR FITTINGS.  
4.) ANCHOR BAR SHALL BE 5/8" MINIMUM DIAMETER.  
5.) RODDING FOR A CONCRETE REVERSE KICKER SHALL BE AS FOLLOWS: 4" USE 2 RODS, 6"-10" USE 4 RODS & 12" PER ENGINEER.  
6.) FITTINGS SHALL BE INSTALLED AS REQUIRED PER WSB INSPECTOR.

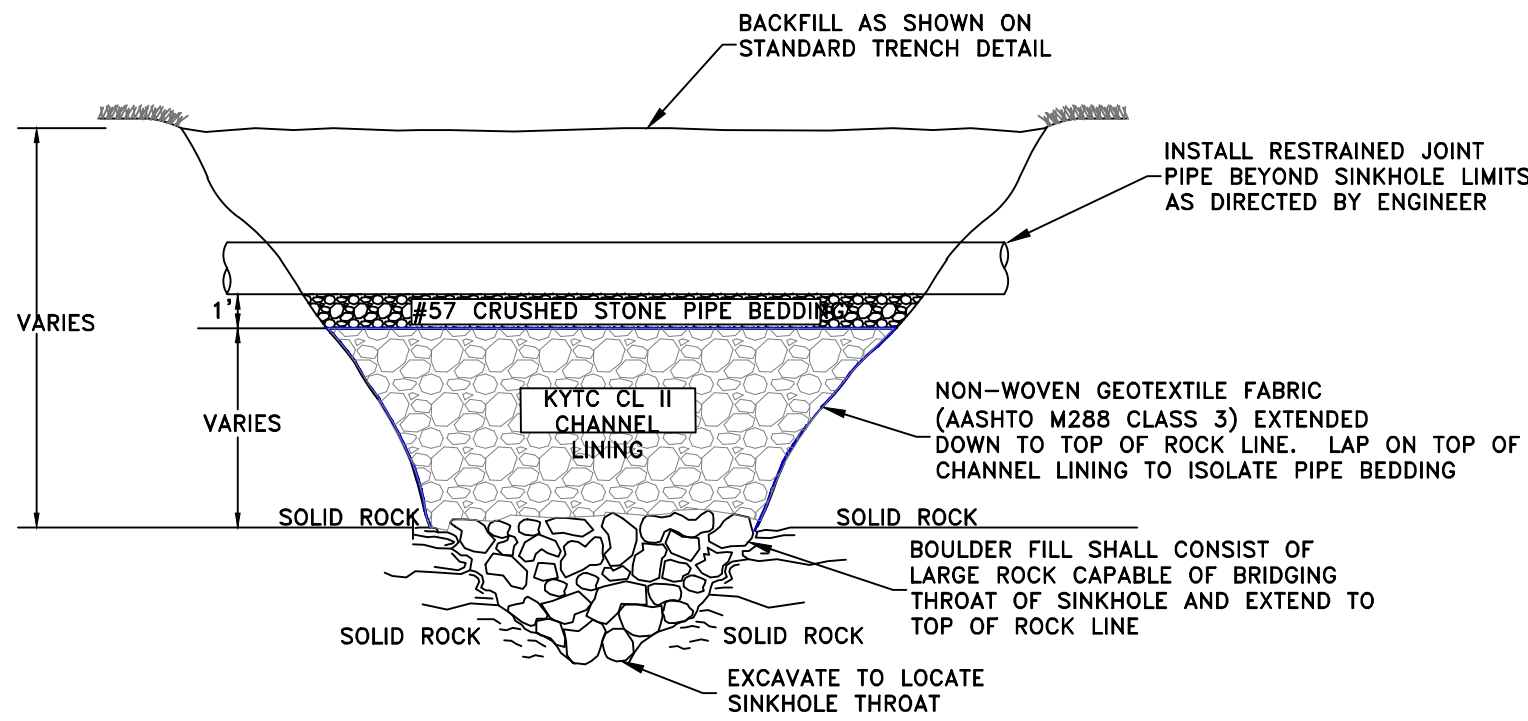
90° BENDS											
SIZE	2	4	6	8	10	12	14	16	18	20	24
"D"	6	8	8	10	12	14	22	22	24	24	30
"L"	16	20	24	30	32	34	68	68	80	80	96
"W"	8	10	12	18	22	24	34	34	40	40	48
"T"	10	12	16	20	22	22	38	38	40	40	44

45° BENDS											
SIZE	2	4	6	8	10	12	14	16	18	20	24
"D"	6	6	8	8	10	12	12	22	22	24	30
"L"	14	18	18	22	24	24	51	51	60	60	72
"W"	8	10	12	16	18	18	25	25	29	29	36
"T"	10	12	16	18	18	18	38	38	40	40	44

22 1/2" & 11 1/4" BENDS											
SIZE	2	4	6	8	10	12	14	16	18	20	24
"D"	6	10	14	18	20	20	22	22	24	24	30
"L"	20	24	28	28	28	28	36	36	42	42	54
"W"	18	20	22	24	24	24	18	18	21	21	24
"T"	12	14	16	18	18	18	38	38	40	40	44

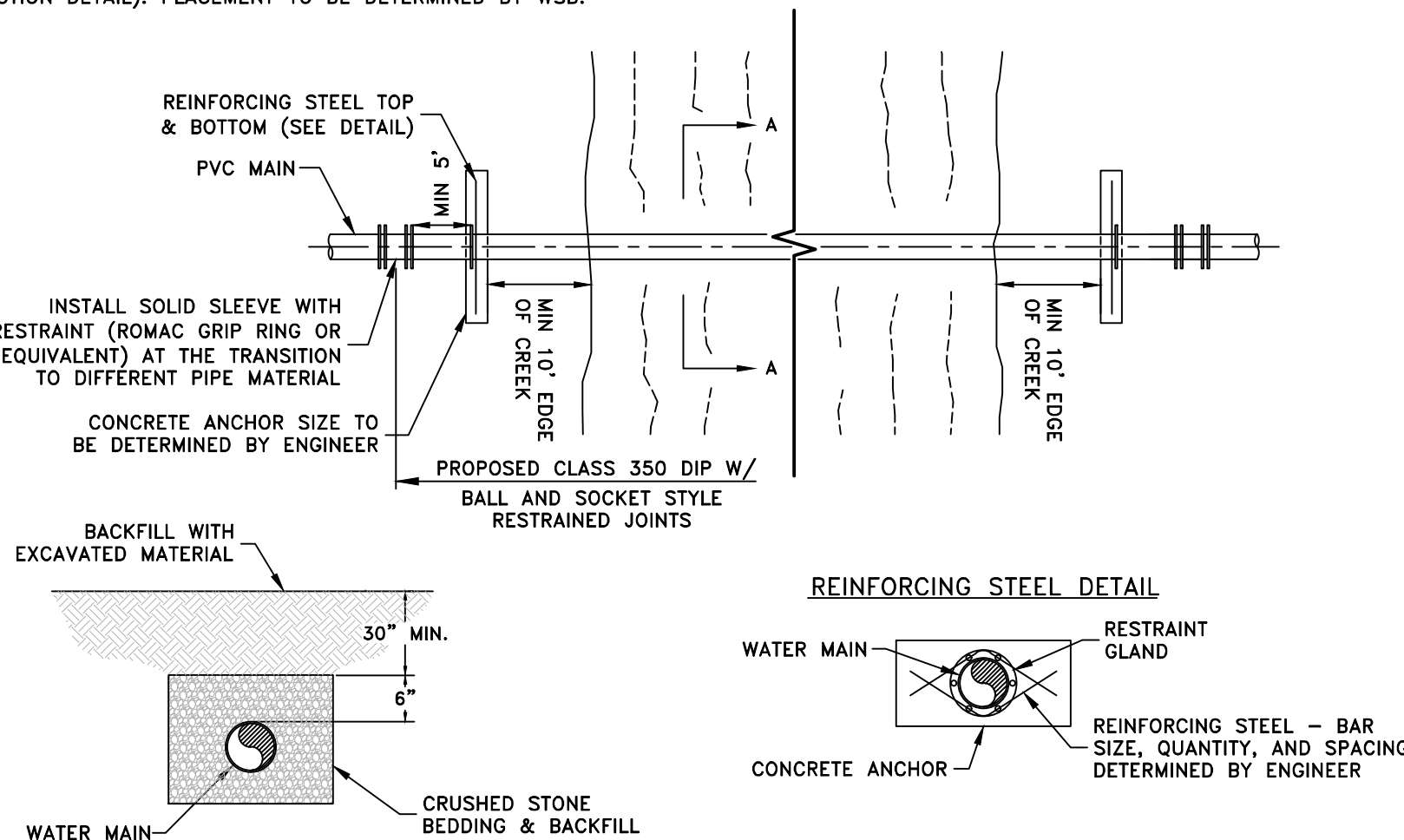
TEES, PLUGS & BLOWOFFS											
SIZE	2	4	6	8	10	12	14	16	18	20	24
"D"	12	16	18	24	28	30	30	30	30	30	36
"L"	12	16	18	24	28	30	60	60	72	72	84
"W"	14	16	18	18	22	24	28	28	32	32	40
"T"	10	10	12	12	12	12	38	38	40	40	44

MINIMUM CONCRETE BLOCKING FOR PIPE & FITTINGS

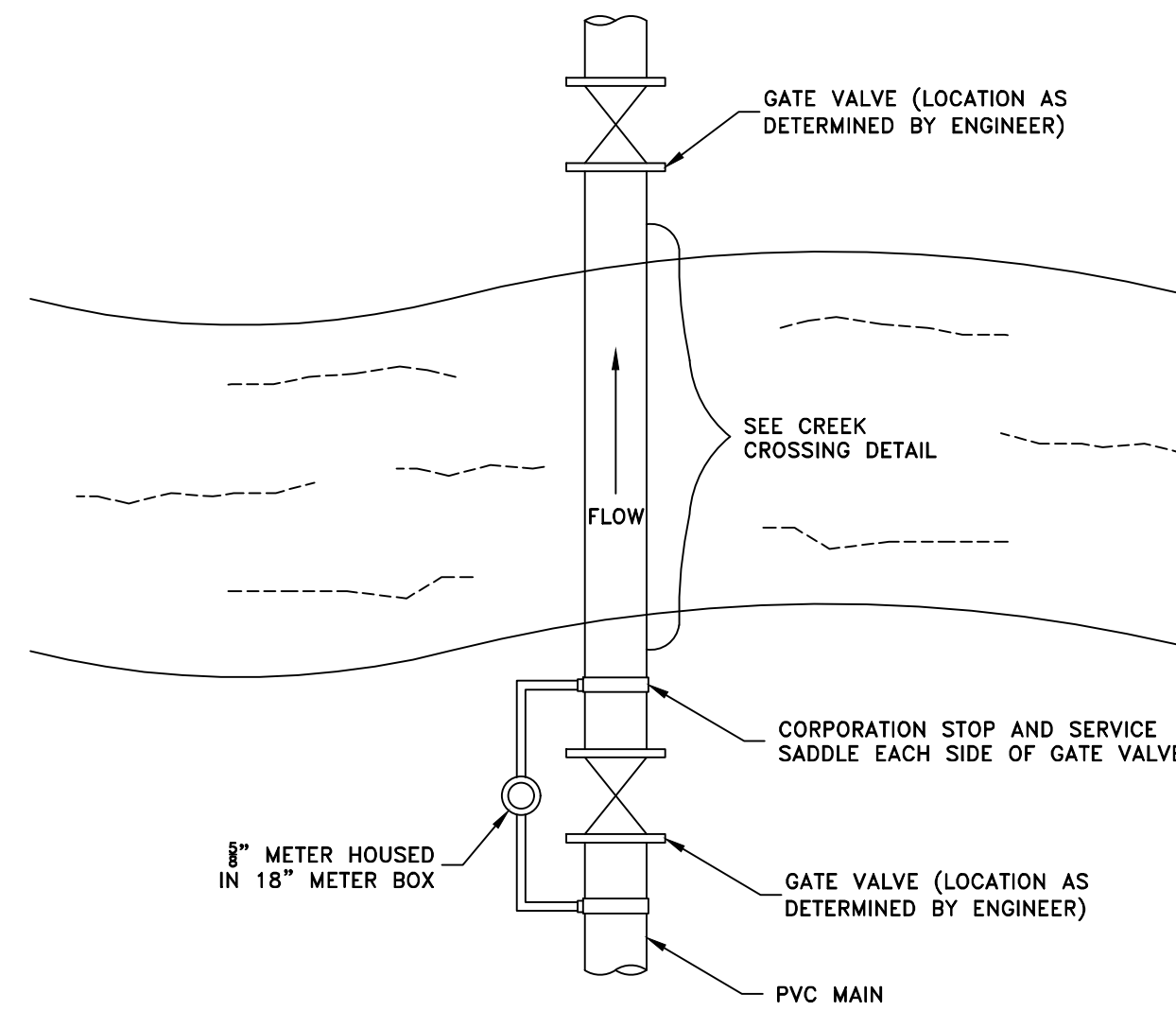


SINK HOLE REPAIR

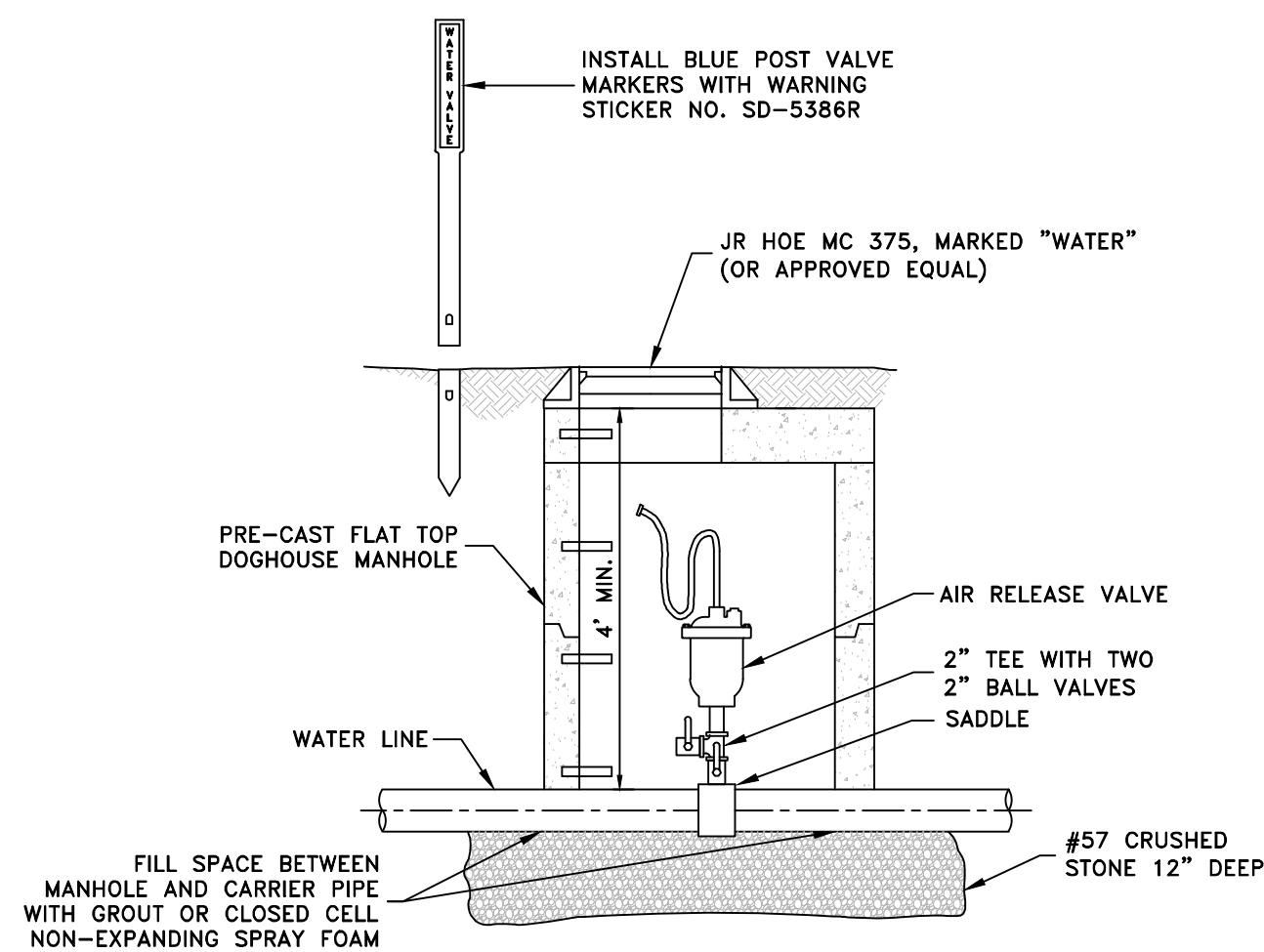
- NOTES:
- 1.) CREEK CROSSING AS SHOWN SHALL BE CONSTRUCTED ACROSS ALL MAJOR STREAMS AS INSTRUCTED BY ENGINEER.
  - 2.) CONSTRUCTION OF FITTINGS AND ANCHORS SHALL BE SYMMETRICAL ON EACH SIDE.
  - 3.) GATE VALVES ARE REQUIRED ON EACH SIDE OF THE CREEK CROSSING.
  - 4.) FOR CHANNELS GREATER THAN 15' IN WIDTH, A LEAK DETECTION STATION SHALL BE INSTALLED ON ONE SIDE OF THE STREAM (PER WSB LEAK DETECTION DETAIL). PLACEMENT TO BE DETERMINED BY WSB.



TYPICAL CREEK CROSSING

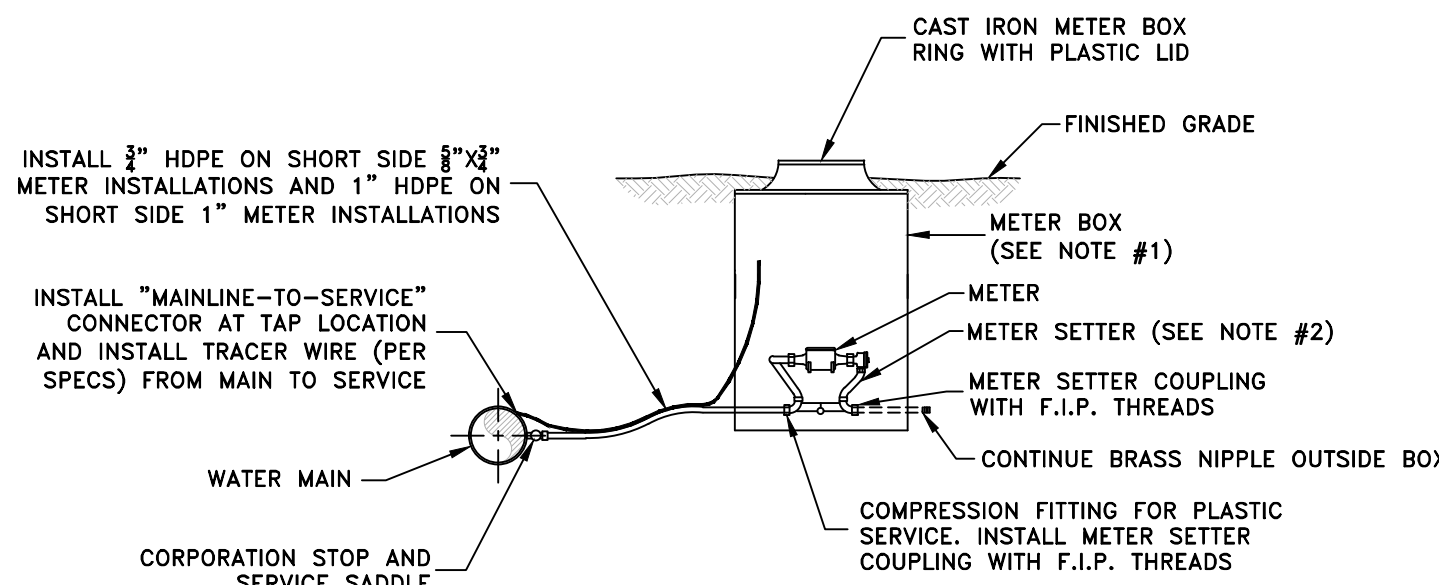


CREEK CROSSING LEAK DETECTION



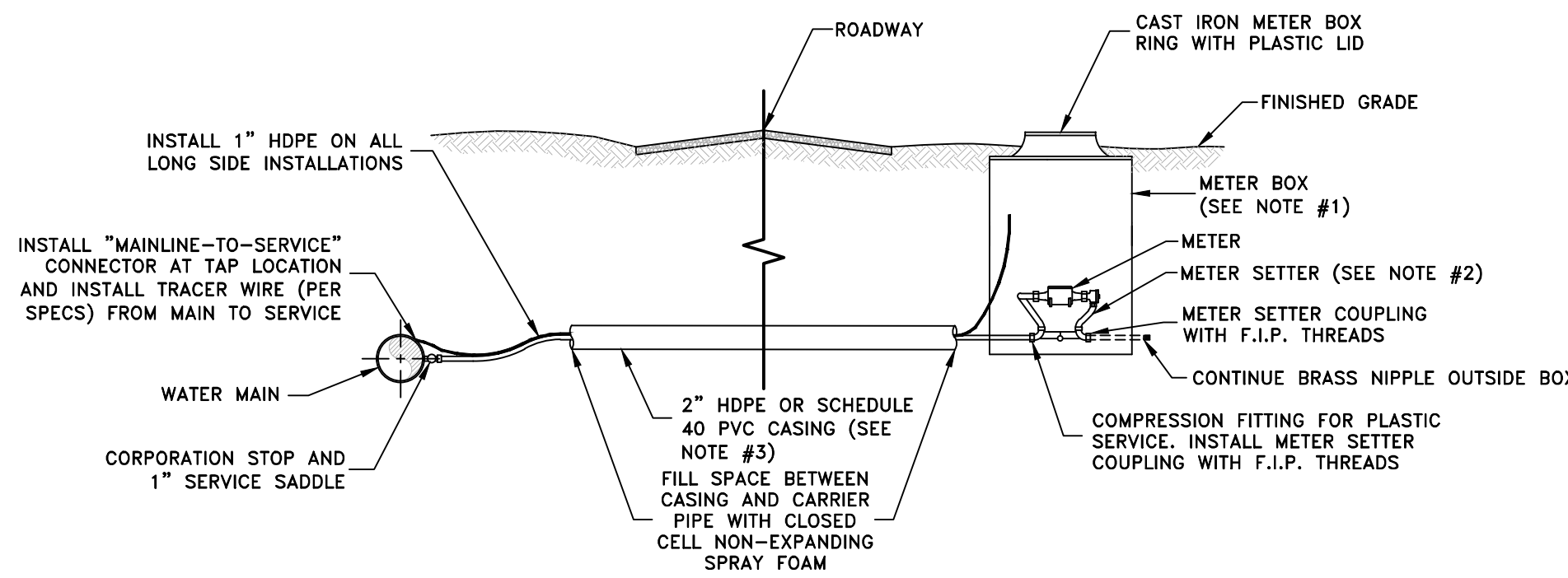
STANDARD AIR RELEASE STATION - WATER

- NOTES:
- 1.) ALL  $\frac{3}{4}$ " METERS SHALL BE HOUSED IN AN 18" METER BOX. ALL 1" METERS SHALL BE HOUSED IN A 20" METER BOX.
  - 2.) FOR METER ASSEMBLIES REQUIRING PRESSURE REGULATORS, A TANDEM METER SETTER WILL BE REQUIRED. REFER TO STANDARD SPECIFICATIONS FOR REGULATOR AND TANDEM SETTER MODEL NUMBERS.
  - 3.) ON ROAD CROSSING SERVICE CONNECTIONS, REFER TO "LONG SIDE" SERVICE DETAIL.



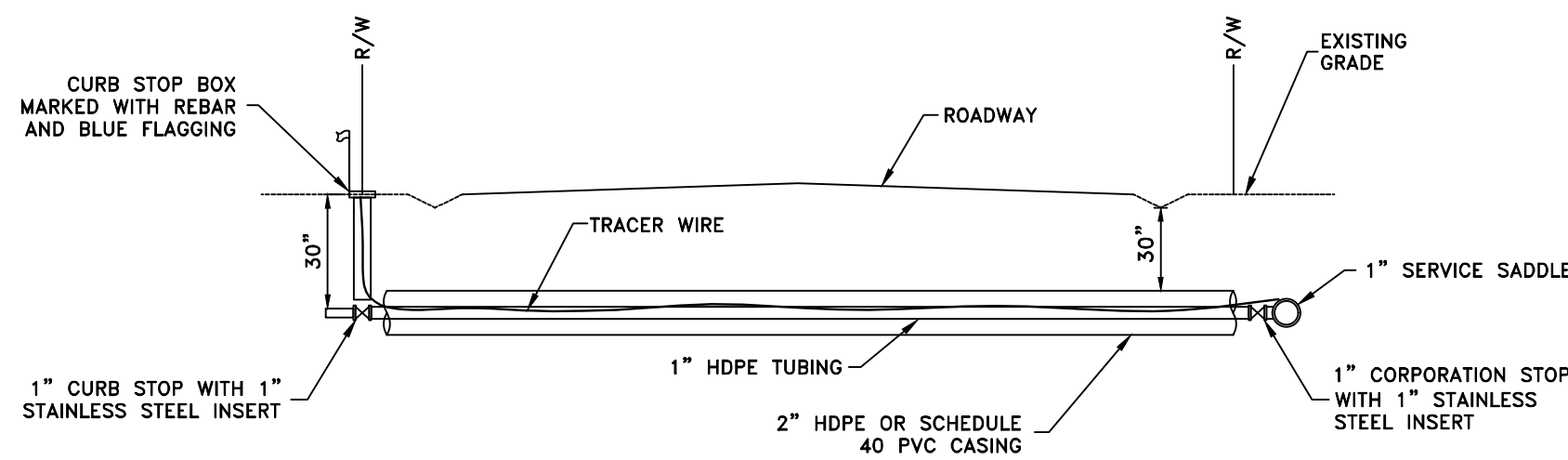
TYPICAL METER SETTING FOR "SHORT SIDE"  $\frac{3}{4}$ " & 1" SERVICES

- NOTES:
- 1.) ALL  $\frac{3}{4}$ " METERS SHALL BE HOUSED IN AN 18" METER BOX. ALL 1" METERS SHALL BE HOUSED IN A 20" METER BOX.
  - 2.) FOR METER ASSEMBLIES REQUIRING PRESSURE REGULATORS, A TANDEM METER SETTER WILL BE REQUIRED. REFER TO STANDARD SPECIFICATIONS FOR REGULATOR AND TANDEM SETTER MODEL NUMBERS.
  - 3.) 4" HDPE OR SCHEDULE 40 PVC CASING SHOULD BE USED FOR A 2" CARRIER PIPE. FOR CASINGS ON ALL OTHER CARRIER PIPE DIAMETERS, REFER TO THE CASING SCHEDULE DETAIL.

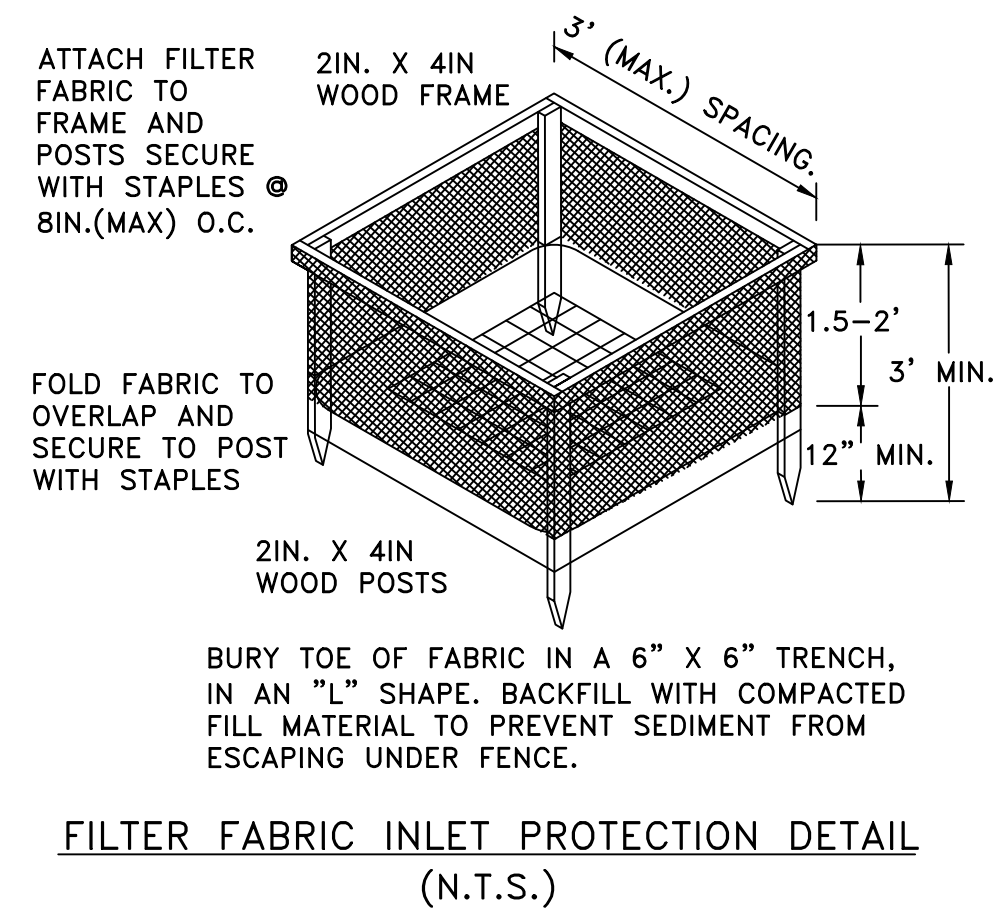


TYPICAL METER SETTING FOR "LONG SIDE"  $\frac{3}{4}$ " & 1" SERVICES

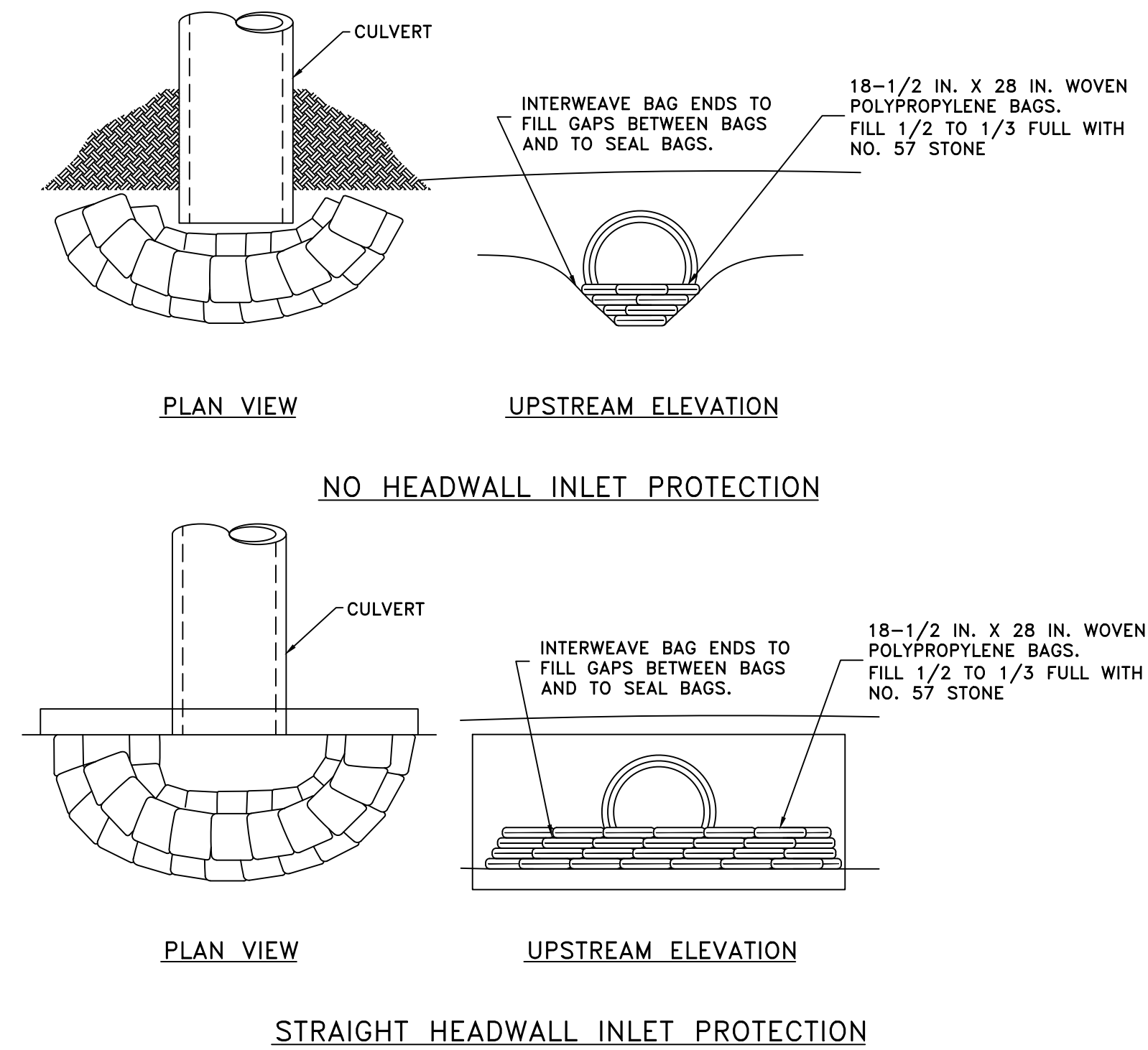
- NOTES:
- 1.) NO TAPS SHALL BE MADE ON PRESSURIZED MAINS.
  - 2.) CURB STOP INSTALLED ON PROPERTY CORNERS AS DIRECTED BY WSB.
  - 3.) CASING SHALL EXTEND THE ENTIRE RIGHT OF WAY SHORTENED AS NEEDED FOR CURB STOP.
  - 4.) ALL CROSSINGS SHALL BE BACKFILLED WITH CRUSHED STONE.
  - 5.) IF MULTIPLE SERVICE CONNECTIONS ARE NEEDED, LARGER CASING MAY BE REQUIRED.
  - 6.) ALL FITTINGS SHALL BE INSTALLED WITH TEFLON TAPE OR JOINT COMPOUND.
  - 6.) ALL SHOWN MATERIAL SHALL BE SUPPLIED BY THE DEVELOPER.



SERVICE LINE CROSSING DETAIL FOR SUBDIVISION

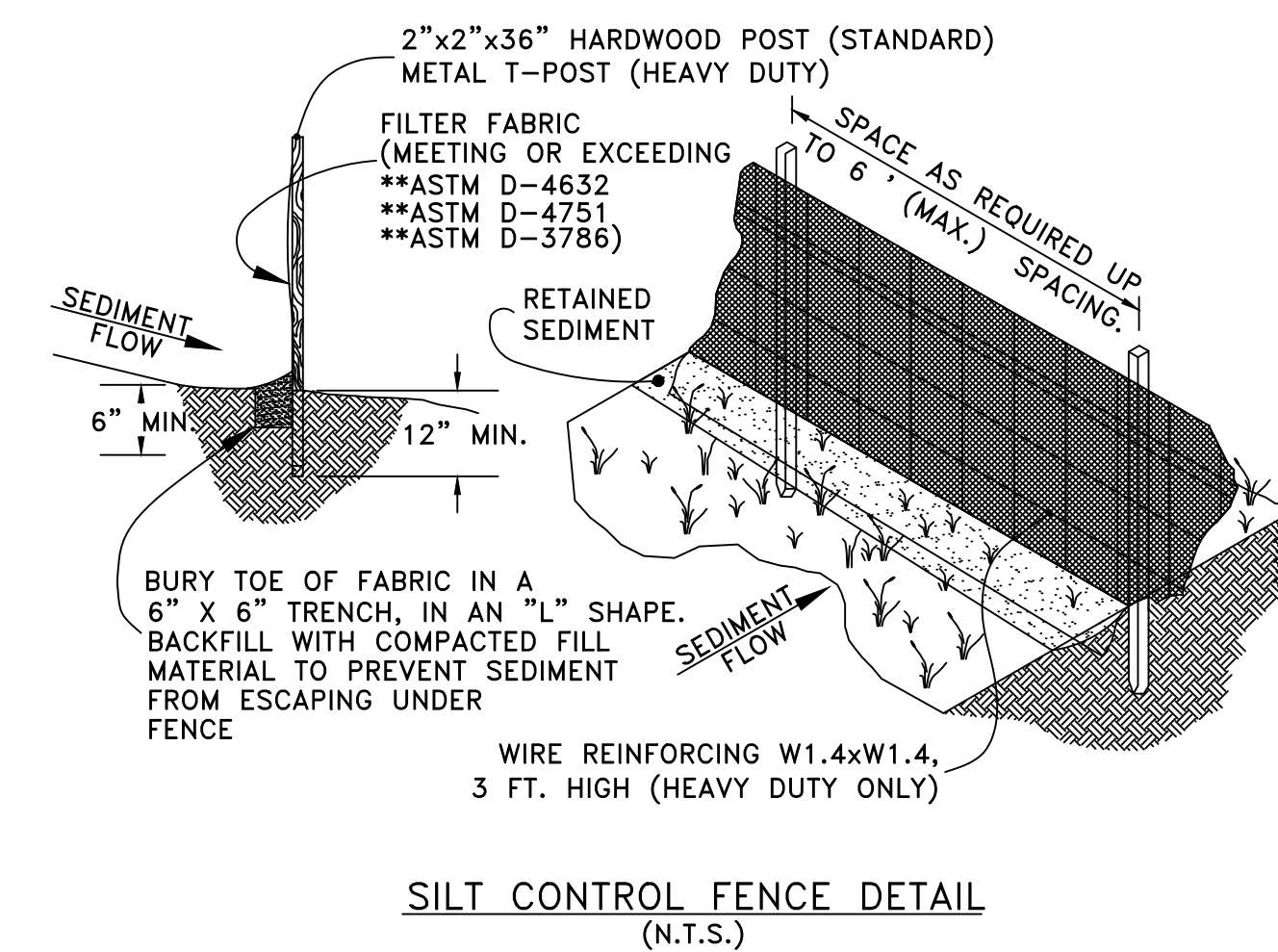
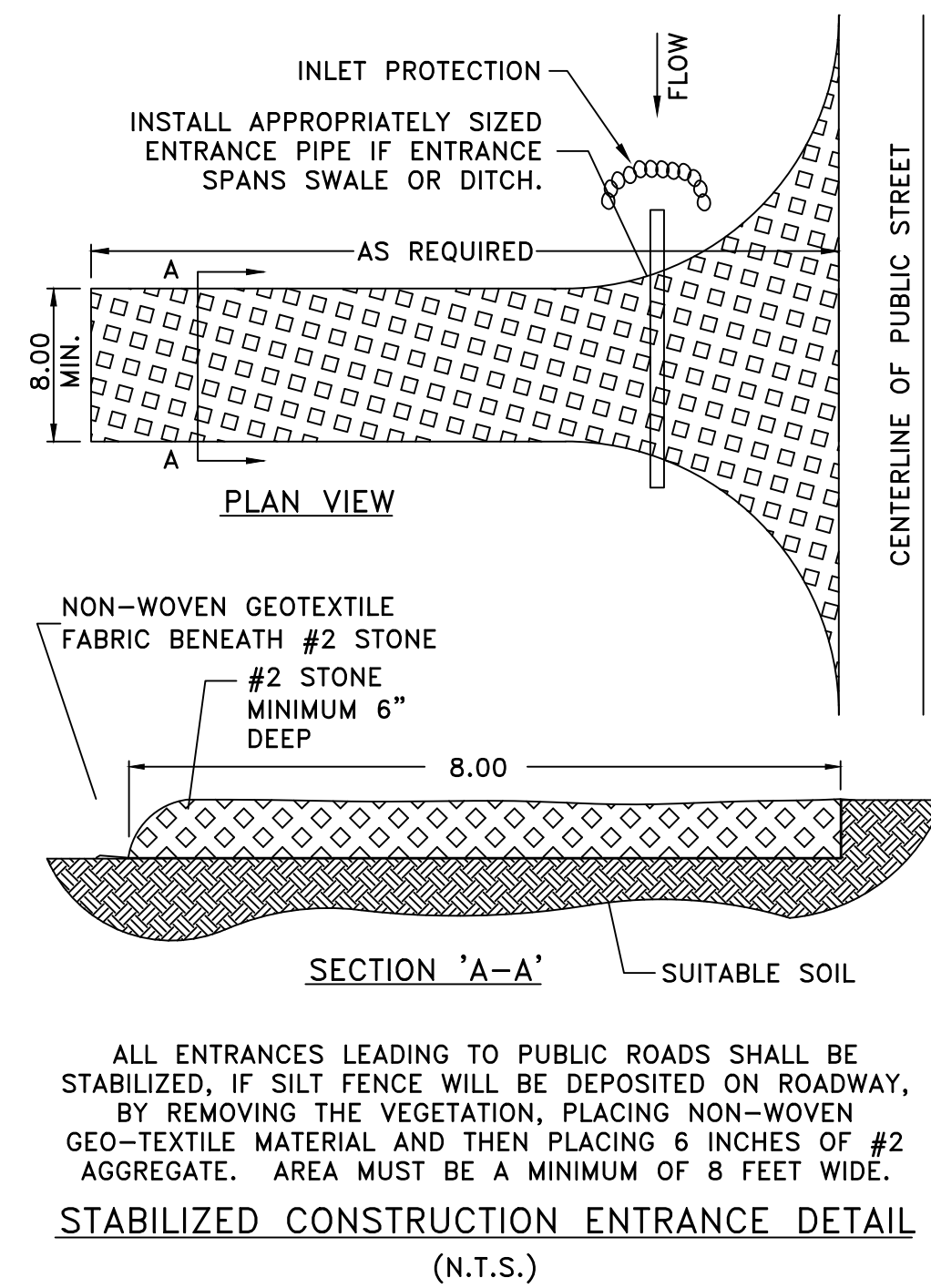
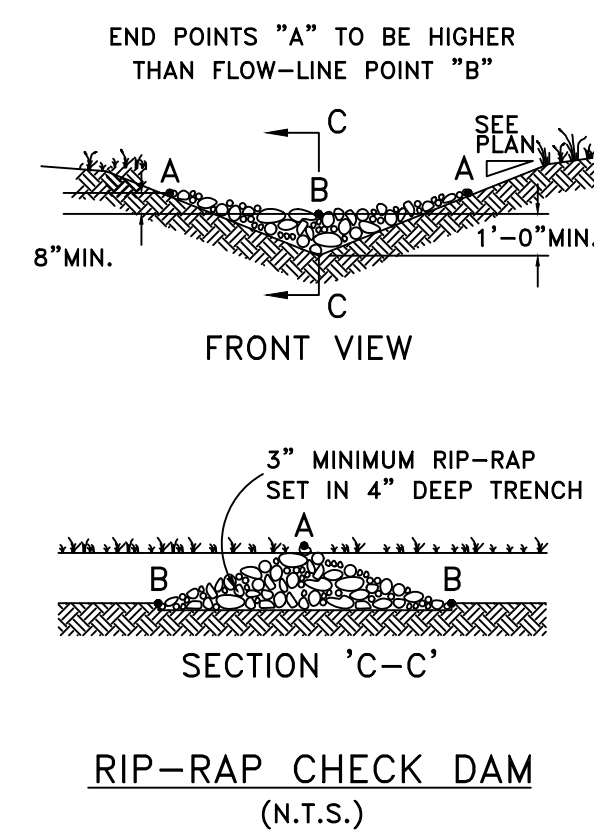


- GENERAL EPSC NOTES:
1. ALL PRACTICAL MEASURES SHALL BE TAKEN TO PRESERVE EXISTING VEGETATION ON AND ADJACENT TO THE CONSTRUCTION SITE(S).
  2. EPSC MEASURES SHALL BE INSTALLED IN ADVANCE OF ALL OTHER CONSTRUCTION IN EACH AREA OF CONSTRUCTION.
  3. SILT FENCING OR OTHER APPROVED EPSC DEVICE(S) SHALL BE INSTALLED ON THE DOWN-SLOPE SIDE OF TEMPORARY STOCKPILES, AS REQUIRED.
  4. APPROPRIATE EPSC DEVICES SHALL BE INSTALLED AT TEMPORARY PIPE YARDS AND/OR STORAGE AREAS, AS REQUIRED.



PURPOSE:  
INSTALL STONE BAG PROTECTION AT HEADWALL INLETS TO POOL WATER, PROVIDING OPPORTUNITY FOR SETTLING SEDIMENT BEFORE IT ENTERS HEADWALL.

CONSTRUCTION:  
BAG SPECIFICATIONS: APPROXIMATELY 18 1/2-INCH X 28-INCH WOVEN POLYPROPYLENE BAGS. STONE: USE KTC NO. 57 STONE. HEIGHT OF STONE BAGS ABOVE CULVERT INVERTS: CONSTRUCT A MINIMUM OF TWO COURSES OF BAGS. THE STONE-FILLED BAGS SHALL BE STACKED TO A HEIGHT EQUAL TO 1/2 THE DIAMETER OF THE CULVERT BEING PROTECTED.



SCALE: NOT TO SCALE  
DATE: 1-30-08  
DWG NO.: WD  
DESIGNED: WCWD  
DRAWN: JT  
CHECKED: JES

REVISIONS:

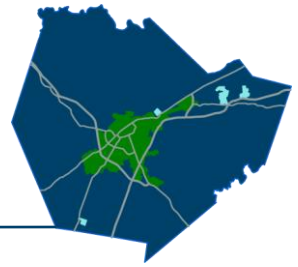
NO.:	DATE:

SHEET:

# **Exhibit 6**

Letter & Map

City-County Planning Commission



November 6, 2025

Clint Harbison, PE  
Manager of Engineering  
Warren, Butler & Simpson County Water Districts  
P.O. Box 10180  
Bowling Green, Kentucky 42102-4780

RE: Old Scottsville Road Corridor Water Improvements

Dear Mr. Harbison:

At your request, the Planning Commission has conducted a review of the proposed water infrastructure improvements along the Old Scottsville Road corridor in Warren County. It is our understanding that these upgrades will help provide the necessary water flow and pressure needed to meet our local fire protection ordinances. These upgrades are needed for both existing and planned subdivisions, as well as commercial development proposed along this corridor. Recent developments have been unable to meet the minimum fire protection and often upgrades are prohibitive for singular projects. The attached map illustrates the location of building permits, permitted construction projects, and zoning changes as well as future development interests our office has had with developers within the last 5 years. All of these projects are currently in some phase of the development or construction process. There have been 265 building permits issued, 9 zone changes, 4 development plan approvals, and 4 development proposals in the last 5 years.

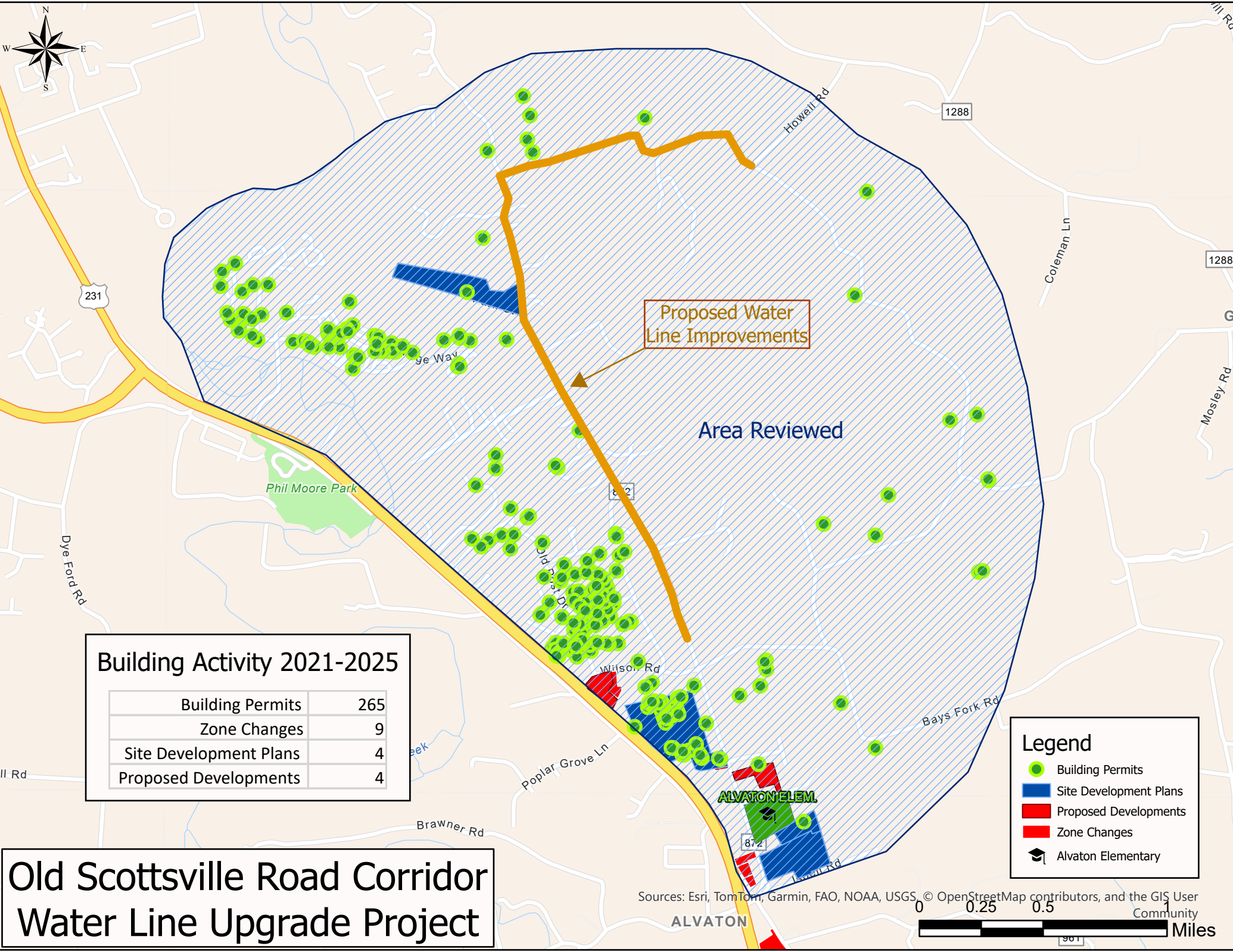
Warren County continues to be the fastest growing community in the Commonwealth. According to Kentucky State Data Center projections, Warren County will grow by more people by the year 2050 than any other county in Kentucky, except Fayette County. Additional growth in the area of review is all but certain given the presence of sanitary sewer along Scottsville Road.

This area is already experiencing rapid urbanization from more dense single family and multi-family housing along with some commercial developments as vacant land and sewer is readily available. The last piece of the puzzle for continued growth is adequate water flow and fire protection. Planning Commission staff urges Warren County Water District to continue improving infrastructure along the Scottsville Road / Old Scottsville Road corridor in order to help accommodate our projected growth. If you have any questions please do not hesitate to contact us.

Sincerely,



Ben Peterson AICP, GISP  
Executive Director



### Building Activity 2021-2025

Building Permits	265
Zone Changes	9
Site Development Plans	4
Proposed Developments	4

### Legend

- Building Permits
- Site Development Plans
- Proposed Developments
- Zone Changes
- Alvaton Elementary

# Old Scottsville Road Corridor Water Line Upgrade Project

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

0 0.25 0.5 1 Miles

# **Exhibit 7**

Project Need Memorandum

# ALVATON AREA CAPACITY IMPROVEMENTS

Project Need Memo

September 24, 2025



Warren County  
Water District





## Alvaton Area Capacity Improvements Project Need

### **Project Background and Summary**

The Alvaton Area Capacity Improvement project has existed in the Warren County Water District (WCWD) since its 2008 Capital Improvement Plan (CIP). The original project scope involved a 10-inch water main and a 500,000-gallon elevated water storage tank. The 2008 CIP projected the project horizon occurring in 2021-2030. This project was identified to provide improved water distribution service to the area as a result of growing demand from residential and commercial growth. Sanitary sewer service was established for the southern portion of the project area in late 2016, which has further increased the development demand.

The project area lies within the Drakes Creek pressure zone of WCWD's Water Distribution System. Due to increasing system demand within the Drakes Creek zone, WCWD had previously identified the need for system upgrades. A short-term project was undertaken to supplement the Drakes Creek with supply from the Plano Zone. A pressure sustaining check valve was installed in the southern portion of the Drakes Creek zone and supplemented with flow contributions from the adjacent Plano zone. The supplemental flow has limitations as the Plano zone operates at a lower hydraulic grade than the Drakes Creek zone. The supplemental flow only operates when the Drakes Creek system demand is significant enough that system pressures are low. The Drakes Creek system demand has increased to a level that the supply from the Plano zone is functioning routinely making it difficult for the Drakes Creek pressure zone to function independently.

In addition to the increased system demands, county-wide minimum fire protection requirements for residential developments were increased in June 2023 from 250 GPM to 600 GPM. The increased fire protection requirements coupled with the increase in overall system demand are limiting the locations in which additional development can occur without significant system upgrades.

### **Alternatives Analysis**

To evaluate the potential alternatives for system upgrades, a comprehensive hydraulic model of the distribution system was developed. The new transmission main is expected to serve around 0.58 million gallons per day (MGD) of customer demand in the southern portion of the system, with potential to support additional demand from the nearby South Alvaton Zone to the west and a large volume development in Plano Zone to the east. By increasing system capacity within the Drake Creek zone, the model also indicated that the check valve between the Plano and Drakes Creek zones would no longer be necessary, as the pressure gradient at that location has reversed. This change in system capacity will free up approximately



## Alvaton Area Capacity Improvements Project Need

0.22 MGD of demand capacity and increase available capacity in the Plano Zone by the same amount.

In a departure from the project originally identified in the capital improvement plan, the comprehensive model analysis indicated the need for a new elevated water storage tank could be eliminated with the installation of larger transmission piping than specified in the original scope. Installation of the larger water transmission piping vs. smaller transmission piping and a new elevated tank would result in an overall lower up front capital cost. In addition, due to the increased focus on water quality and disinfectant by-product (DBP) limits in the water distribution system, providing the required hydraulic capacity without adding an additional water storage tank in a more remote portion of the water distribution system will allow for maintaining a high level of water quality.

The larger water transmission line analysis was then evaluated between a 12-inch and 16-inch line size. Modeled analyses indicated that both the 12-inch and 16-inch sizes would provide more than ample capacity for domestic water use. The evaluation then centered around fire protection availability. The increase to 16-inch pipe over 12-inch indicated a significant increase in service area meeting the higher county-wide fire flow requirements. While there is an appreciable increase in cost to install a 16-inch line vs. a 12-inch, the increased fire flow capacity and increased area with available service capacity indicate the 16-inch size to be the preferred option.

## **Cost Comparison**

An estimated cost of each option is provided in the following section. The original project scope from the Capital Improvement Plan (10-inch transmission line with new 500,000-gallon water storage tank) was the most expensive option at just over \$5.2 million. The additional water storage tank in the distribution system would also create the potential for reduced water quality due to water age and potential disinfectant by-product formation.

The two options for a larger water transmission main without a water storage tank were preferred. The estimated cost of the 12-inch main was just over \$4.1 million, while the 16-inch main cost was just over \$4.6 million. Given the new county-wide fire protection requirements and the increased service area provided by the larger water main, the 16-inch transmission main option is preferred.

Detailed cost estimates follow:



Alvaton Area Capacity Improvements  
Project Need

## 10-inch Water Main & Water Storage Tank

Alvaton Area Capacity Improvements					
Estimate of Probable Cost					
Warren County Water District					
500K Gallon Tank and 10-inch Transmission Line Option					
ITEM NO.	DESCRIPTION	EST. QTY.	UNITS	UNIT PRICE	AMOUNT
1	500K Gallon Multi-Column Elevated Water Storage Tank	1	LS	\$2,300,000.00	\$2,300,000.00
2	10" x 10" Tapping Sleeve & Valve on PVC	3	EA	\$9,500.00	\$28,500.00
3	6" x 6" Tapping Sleeve & Valve on PVC	1	EA	\$6,500.00	\$6,500.00
4	10" Gate Valve	9	EA	\$11,000.00	\$99,000.00
5	Plug Exist Line	1	EA	\$1,500.00	\$1,500.00
6	5 1/4" Fire Hydrant Assembly	9	EA	\$12,000.00	\$108,000.00
7	Ductile Iron Fittings	6,000	LBS	\$10.00	\$60,000.00
8	Relocate Exist 5/8" x 3/4" Water Meter	6	EA	\$2,200.00	\$13,200.00
9	Reconnect Exist 5/8" x 3/4" Water Meter	13	EA	\$1,500.00	\$19,500.00
10	3/4" Service Line	30	LF	\$35.00	\$1,050.00
11	1" Service Line	20	LF	\$35.00	\$700.00
12	Customer Service Line	50	LF	\$35.00	\$1,750.00
13	16" Steel Casing by Bore w/ 10" Rest. Joint DIP Carrier	315	LF	\$800.00	\$252,000.00
14	16" Steel Casing by Bore w/ 10" DIP Carrier	400	LF	\$750.00	\$300,000.00
15	10" Class 250 Rest. Joint DIP Water line	1,093	LF	\$125.00	\$136,625.00
16	10" Class 250 DIP Water Line	15,067	LF	\$100.00	\$1,506,700.00
17	6" DIP Water Line	50	LF	\$75.00	\$3,750.00
18	Miscellaneous Concrete	20	CY	\$300.00	\$6,000.00
19	Full Depth Crushed Stone Backfill	80	TN	\$25.00	\$2,000.00
20	Erosion Control	1	LS	\$10,000.00	\$10,000.00
21	Final Cleanup	16,800	LF	\$7.50	\$126,000.00
	Item Summary				\$4,982,775.00
	Contingency				\$249,140.00
	Total Project Cost				<b>\$5,231,915.00</b>



Alvaton Area Capacity Improvements  
Project Need

## 12-inch Water Main

Alvaton Area Capacity Improvements					
Estimate of Probable Cost					
Warren County Water District					
12-inch Transmission Line Option					
ITEM		EST.		UNIT	
NO.	DESCRIPTION	QTY.	UNITS	PRICE	AMOUNT
1	10" x 10" Tapping Sleeve & Valve on PVC	3	EA	\$9,500.00	\$28,500.00
2	6" x 6" Tapping Sleeve & Valve on PVC	1	EA	\$6,500.00	\$6,500.00
3	12" Gate Valve	9	EA	\$12,000.00	\$108,000.00
4	Plug Exist Line	1	EA	\$1,500.00	\$1,500.00
5	5 1/4" Fire Hydrant Assembly	9	EA	\$12,000.00	\$108,000.00
6	Ductile Iron Fittings	7,000	LBS	\$10.00	\$70,000.00
7	Relocate Exist 5/8" x 3/4" Water Meter	6	EA	\$2,200.00	\$13,200.00
8	Reconnect Exist 5/8" x 3/4" Water Meter	13	EA	\$1,500.00	\$19,500.00
9	3/4" Service Line	30	LF	\$35.00	\$1,050.00
10	1" Service Line	20	LF	\$35.00	\$700.00
11	Customer Service Line	50	LF	\$35.00	\$1,750.00
12	20" Steel Casing by Bore w/ 12" Rest. Joint DIP Carrier	315	LF	\$950.00	\$299,250.00
13	20" Steel Casing by Bore w/ 12" DIP Carrier	400	LF	\$725.00	\$290,000.00
14	12" Class 250 Rest. Joint DIP Water line	1,093	LF	\$195.00	\$213,135.00
15	12" Class 250 DIP Water Line	15,067	LF	\$175.00	\$2,636,725.00
16	10" DIP Water Line	50	LF	\$125.00	\$6,250.00
17	6" DIP Water Line	50	LF	\$75.00	\$3,750.00
18	Miscellaneous Concrete	20	CY	\$300.00	\$6,000.00
19	Full Depth Crushed Stone Backfill	80	TN	\$25.00	\$2,000.00
20	Erosion Control	1	LS	\$10,000.00	\$10,000.00
21	Final Cleanup	16,800	LF	\$7.50	\$126,000.00
	Item Summary				\$3,951,810.00
	Contingency				\$ 197,590.00
	Total Project Cost				<b>\$4,149,400.00</b>



Alvaton Area Capacity Improvements  
Project Need

## 16-inch Water Main

Alvaton Area Capacity Improvements					
Estimate of Probable Cost					
Warren County Water District					
16-inch Transmission Line Option					
ITEM		EST.		UNIT	
NO.	DESCRIPTION	QTY.	UNITS	PRICE	AMOUNT
1	10" x 10" Tapping Sleeve & Valve on PVC	2	EA	\$9,500.00	\$19,000.00
2	6" x 6" Tapping Sleeve & Valve on PVC	1	EA	\$6,500.00	\$6,500.00
3	12" x 12" Tapping Sleeve & Valve on PVC	1	EA	\$11,000.00	\$11,000.00
4	16" Butterfly Valve	9	EA	\$12,000.00	\$108,000.00
5	Plug Exist Line	1	EA	\$1,500.00	\$1,500.00
6	5 1/4" Fire Hydrant Assembly	9	EA	\$12,000.00	\$108,000.00
7	Ductile Iron Fittings	7,550	LBS	\$10.00	\$75,500.00
8	Relocate Exist 5/8" x 3/4" Water Meter	6	EA	\$2,200.00	\$13,200.00
9	Reconnect Exist 5/8" x 3/4" Water Meter	13	EA	\$1,500.00	\$19,500.00
10	3/4" Service Line	30	LF	\$35.00	\$1,050.00
11	1" Service Line	20	LF	\$35.00	\$700.00
12	Customer Service Line	50	LF	\$35.00	\$1,750.00
13	24" Steel Casing by Bore w/ 16" Rest. Joint DIP Carrier	315	LF	\$1,000.00	\$315,000.00
14	24" Steel Casing by Bore w/ 16" DIP Carrier	400	LF	\$750.00	\$300,000.00
15	16" Class 250 Rest. Joint DIP Water line	1,093	LF	\$225.00	\$245,925.00
16	16" Class 250 DIP Water Line	15,067	LF	\$200.00	\$3,013,400.00
17	10" DIP Water Line	50	LF	\$125.00	\$6,250.00
18	6" DIP Water Line	50	LF	\$75.00	\$3,750.00
19	Miscellaneous Concrete	20	CY	\$300.00	\$6,000.00
20	Full Depth Crushed Stone Backfill	80	TN	\$25.00	\$2,000.00
21	Erosion Control	1	LS	\$10,000.00	\$10,000.00
22	Final Cleanup	16,800	LF	\$7.50	\$126,000.00
	Item Summary				\$4,394,025.00
	Contingency				\$ 219,700.00
	Total Project Cost				<b>\$4,613,725.00</b>

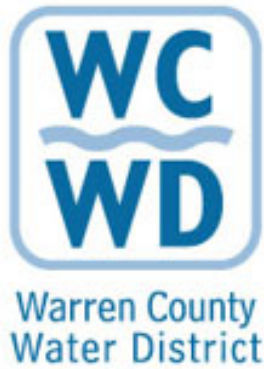
# **Exhibit 8**

Contract Specifications

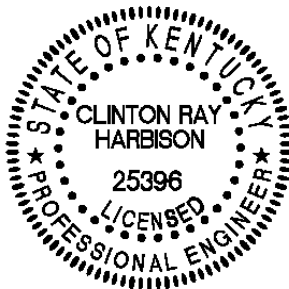
WARREN COUNTY WATER DISTRICT  
WARREN COUNTY, KENTUCKY

SPECIFICATIONS AND  
CONTRACT DOCUMENTS

**Alvaton Area Capacity Improvements**



September 24, 2025



Project No. 593013

Prepared by  
Engineering Staff  
Warren County Water District



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## **ADVERTISEMENT FOR BIDS**

Separate sealed BIDS for the construction of the Alvaton Area Capacity Improvements (construction of approximately 16,900' of 16" water main and appurtenances) will be received by Warren County Water District. at the office of the General Manager at 523 U.S. Hwy 31-W Bypass, Bowling Green, Kentucky 42101 until 10:00 AM, Central Daylight Time, October 15, 2025, and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined beginning Thursday, September 25, 2025 at the office of Warren County Water, 523 U.S. Hwy 31-W Bypass, Bowling Green, KY.

Copies of the CONTRACT DOCUMENTS may be obtained at the office of the General Manager located at 523 U.S. 31W Bypass, Bowling Green, KY 42101, upon payment of \$150.00 for each set.

Refer all inquiries to: Clint Harbison, P.E., [clinth@warrenwater.com](mailto:clinth@warrenwater.com), 270-842-0052, ext. 556.

September 23, 2025

Jacob Cuarta, General Manager



## **INFORMATION FOR BIDDERS**

### **General**

BIDS will be received by Warren County Water District. (hereinafter called the "OWNER") at the Office of the General Manager at 523 US 31W By Pass, Bowling Green, KY 42101 until 10:00 AM, CDT, Wednesday, October 15, 2025, and then at said office publicly opened and read aloud.

The ENGINEER is Clint Harbison, P.E. The ENGINEER'S address is Warren County Water District, 523 US 31W Bypass, Bowling Green, KY 42101, Phone 270-842-0052 ext. 556, Email: [clinth@warrenwater.com](mailto:clinth@warrenwater.com).

All questions about the meaning or intent of the Bidding Documents shall be submitted to the ENGINEER in writing. Interpretations of clarifications considered necessary by the ENGINEER in responses to such questions will issued by Addenda to all parties recorded as having received the Bidding Documents. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

Questions will be received until 4:00 PM CDT, Monday October 13, 2025. The last day an Addenda will be issued is Tuesday, October 14, 2025.

### **Requirements for BID**

Each BID must be submitted in a sealed envelope, addressed to Jacob Cuarta, General Manager, Warren County Water District at 523 US 31W By Pass, Bowling Green, KY 42101. Each sealed envelope containing a BID must be plainly marked on the outside as BID for "Alvaton Area Capacity Improvements " and the envelope should bear on the outside the BIDDER'S name, address, and license number, if applicable, and the name of the project for which the BID is submitted. If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OWNER at Warren County Water District, PO Box 10180, Bowling Green, KY 42102-4780.

All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. Only one copy of the BID form is required.

Each BID must be accompanied by a BID BOND payable to the OWNER for five percent of the total amount of the BID. As soon as the BID prices have been compared, the OWNER will return the BONDS of all except the three lowest responsible BIDDERS. When the Agreement is executed the BONDS of the two remaining unsuccessful BIDDERS will be returned. The BID BOND of the successful BIDDER will be retained until the PAYMENT BOND and PERFORMANCE BOND have been executed and approved, after which it will be returned. A certified check may be used in lieu of a BID BOND.

## Information for Bidders

Each BID must be accompanied by the Compliance Statement regarding State and Federal Standards Provisions. The Compliance Statement shall be signed by the BIDDER indicating full compliance with the standard provisions.

Any BIDDER claiming Resident BIDDER status shall submit along with its BID the attached Affidavit for BIDDERS Claiming Resident BIDDER Status. The OWNER reserves the right to request documentation supporting a BIDDER'S claim of Resident BIDDER status. Failure to provide such documentation upon request shall result in disqualification of the BIDDER or Contract termination. A nonresident BIDDER shall submit, along with its BID, its certificate of authority to transact business in the Commonwealth as filed with the Commonwealth of Kentucky, Secretary of State. The location of the principal office identified therein shall be deemed the state of residency for that BIDDER. If the BIDDER is not required by law to obtain said certificate, the state of residency for that BIDDER shall be deemed to be that which is identified in its mailing address as provided in its BID.

### **Stipulations for BID**

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the BID Schedule by examination of the site and a review of the Drawings and Specifications including ADDENDA. After BIDS have been submitted, the BIDDER shall not assert that there was a misunderstanding concerning the quantities of WORK or of the nature of the WORK to be done.

Each BIDDER is responsible for inspecting the site and for reading and being thoroughly familiar with the CONTRACT DOCUMENTS. The failure or omission of any BIDDER to do any of the foregoing shall in no way relieve any BIDDER from any obligation in respect to its BID.

The OWNER reserves the right to delete any bid item or in the case of unit price items, the OWNER may delete, reduce or increase the quantities involved. BIDDERS shall be aware of this possibility and shall base their BIDS accordingly.

The CONTRACT DOCUMENTS contain the provisions required for the construction of the PROJECT. Information obtained from an officer, agent, or employee of the OWNER or any other person shall not affect the risks or obligations assumed by the CONTRACTOR or relieve the CONTRACTOR from fulfilling any of the conditions of the Contract.

The OWNER shall provide to BIDDERS prior to BIDDING, all information which is pertinent to, and delineates and describes, the land owned and rights of way acquired or to be acquired.

A conditional or qualified BID will not be accepted.

### **Requirements for Award**

A PERFORMANCE BOND and a PAYMENT BOND each in the amount of 100 percent of the CONTRACT PRICE, with a corporate surety approved by the OWNER will be required for the faithful performance of the Contract.

Attorneys-in-fact who sign BID BONDS or PAYMENT BONDS and PERFORMANCE BONDS must file with each BOND a certified and effective dated copy of their power of attorney.

The party to whom the CONTRACT is awarded will be required to execute the AGREEMENT and obtain the PERFORMANCE BOND and PAYMENT BOND within ten (10) calendar days from the date when the NOTICE OF AWARD is delivered to the BIDDER. The NOTICE OF AWARD shall be accompanied by the necessary AGREEMENT and BOND forms. In case of failure of the BIDDER to execute the AGREEMENT, the OWNER may consider the BIDDER in default, in which case the BID BOND accompanying the proposal shall become the property of the OWNER.

The OWNER, within ten (10) days of receipt of acceptable PERFORMANCE BOND, PAYMENT BOND and AGREEMENT signed by the party to whom the AGREEMENT was awarded, shall sign the AGREEMENT and return to such party an executed duplicate of the AGREEMENT. Should the OWNER not execute the AGREEMENT within such period, the BIDDER may, by WRITTEN NOTICE, withdraw the signed AGREEMENT. Such notice of withdrawal shall be effective upon receipt of the notice by the OWNER.

The NOTICE TO PROCEED shall be issued upon execution of the AGREEMENT by the OWNER. Should there be reasons why the NOTICE TO PROCEED cannot be issued within such period, the time may be extended by mutual agreement between the OWNER AND CONTRACTOR. If the NOTICE TO PROCEED is not issued as stated above or within a period mutually agreed upon, the CONTRACTOR may terminate the AGREEMENT without further liability on the part of either party.

The low BIDDER shall supply the names and addresses of major material SUPPLIERS and SUBCONTRACTORS when required to do so by the OWNER. Also see requirements contained in the SUPPLEMENTAL GENERAL CONDITIONS regarding "Subcontractors, Suppliers and Others."

### **Basis for Award**

BIDS that are not arithmetically correct shall be evaluated as follows: Discrepancies in the multiplication of quantities of work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

The OWNER may waive any informalities or minor defects or reject any and all BIDS. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof. Any BID received after the time and date specified shall not be considered. No BIDDER may withdraw a BID within 60 days after the actual date of the opening thereof. Should there be reasons why the Contract cannot be awarded within the specified period; the time may be extended by mutual agreement between the OWNER and the BIDDER.

The OWNER may make such investigations as deemed necessary to determine the ability of the BIDDER to perform the WORK, and the BIDDER shall furnish to the OWNER all

## Information for Bidders

such information and data for this purpose as the OWNER may request. **Poor performance on any prior Contracts between the BIDDER and OWNER (including work as a Sub-Contractor) shall be considered when determining the ability of the BIDDER to perform the WORK.** The OWNER reserves the right to reject any BID if the evidence submitted by, or investigation of, such BIDDER fails to satisfy the OWNER that such BIDDER is properly qualified to carry out the obligations of the AGREEMENT and to complete the WORK contemplated therein.

Award will be made in accordance with KRS 45A.494.

Award will be made to the **lowest responsible BIDDER**. Responsible BIDDERS are companies that have the capabilities in all respects to perform fully the Contract requirements, and the integrity and reliability which will assure good faith performance. For the purpose of this project the OWNER will determine responsibility of bidders based on such investigations as deemed necessary to satisfy the OWNER that the BIDDER is properly qualified. A responsible BIDDER shall be a company that has successfully completed projects comprised mainly of the same or similar type construction in size and scope as the subject project. The BIDDER'S past experience shall include projects with a final Contract amount similar to this project.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the Contract throughout.

The BIDDER agrees to abide by the requirements under Executive Order No. 11246, as amended, including specifically the provisions of the equal opportunity clause set forth in the SUPPLEMENTAL GENERAL CONDITIONS.

## **SUMMARY**

### **General**

The work to be performed under this CONTRACT shall consist of furnishing all labor, materials, equipment, tools, incidentals and performing all work required to construct complete, in place and ready to operate:

Approximately 16,900 LF of 16-inch ductile iron pipe waterline, reconnection and/or relocation of 13 customer connections and associated appurtenances.

The materials and equipment to be furnished will be installed at the locations as shown on the Drawings. The OWNER reserves the right to alter the quantities of work to be performed or to extend or shorten the improvements at any time when and as found necessary, and the CONTRACTOR shall perform the work as altered, increased or decreased. Payment for such increased or decreased quantity will be made in accordance with the GENERAL and SUPPLEMENTAL GENERAL CONDITIONS.



## **BID**

Proposal of \_\_\_\_\_ (hereinafter called "BIDDER") organized and existing under the laws of the State of \_\_\_\_\_ doing business as \_\_\_\_\_ \* to Warren County Water District, 523 US 31W By Pass, Bowling Green, Kentucky 42101 (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for Alvaton Area Capacity Improvements in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to its own organization, that this BID has been arrived at independently, without consultation, communication or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this Contract on or before a date to be specified in the NOTICE TO PROCEED. The BIDDER further agrees to fully complete the PROJECT within 210 consecutive calendar days after the date specified in the NOTICE TO PROCEED. The BIDDER further agrees to pay as liquidated damages, the sum of \$500 for each consecutive calendar day thereafter as provided in Section 15 of the General Conditions.

\*Insert "a corporation", "a partnership", or "an individual" as applicable.

BIDDER acknowledges receipt of the following ADDENDUM(A):

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BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices or lump sum:

**BASE BID SCHEDULE**

NO.	ITEM	UNIT	UNIT PRICE	QTY.	TOTAL PRICE
1	16" Class 250 Rest. Joint DIP Water Line	LF		1,235	
2	16" Class 250 DIP Water Line	LF		14,948	
3	10" DIP Water Line	LF		50	
4	6" DIP Water Line	LF		50	
5	24" Steel Casing by Bore w/ 16" Rest. Joint DIP Carrier	LF		335	
6	24" Steel Casing by Bore w/ 16" DIP Carrier	LF		385	
7	Ductile Iron Fittings	LBS		8000	
8	Reconnect 5/8"x3/4" Water Meter	EA		15	
9	Relocate 5/8"x3/4" Water Meter	EA		1	
10	3/4" Service Line (Line Side)	LF		50	
11	1" Service Line (Road Crossing)	LF		700	
12	Customer Service Line	LF		50	
13	10" x 10" Tapping Sleeve & 10" Tapping Valve	EA		2	
14	6" x 6" Tapping Sleeve & 6" Tapping Valve	EA		1	
15	6" Gate Valve	EA		2	
16	12" x 12" Tapping Sleeve & 12" Tapping Valve	EA		1	
17	16" Butterfly Valve	EA		11	
18	Blow-off Assembly	EA		1	
19	5-1/4" Fire Hydrant Assembly	EA		9	
20	Automatic Air Release Valve	EA		5	
21	Miscellaneous Concrete	CY		20	
22	Full Depth Stone Backfill	TN		250	



23	Rock Check Dam	TN	_____	100	_____
24	Silt Fencing	LF	_____	1000	_____
25	Channel Lining	TN	_____	50	_____
26	Final Clean-up	LF	_____	16,903	_____

**TOTAL BASE BID**

\_\_\_\_\_

Respectfully submitted:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
Title

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Date

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
License No. (If Applicable)

\_\_\_\_\_  
Facsimile Number

SEAL - (if BID is by a corporation)

ATTEST: \_\_\_\_\_



**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned \_\_\_\_\_, as Principal, and \_\_\_\_\_ as Surety, are hereby held and firmly bound unto Warren County Water District as OWNER in the penal sum of \*\* \_\_\_\_\_ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this \_\_\_\_\_ day of \_\_\_\_\_, 2025. The Condition of the above obligation is such that whereas the Principal has submitted to Warren County Water District a certain BID, attached hereto and hereby made a part hereof to enter into a Contract in writing, for Alvaton Area Capacity Improvements.

NOW, THEREFORE,

- (a) If said BID shall be rejected, or
- (b) If said BID shall be accepted and the Principal shall execute and deliver a Contract in the Form of Contract attachment hereto (properly completed in accordance with said BID) and shall furnish a BOND for faithful performance of said Contract, and for the payment of all persons performing labor furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

\*\* Required Bid Bond is 5 percent of Base Bid amount.



IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

\_\_\_\_\_(L.S.)  
Principal

\_\_\_\_\_  
Surety

BY:\_\_\_\_\_

**IMPORTANT:** Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.



**COMPLIANCE STATEMENT REGARDING  
STATE AND FEDERAL STANDARDS PROVISIONS**

1. **Equal Employment Opportunity**

During the performance of this Contract, the CONTRACTOR agrees as follows:

- A. The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, creed, sex, color or national origin. The CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, sex, color or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the County setting forth the provisions of this non-discrimination clause.
- B. The CONTRACTOR will, in all solicitation or advertisements for employees placed by or on behalf of the CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, or national origin.
- C. The CONTRACTOR will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this Contract so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.
- D. The CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- E. The CONTRACTOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the County's Department of Housing and Community Development and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- F. In the event of the CONTRACTOR's noncompliance with the noncompliance clauses of this Agreement or with any of such rules, regulations or orders, this Agreement may be canceled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

## Compliance Statement

- G. The CONTRACTOR will include the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The CONTRACTOR will take such action with respect to any subcontract or purchase order as the County's Department of Housing and Community Development may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that in the event the CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the County's Department of Housing and Community Development, the CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

### 2. "Section 3" Compliance in the Provision of Training, Employment, and Business Opportunities

- A. The work to be performed under this Contract is on a project assisted under a program providing direct Federal financial assistance from the Division of Abandoned Mine Lands and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 USC 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in or owned in substantial part by persons residing in the area of the project.
- B. The parties to this Contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of this Contract. The parties to this Contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.
- C. The CONTRACTOR will send to each labor organization or representative of workers with which she/he has a collective bargaining agreement or other Contract or understanding, if any, a notice advising the said labor organization or workers' representative of his/her commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
- D. The CONTRACTOR will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR Part 135. The CONTRACTOR will not subcontract with any subcontractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.

- E. Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued hereunder prior to the execution of the Contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors and subcontractors, its successor and assigns to those sanctions specified by the grant or loan agreement or contract through which federal assistance is provided, and to such sanctions as are specified by 24 CFR Part 135.

3. Certification Regarding Debarment, Suspension, and Other Responsibility Matters

The CONTRACTOR certifies to the best of his knowledge and belief that he or any of the company principals:

- A. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- B. Have not within a three-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, Stat, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of record, making false statements, or receiving stolen property;
- C. Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph B of this certification; and
- D. Have not within a three-year period preceding this proposal had one or more public transaction (Federal, State, or local) terminated for cause or default.

4. Access to Records

The grantee, the Federal Grantor Agency, the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the CONTRACTOR which are directly pertinent to this specific Contract, for the purpose of making audit, examination, excerpts, and transcriptions. The CONTRACTOR shall maintain all required records for three years after the Agency makes final payments and all other pending matters are closed.

5. Civil Rights Act of 1964

Under Title VI of the Civil Rights Act of 1964, no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

## Compliance Statement

6. Section 109 of the Housing and Community Development Act of 1974

No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

7. Interest of Members of a County

No member of the governing body of the County and no other office, employee, or agent of the County who exercises any functions or responsibilities in connection with the planning and carrying out of the program, shall have any personal financial interest, direct or indirect, in this Contract; and the CONTRACTOR shall take appropriate steps to assure compliance.

8. Interest of Other Local Public Officials

No member of the governing body of the locality and no other public official of such locality, who exercises any functions or responsibilities in connection with the planning and carrying out of the program, shall have any personal financial interest, direct or indirect, in this Contract; and the CONTRACTOR shall take appropriate steps to assure compliance.

9. Interest of CONTRACTOR and Employees

The CONTRACTOR covenants that he presently has no interest and shall not acquire interest, direct or indirect, in the study area or any parcels therein or any other interest which would conflict in any manner or degree with the performance of his services hereunder. The CONTRACTOR further covenants that in the performance of this Contract, no person having any such interest shall be employed.

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Name and Title of Signer (Print or Type)

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Signature

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Date

## **AFFIDAVIT FOR BIDDERS CLAIMING RESIDENT BIDDER STATUS**

The BIDDER hereby swears and affirms under penalty of perjury that, in accordance with KRS 45A.494(2), the BIDDER is an individual, partnership, association, corporation, or other business entity that, on the date the Contract was first advertised as available for bidding:

1. Is authorized to transact business in the Commonwealth.
2. Has for one year prior to and through the date of Advertisement:
  - 2.1 Filed Kentucky corporate income taxes.
  - 2.2 Made payments to the Kentucky unemployment insurance fund established in KRS 341.49.
  - 2.3 Maintained a Kentucky workers' compensation policy.

The OWNER reserves the right to request documentation supporting a BIDDER'S claim of Resident BIDDER status. Failure to provide such documentation upon request shall result in disqualification of the BIDDER or Contract termination.

\_\_\_\_\_  
Signature Printed Name

\_\_\_\_\_  
Title Date

Company Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subscribed and sworn to before me by \_\_\_\_\_  
(Affiant) (Title)

of \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.  
(Company Name)

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_



### **TAX EXEMPTION CERTIFICATION**

In accordance with KRS 139.840(34), any purchases made on or after January 1, 2023 by a construction contractor fulfilled by a construction contract for a sewer or water project with a water district formed or organized under KRS Chapter 74 shall be exempt from Kentucky sales tax.

Kentucky Department of Revenue form 51A383 (4-23) is included with the OWNER's tax exemption certification number for the CONTRACTOR's use.



**CERTIFICATE OF EXEMPTION  
FOR BUILDING MATERIALS, FIXTURES AND SUPPLIES  
PURCHASED BY A CONSTRUCTION CONTRACTOR FOR  
A SEWER OR WATER PROJECT WITH A  
GOVERNMENTAL AGENCY**

**Important—Certificate not valid  
unless completed in full.**

In accordance with KRS 139.480(34), this certificate may be executed only for those purchases **(on or after 01/01/2023)** of building materials, fixtures and supplies that will be permanently incorporated into a structure or improvement to real property, or will be completely consumed, in fulfilling a construction contract with a governmental agency for the purpose of furnishing water or sewer services to the general public. The building materials, fixtures and supplies purchased must also be exempt from the sales and use tax if purchased directly by the governmental agency. This certificate must be executed jointly by the governmental agency and the construction contractor who is under contract with the governmental agency and purchases the property to fulfill the terms of the construction contract.

THE UNDERSIGNED HEREBY CERTIFIES THAT THE PROPERTY TO BE PURCHASED FROM:

\_\_\_\_\_  
Vendor Name and Address

will be permanently incorporated into a structure or improvement to real property, or will be completely consumed, in fulfilling a construction contract with a governmental agency for the purpose of furnishing water or sewer services to the general public.

Type and description of property to be purchased:

☐ Building Materials: \_\_\_\_\_

☐ Fixtures: \_\_\_\_\_

☐ Supplies: \_\_\_\_\_

Project Period of Construction Contract: Start Date \_\_\_\_\_ End Date \_\_\_\_\_

**This jointly executed certificate of exemption, shall be valid only for purchases made for the project period of the construction contract indicated on the certificate at the time of purchase. A construction contractor shall jointly execute a new certificate with a government agency for additional purchases of building materials, fixtures and supplies required for the same project after the initial expiration date or for additional projects.**

I, the purchaser, understand that if the property described above is used in a nonexempt manner, I am liable for the payment of sales tax as provided in KRS 139.270, as if I were the retailer making a retail sale of the property at the time of such use and the cost to me shall be deemed the gross receipts from such retail sale. I will immediately remit to the Department of Revenue, Frankfort, Kentucky 40620, the required tax measured by the purchase price of the property. I also understand that the department shall hold the purchaser liable for the remittance of the tax and may apply any penalties as provided in KRS 139.990.

Under penalties of perjury, I swear or affirm that the information on this certificate is true and correct as to every material matter.

Warren County Water District      SD-114-100  
\_\_\_\_\_  
Governmental Agency      Exemption Number

\_\_\_\_\_  
Governmental Agency Authorized Signature      Date

\_\_\_\_\_  
Construction Contractor Name (Print)      FEIN

\_\_\_\_\_  
Construction Contractor Authorized Signature      Date

\_\_\_\_\_  
Sub-Contractor Name (Print)      FEIN

\_\_\_\_\_  
Sub-Contractor Authorized Signature      Date

## **GENERAL CONDITIONS**

1. Definitions
2. Additional Instructions and Detail Drawings
3. Schedules, Reports and Records
4. Drawings and Specifications
5. Shop Drawings
6. Materials, Services and Facilities
7. Inspection and Testing
8. Substitutions
9. Patents
10. Surveys, Permits, Regulations
11. Protection of Work, Property, Persons
12. Supervision by Contractor
13. Changes in the Work
14. Changes in Contract Price
15. Time for Completion and Liquidated Damages
16. Correction of Work
17. Subsurface Conditions
18. Suspension of Work, Termination and Delay
19. Payments to Contractor
20. Acceptance of Final Payment as Release
21. Insurance
22. Contract Security
23. Assignments
24. Indemnification
25. Separate Contracts
26. Subcontracting
27. Engineer's Authority
28. Land and Rights-of-Way
29. Guaranty
30. Arbitration
31. Taxes

### **1. DEFINITIONS**

- 1.1 Wherever used in the CONTRACT DOCUMENTS, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:
- 1.2 ADDENDA—Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the CONTRACT DOCUMENTS, DRAWINGS and SPECIFICATIONS, by additions, deletions, clarifications or corrections.
- 1.3 BID—The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the WORK to be performed.
- 1.4 BIDDER—Any person, firm or corporation submitting a BID for the WORK.
- 1.5 BONDS—Bid, Performance, and Payment Bonds and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the CONTRACT DOCUMENTS.
- 1.6 CHANGE ORDER—A written order to the CONTRACTOR authorizing an addition, deletion or revision in the WORK within the general scope of the CONTRACT DOCUMENTS, or authorizing an adjustment in the CONTRACT PRICE or CONTRACT TIME.

## General Conditions

1.7 CONTRACT DOCUMENTS—The contract, including Advertisement For Bids, Information For Bidders, BID, Bid Bond, Agreement, Payment Bond, Performance Bond, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, and ADDENDA.

1.8 CONTRACT PRICE—The total monies payable to the CONTRACTOR under the terms and conditions of the CONTRACT DOCUMENTS.

1.9 CONTRACT TIME—The number of calendar days stated in the CONTRACT DOCUMENTS for the completion of the WORK.

1.10 CONTRACTOR—The person, firm or corporation with whom the OWNER has executed the Agreement.

1.11 DRAWINGS—The part of the CONTRACT DOCUMENTS which show the characteristics and scope of the WORK to be performed and which have been prepared or approved by the ENGINEER.

1.12 ENGINEER—The person, firm or corporation named as such in the CONTRACT DOCUMENTS.

1.13 FIELD ORDER—A written order effecting a change in the WORK not involving an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, issued by the ENGINEER to the CONTRACTOR during construction.

1.14 NOTICE OF AWARD—The written notice of the acceptance of the BID from the OWNER to the successful BIDDER.

1.15 NOTICE TO PROCEED—Written communication issued by the OWNER to the CONTRACTOR authorizing him to proceed with the WORK and establishing the date of commencement of the WORK.

1.16 OWNER—A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the WORK is to be performed.

1.17 PROJECT—The undertaking to be performed as provided in the CONTRACT DOCUMENTS.

1.18 RESIDENT PROJECT REPRESENTATIVE—The authorized representative of the OWNER who is assigned to the PROJECT site or any part thereof.

1.19 SHOP DRAWINGS—All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a SUBCONTRACTOR, manufacturer, SUPPLIER or distributor, which illustrate how specific portions of the WORK shall be fabricated or installed.

1.20 SPECIFICATIONS—A part of the CONTRACT DOCUMENTS consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.

1.21 SUBCONTRACTOR—An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other SUBCONTRACTOR for the performance of a part of the WORK at the site.

1.22 SUBSTANTIAL COMPLETION—That date as certified by the ENGINEER when the construction of the PROJECT or a specified part thereof is sufficiently completed, in accordance with the CONTRACT DOCUMENTS, so that the PROJECT or specified part can be utilized for the purposes for which it is intended.

1.23 SUPPLEMENTAL GENERAL CONDITIONS — Modifications to General Conditions required by a Federal agency for participation in the PROJECT and approved by the agency in writing prior to inclusion in the CONTRACT DOCUMENTS, or such requirements that may be imposed by applicable state laws.

1.24 SUPPLIER—Any person or organization who supplies materials or equipment for the WORK, including that fabricated to a special design, but who does not perform labor at the site.

1.25 WORK—All labor necessary to produce the construction required by the CONTRACT DOCUMENTS, and all materials and equipment incorporated or to be incorporated in the PROJECT.

1.26 WRITTEN NOTICE—Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the WORK.

## **2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS**

2.1 The CONTRACTOR may be furnished additional instructions and detail drawings, by the ENGINEER, as necessary to carry out the WORK required by the CONTRACT DOCUMENTS.

2.2 The additional drawings and instruction thus supplied will become a part of the CONTRACT DOCUMENTS. The CONTRACTOR shall carry out the WORK in accordance with the additional detail drawings and instructions.

## **3. SCHEDULES, REPORTS AND RECORDS**

3.1 The CONTRACTOR shall submit to the OWNER such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the CONTRACT DOCUMENTS for the WORK to be performed.

3.2 Prior to the first partial payment estimate, the CONTRACTOR shall submit construction progress schedules showing the order in which he proposes to carry on the WORK, including dates at which he will start the various parts of the WORK, estimated date of completion of each part, and as applicable:

3.2.1. The dates at which special detail drawings will be required; and

3.2.2 Respective dates for submission of SHOP DRAWINGS, the beginning of manufacture, the testing and the installation of materials, supplies and equipment.

3.3 The CONTRACTOR shall also submit a schedule of payments that he anticipates he will earn during the course of the WORK.

## **4. DRAWINGS AND SPECIFICATIONS**

4.1 The intent of the DRAWINGS and SPECIFICATIONS is that the CONTRACTOR shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the WORK in accordance with the CONTRACT DOCUMENTS and all incidental work necessary to complete the PROJECT in an acceptable manner, ready for use, occupancy or operation by the OWNER.

4.2 In case of conflict between the DRAWINGS and SPECIFICATIONS, the SPECIFICATIONS shall govern. Figure dimensions on DRAWINGS shall govern over scale dimensions, and detailed DRAWINGS shall govern over general DRAWINGS.

4.3 Any discrepancies found between the DRAWINGS and SPECIFICATIONS and site conditions or any inconsistencies or ambiguities in the DRAWINGS or SPECIFICATIONS shall be immediately reported to the ENGINEER, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. WORK done by the CONTRACTOR after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the CONTRACTOR's risk.

## **5. SHOP DRAWINGS**

5.1 The CONTRACTOR shall provide SHOP DRAWINGS as may be necessary for the prosecution of the WORK as required by the CONTRACT DOCUMENTS. The ENGINEER shall promptly review all SHOP DRAWINGS. The ENGINEER'S approval of any SHOP DRAWING shall not release the CONTRACTOR from responsibility for deviations from the CONTRACT DOCUMENTS. The approval of

## General Conditions

any SHOP DRAWING which substantially deviates from the requirement of the CONTRACT DOCUMENTS shall be evidenced by a CHANGE ORDER.

5.2 When submitted for the ENGINEER'S review, SHOP DRAWINGS shall bear the CONTRACTOR'S certification that he has reviewed, checked and approved the SHOP DRAWINGS and that they are in conformance with the requirements of the CONTRACT DOCUMENTS.

5.3 Portions of the WORK requiring a SHOP DRAWING or sample submission shall not begin until the SHOP DRAWING or submission has been approved by the ENGINEER. A copy of each approved SHOP DRAWING and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the ENGINEER.

### **6. MATERIALS, SERVICES AND FACILITIES**

6.1 It is understood that, except as otherwise specifically stated in the CONTRACT DOCUMENTS, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the WORK within the specified time.

6.2 Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the WORK. Stored materials and equipment to be incorporated in the WORK shall be located so as to facilitate prompt inspection.

6.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.

6.4 Materials, supplies and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.

6.5 Materials, supplies or equipment to be incorporated into the WORK shall not be purchased by the CONTRACTOR or the SUBCONTRACTOR subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

### **7. INSPECTION AND TESTING**

7.1 All materials and equipment used in the construction of the PROJECT shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the CONTRACT DOCUMENTS.

7.2 The OWNER shall provide all inspection and testing services not required by the CONTRACT DOCUMENTS.

7.3 The CONTRACTOR shall provide at his expense the testing and inspection services required by the CONTRACT DOCUMENTS.

7.4 If the CONTRACT DOCUMENTS, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any WORK to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the ENGINEER timely notice of readiness. The CONTRACTOR will then furnish the ENGINEER the required certificates of inspection, testing or approval.

7.5 Inspections, tests or approvals by the engineer or others shall not relieve the CONTRACTOR from his obligations to perform the WORK in accordance with the requirements of the CONTRACT DOCUMENTS.

7.6 The ENGINEER and his representatives will at all times have access to the WORK. In addition, authorized representatives and agents of any participating Federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data

and records. The CONTRACTOR will provide proper facilities for such access and observation of the WORK and also for any inspection, or testing thereof.

7.7 If any WORK is covered contrary to the written instructions of the ENGINEER it must, if requested by the ENGINEER, be uncovered for his observation and replaced at the CONTRACTOR'S expense.

7.8 If the ENGINEER considers it necessary or advisable that covered WORK be inspected or tested by others, the CONTRACTOR, at the ENGINEER'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such WORK is defective, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection, and testing; and of satisfactory reconstruction. If, however, such WORK is not found to be defective, the CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate CHANGE ORDER shall be issued.

## **8. SUBSTITUTIONS**

Whenever a material, article or piece of equipment is identified on the DRAWINGS or SPECIFICATIONS by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The CONTRACTOR may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the CONTRACT DOCUMENTS by reference to brand name or catalogue number, and if, in the opinion of the ENGINEER, such material, article, or piece of equipment is of equal substance and function to that specified, the ENGINEER may approve its substitution and use by the CONTRACTOR. Any cost differential shall be deductible from the CONTRACT PRICE and the CONTRACT DOCUMENTS shall be appropriately modified by CHANGE ORDER. The CONTRACTOR warrants that if substitutes are approved, no major changes in the function or general design of the PROJECT will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the CONTRACTOR without a change in the CONTRACT PRICE or CONTRACT TIME.

## **9. PATENTS**

The CONTRACTOR shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and save the OWNER harmless from loss on account thereof, except that the OWNER shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, however if the CONTRACTOR has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the ENGINEER.

## **10. SURVEYS, PERMITS, REGULATIONS**

10.1 The OWNER shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the WORK together with a suitable number of bench marks adjacent to the WORK as shown in the CONTRACT DOCUMENTS. From the information provided by the OWNER, unless otherwise specified in the CONTRACT DOCUMENTS, the CONTRACTOR shall develop and make all detail surveys needed for construction such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets.

10.2 The CONTRACTOR shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

10.3 Permits and licenses of a temporary nature necessary for the prosecution of the WORK shall be secured and paid for by the CONTRACTOR unless otherwise stated in the SUPPLEMENTAL GENERAL CONDITIONS. Permits, licenses and easements for permanent structures or permanent changes in

## General Conditions

existing facilities shall be secured and paid for by the OWNER, unless otherwise specified. The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the WORK as drawn and specified. If the CONTRACTOR observes that the CONTRACT DOCUMENTS are at variance therewith, he shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in Section 13. CHANGES IN THE WORK.

### 11. **PROTECTION OF WORK, PROPERTY AND PERSONS**

11.1 The CONTRACTOR will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the WORK. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the WORK and other persons who may be affected thereby, all the WORK and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

11.2 The CONTRACTOR will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the WORK, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when protection of the WORK may affect them. The CONTRACTOR will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any SUBCONTRACTOR or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the CONTRACT DOCUMENTS or to the acts or omissions of the OWNER or the ENGINEER or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the CONTRACTOR.

11.3 In emergencies affecting the safety of persons or the WORK or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the ENGINEER or OWNER, shall act to prevent threatened damage, injury or loss. He will give the ENGINEER prompt WRITTEN NOTICE of any significant changes in the WORK or deviations from the CONTRACT DOCUMENTS caused thereby, and a CHANGE ORDER shall thereupon be issued covering the changes and deviations involved.

### 12. **SUPERVISION BY CONTRACTOR**

The CONTRACTOR will supervise and direct the WORK. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR will employ and maintain on the WORK a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR's representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the WORK.

### 13. **CHANGES IN THE WORK**

13.1 The OWNER may at any time, as the need arises, order changes within the scope of the WORK without invalidating the Agreement. If such changes increase or decrease the amount due under the CONTRACT DOCUMENTS, or in the time required for performance of the WORK, an equitable adjustment shall be authorized by CHANGE ORDER.

13.2 The ENGINEER, also, may at any time, by issuing a FIELD ORDER, make changes in the details of the WORK. The CONTRACTOR shall proceed with the performance of any changes in the WORK so ordered by the ENGINEER unless the CONTRACTOR believes that such FIELD ORDER entitles him to a change in CONTRACT PRICE or TIME, or both, in which event he shall give the ENGINEER WRITTEN NOTICE thereof within seven (7) days after the receipt of the ordered change. Thereafter the CONTRACTOR shall document the basis for the change in CONTRACT PRICE or TIME within thirty (30)

days. The CONTRACTOR shall not execute such changes pending the receipt of an executed CHANGE ORDER or further instruction from the OWNER.

**14. CHANGES IN CONTRACT PRICE**

The CONTRACT PRICE may be changed only by a CHANGE ORDER. The value of any WORK covered by a CHANGE ORDER or of any claim for increase or decrease in the CONTRACT PRICE shall be determined by one or more of the following methods in the order of precedence listed below:

(a) Unit prices previously approved.

(b) An agreed lump sum.

(c) The actual cost for labor, direct overhead, materials, supplies, equipment and other services necessary to complete the work. In addition, there shall be added an amount to be agreed upon but not to exceed fifteen (15) percent of the actual cost of the WORK to cover the cost of general overhead and profit.

**15. TIME FOR COMPLETION AND LIQUIDATED DAMAGES**

15.1 The date of beginning and the time for completion of the WORK are essential conditions of the CONTRACT DOCUMENTS and the WORK embraced shall be commenced on a date specified in the NOTICE TO PROCEED.

15.2 The CONTRACTOR will proceed with the WORK at such rate of progress to insure full completion within the CONTRACT TIME. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the CONTRACT TIME for the completion of the WORK described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the WORK.

15.3 If the CONTRACTOR shall fail to complete the WORK within the CONTRACT TIME, or extension of time granted by the OWNER, then the CONTRACTOR will pay to the OWNER the amount for liquidated damages as specified in the BID for each calendar day that the CONTRACTOR shall be in default after the time stipulated in the CONTRACT DOCUMENTS.

15.4 The CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the WORK is due to the following, and the CONTRACTOR has promptly given WRITTEN NOTICE of such delay to the OWNER or ENGINEER.

15.4.1 To any preference, priority or allocation order duly issued by the OWNER.

15.4.2 To unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather, and

15.4.3 To any delays of SUBCONTRACTORS occasioned by any of the causes specified in paragraphs 15.4.1 and 15.4.2 of this article.

**16. CORRECTION OF WORK**

16.1 The CONTRACTOR shall promptly remove from the premises all WORK rejected by the ENGINEER for failure to comply with the CONTRACT DOCUMENTS, whether incorporated in the construction or not, and the CONTRACTOR shall promptly replace and re-execute the WORK in accordance with the CONTRACT DOCUMENTS and without expense to the OWNER and shall bear the expense of making good all WORK of other CONTRACTORS destroyed or damaged by such removal or replacement.

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16.2 All removal and replacement WORK shall be done at the CONTRACTOR's expense. If the CONTRACTOR does not take action to remove such rejected WORK within ten (10) days after receipt of WRITTEN NOTICE, the OWNER may remove such WORK and store the materials at the expense of the CONTRACTOR.

### 17. **SUBSURFACE CONDITIONS**

17.1 The CONTRACTOR shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the OWNER by WRITTEN NOTICE of:

17.1.1 Subsurface or latent physical conditions at the site differing materially from those indicated in the CONTRACT DOCUMENTS; or

17.1.2 Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the CONTRACT DOCUMENTS.

17.2 The OWNER shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the WORK, an equitable adjustment shall be made and the CONTRACT DOCUMENTS shall be modified by a CHANGE ORDER. Any claim of the CONTRACTOR for adjustment hereunder shall not be allowed unless he has given the required WRITTEN NOTICE; provided that the OWNER may, if he determines the facts so justify, consider and adjust any such claims asserted before the date of final payment.

### 18. **SUSPENSION OF WORK, TERMINATION AND DELAY**

18.1 The OWNER may suspend the WORK or any portion thereof for a period of not more than ninety days or such further time as agreed upon by the CONTRACTOR, by WRITTEN NOTICE to the CONTRACTOR and the ENGINEER which notice shall fix the date on which WORK shall be resumed. The CONTRACTOR will resume that WORK on the date so fixed. The CONTRACTOR will be allowed an increase in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, directly attributable to any suspension.

18.2 If the CONTRACTOR is adjudged a bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to SUBCONTRACTORS or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the WORK or if he disregards the authority of the ENGINEER, or if he otherwise violates any provision of the CONTRACT DOCUMENTS, then the OWNER may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his surety a minimum of ten (10) days from delivery of a WRITTEN NOTICE, terminate the services of the CONTRACTOR and take possession of the PROJECT and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the WORK by whatever method he may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the unpaid balance of the CONTRACT PRICE exceeds the direct and indirect costs of completing the PROJECT, including compensation for additional professional services, such excess SHALL BE PAID TO THE CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the OWNER. Such costs incurred by the OWNER will be determined by the ENGINEER and incorporated in a CHANGE ORDER.

18.3 Where the CONTRACTOR'S services have been so terminated by the OWNER, said termination shall not affect any right of the OWNER against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of monies by the OWNER due the CONTRACTOR will not release the CONTRACTOR from compliance with the CONTRACT DOCUMENTS.

18.4 After ten (10) days from delivery of a WRITTEN NOTICE to the CONTRACTOR and the ENGINEER, the OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the PROJECT and terminate the Contract. In such case, the CONTRACTOR shall be paid for all WORK executed and any expense sustained plus reasonable profit.

18.5 If, through no act or fault of the CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the OWNER or under an order of court or other public authority, or the ENGINEER fails to act on any request for payment within thirty (30) days after it is submitted, or the OWNER fails to pay the CONTRACTOR substantially the sum approved by the ENGINEER or awarded by arbitrators within thirty (30) days of its approval and presentation, then the CONTRACTOR may, after ten (10) days from delivery of a WRITTEN NOTICE to the OWNER and the ENGINEER, terminate the CONTRACT and recover from the OWNER payment for all WORK executed and all expenses sustained. In addition and in lieu of terminating the CONTRACT, if the ENGINEER has failed to act on a request for payment or if the OWNER has failed to make any payment as aforesaid, the CONTRACTOR may upon ten (10) days written notice to the OWNER and the ENGINEER stop the WORK until he has been paid all amounts then due, in which event and upon resumption of the WORK, CHANGE ORDERS shall be issued for adjusting the CONTRACT PRICE or extending the CONTRACT TIME or both to compensate for the costs and delays attributable to the stoppage of the WORK.

18.6 If the performance of all or any portion of the WORK is suspended, delayed, or interrupted as a result of a failure of the OWNER or ENGINEER to act within the time specified in the CONTRACT DOCUMENTS, or if no time is specified, within a reasonable time, an adjustment in the CONTRACT PRICE or an extension of the CONTRACT TIME, or both, shall be made by CHANGE ORDER to compensate the CONTRACTOR for the costs and delays necessarily caused by the failure of the OWNER or ENGINEER.

## **19. PAYMENTS TO CONTRACTOR**

19.1 At least ten (10) days before each progress payment falls due (but not more often than once a month), the CONTRACTOR will submit to the ENGINEER a partial payment estimate filled out and signed by the CONTRACTOR covering the WORK performed during the period covered by the partial payment estimate and supported by such data as the ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the WORK but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the OWNER, as will establish the OWNER'S title to the material and equipment and protect his interest therein, including applicable insurance. The ENGINEER will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present the partial payment estimate to the OWNER, or return the partial payment estimate to the CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the partial payment estimate. The OWNER will, within thirty (30) days of presentation to him of an approved partial payment estimate, pay the CONTRACTOR a progress payment on the basis of the approved partial payment estimate. The OWNER shall retain ten (10) percent of the amount of each payment until final completion and acceptance of all work covered by the CONTRACT DOCUMENTS.

19.2 The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.

19.3 Prior to SUBSTANTIAL COMPLETION, the OWNER, with the approval of the ENGINEER and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portions of the WORK. Such use shall not constitute an acceptance of such portions of the WORK.

19.4 The OWNER shall have the right to enter the premises for the purpose of doing work not covered by the CONTRACT DOCUMENTS. This provision shall not be construed as relieving the CONTRACTOR of the sole responsibility for the care and protection of the WORK, or the restoration of any damaged WORK except such as may be caused by agents or employees of the OWNER.

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19.5 Upon completion and acceptance of the WORK, the ENGINEER shall issue a certificate attached to the final payment request that the WORK has been accepted by him under the conditions of the CONTRACT DOCUMENTS. The entire balance found to be due the CONTRACTOR, including the retained percentages, but except such sums as may be lawfully retained by the OWNER, shall be paid to the CONTRACTOR within thirty (30) days of completion and acceptance of the WORK.

19.6 The CONTRACTOR will indemnify and save the OWNER or the OWNER'S agents harmless from all claims growing out of the lawful demands of SUBCONTRACTORS, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the WORK. The CONTRACTOR shall, at the OWNER'S request, furnish satisfactory evidence that all obligations of the nature designated above have been paid discharged, or waived. If the CONTRACTOR fails to do so the OWNER may, after having notified the CONTRACTOR, either pay unpaid bills or withhold from the CONTRACTORS unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the CONTRACTOR shall be resumed, in accordance with the terms of the CONTRACT DOCUMENTS, but in no event shall the provisions of this sentence be construed to impose any obligations upon the OWNER to either the CONTRACTOR, his Surety, or any third party. In paying any unpaid bills of the CONTRACTOR, any payment so made by the OWNER shall be considered as a payment made under the CONTRACT DOCUMENTS by the OWNER to the CONTRACTOR and the OWNER shall not be liable to the CONTRACTOR for any such payments made in good faith.

19.7 If the OWNER fails to make payment thirty (30) days after approval by the ENGINEER, in addition to other remedies available to the CONTRACTOR, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the CONTRACTOR.

### **20. ACCEPTANCE OF FINAL PAYMENT AS RELEASE**

The acceptance by the CONTRACTOR of final payment shall be and shall operate as a release to the OWNER of all claims and all liability to the CONTRACTOR other than claims in stated amounts as may be specifically excepted by the CONTRACTOR for all things done or furnished in connection with this WORK and for every act and neglect of the OWNER and others relating to or arising out of this WORK. Any payment, however, final or otherwise, shall not release the CONTRACTOR or his sureties from any obligations under the CONTRACT DOCUMENTS or the Performance BOND and Payment BONDS.

### **21. INSURANCE**

21.1 The CONTRACTOR shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S execution of the WORK, whether such execution be by himself or by any SUBCONTRACTOR or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

21.1.1 Claims under workmen's compensation, disability benefit and other similar employee benefit acts;

21.1.2 Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;

21.1.3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;

21.1.4 Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (2) by any other person; and

21.1.5 Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

21.2 Certificates of Insurance acceptable to the OWNER shall be filed with the OWNER prior to commencement of the WORK. These Certificates shall contain a provision that coverages afforded under the policies will not be cancelled unless at least fifteen (15) days prior WRITTEN NOTICE has been given to the OWNER.

21.3 The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, liability insurance as hereinafter specified:

21.3.1 CONTRACTOR'S General Public Liability and Property Damage Insurance including vehicle coverage issued to the CONTRACTOR and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the CONTRACT DOCUMENTS, whether such operations be by himself or by any SUBCONTRACTOR under him, or anyone directly or indirectly employed by the CONTRACTOR or by a SUBCONTRACTOR under him. Insurance shall be written with a limit of liability of not less than \$500,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$500,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$200,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$200,000 aggregate for any such damage sustained by two or more persons in any one accident.

21.3.2 The CONTRACTOR shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the PROJECT to the full insurable value thereof for the benefit of the OWNER, the CONTRACTOR, and SUBCONTRACTORS as their interest may appear. This provision shall in no way release the CONTRACTOR or CONTRACTOR'S surety from obligations under the CONTRACT DOCUMENTS to fully complete the PROJECT.

21.4 The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT TIME, in accordance with the provisions of the laws of the state in which the work is performed. Workmen's Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the PROJECT and in case any work is sublet, the CONTRACTOR shall require such SUBCONTRACTOR similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees, unless such employees are covered by the protection afforded by the CONTRACTOR. In case any class of employees engaged in hazardous work under this contract at the site of the PROJECT is not protected under Workmen's Compensation statute, the CONTRACTOR shall provide, and shall cause each SUBCONTRACTOR to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

21.5 The CONTRACTOR shall secure, if applicable, "All Risk" type Builder's Risk Insurance for WORK to be performed. Unless specifically authorized by the OWNER, the amount of such insurance shall not be less than the CONTRACT PRICE totaled in the BID. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the CONTRACT TIME, and until the WORK is accepted by the OWNER. The policy shall name as the insured the CONTRACTOR, the ENGINEER, and the OWNER.

## **22. CONTRACT SECURITY**

The CONTRACTOR shall within ten (10) days after the receipt of the NOTICE OF AWARD furnish the OWNER with a Performance Bond and a Payment Bond in penal sums equal to the amount of the CONTRACT PRICE, conditioned upon the performance by the CONTRACTOR of all undertakings, covenants, terms, conditions and agreements of the CONTRACT DOCUMENTS, and upon the prompt payment by the CONTRACTOR to all persons supplying labor and materials in the prosecution of the WORK provided by the CONTRACT DOCUMENTS. Such BONDS shall be executed by the

## General Conditions

CONTRACTOR and a corporate bonding company licensed to transact such business in the state in which the WORK is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these BONDS shall be borne by the CONTRACTOR. If at any time a surety on any such BOND is declared a bankrupt or loses its right to do business in the state in which the WORK is to be performed or is removed from the list of Surety Companies accepted on Federal BONDS. CONTRACTOR shall within ten (10) days after notice from the OWNER to do so, substitute an acceptable BOND (or BONDS) in such form and sum and signed by such other surety or sureties as may be satisfactory to the OWNER. The premiums on such BOND shall be paid by the CONTRACTOR. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable BOND to the OWNER.

### **23. ASSIGNMENTS**

Neither the CONTRACTOR nor the OWNER shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

### **24. INDEMNIFICATION**

24.1 The CONTRACTOR will indemnify and hold harmless the OWNER and the ENGINEER and their agents and employees from and against all claims, damages, losses and expenses including attorneys fees arising out of or resulting from the performance of the WORK, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the CONTRACTOR, and SUBCONTRACTOR, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

24.2 In any and all claims against the OWNER or the ENGINEER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.

24.3 The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the ENGINEER, his agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

### **25. SEPARATE CONTRACTS**

25.1 The OWNER reserves the right to let other contracts in connection with this PROJECT. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their WORK, and shall properly connect and coordinate his WORK with theirs. If the proper execution or results of any part of the CONTRACTOR'S WORK depends upon the WORK of any other CONTRACTOR, the CONTRACTOR shall inspect and promptly report to the ENGINEER any defects in such WORK that render it unsuitable for such proper execution and results.

25.2 The OWNER may perform additional WORK related to the PROJECT by himself, or he may let other contracts containing provisions similar to these. The CONTRACTOR will afford the other CONTRACTORS who are parties to such Contracts (or the OWNER, if he is performing the additional WORK himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of WORK, and shall properly connect and coordinate his WORK with theirs.

25.3 If the performance of additional WORK by other CONTRACTORS or the OWNER is not noted in the CONTRACT DOCUMENTS prior to the execution of the CONTRACT, written notice thereof shall be

given to the CONTRACTOR prior to starting any such additional WORK. If the CONTRACTOR believes that the performance of such additional WORK by the OWNER or others involves him in additional expense or entitles him to an extension of the CONTRACT TIME, he may make a claim therefore as provided in Sections 14 and 15.

**26. SUBCONTRACTING**

26.1 The CONTRACTOR may utilize the services of specialty SUBCONTRACTORS on those parts of the WORK which, under normal contracting practices, are performed by specialty SUBCONTRACTORS.

26.2 The CONTRACTOR shall not award WORK to SUBCONTRACTOR(S), in excess of fifty (50%) percent of the CONTRACT PRICE, without prior written approval of the OWNER.

26.3 The CONTRACTOR shall be fully responsible to the OWNER for the acts and omissions of his SUBCONTRACTORS, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

26.4 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the WORK to bind SUBCONTRACTORS to the CONTRACTOR by the terms of the CONTRACT DOCUMENTS insofar as applicable to the WORK of SUBCONTRACTORS and to give the CONTRACTOR the same power as regards terminating any subcontract that the OWNER may exercise over the CONTRACTOR under any provision of the CONTRACT DOCUMENTS.

26.5 Nothing contained in this CONTRACT shall create any contractual relation between any SUBCONTRACTOR and the OWNER.

**27. ENGINEER'S AUTHORITY**

27.1 The ENGINEER shall act as the OWNER's representative during the construction period. He shall decide questions which may arise as to quality and acceptability of materials furnished and WORK performed. He shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. The ENGINEER will make visits to the site and determine if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.

27.2 The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENTS in regard to the quality of materials, workmanship and execution of the WORK. Inspections may be made at the factory or fabrication plant of the source of material supply.

27.3 The ENGINEER will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.

27.4 The ENGINEER shall promptly make decisions relative to interpretation of the CONTRACT DOCUMENTS.

**28. LAND AND RIGHTS-OF-WAY**

28.1 Prior to issuance of NOTICE TO PROCEED, the OWNER shall obtain all land and rights-of-way necessary for carrying out and for the completion of the WORK to be performed pursuant to the CONTRACT DOCUMENTS, unless otherwise mutually agreed.

28.2 The OWNER shall provide to the CONTRACTOR information which delineates and describes the lands owned and rights-of-way acquired.

28.3 The CONTRACTOR shall provide at his own expense and without liability to the OWNER any additional land and access thereto that the CONTRACTOR may desire for temporary construction facilities, or for storage of materials.

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### **29. GUARANTY**

The CONTRACTOR shall guarantee all materials and equipment furnished and WORK performed for a period of one (1) year from the date of SUBSTANTIAL COMPLETION. The CONTRACTOR warrants and guarantees for a period of one (1) year from the date of SUBSTANTIAL COMPLETION of the system that the completed system is free from all defects due to faulty materials or workmanship and the CONTRACTOR shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The OWNER will give notice of observed defects with reasonable promptness. In the event that the CONTRACTOR should fail to make such repairs, adjustments, or other WORK that may be made necessary by such defects, the OWNER may do so and charge the CONTRACTOR the cost thereby incurred. The Performance BOND shall remain in full force and effect through the guarantee period.

### **30. ARBITRATION**

30.1 All claims, disputes and other matters in question arising out of, or relating to, the CONTRACT DOCUMENTS or the breach thereof, except for claims which have been waived by the making and acceptance of final payment as provided by Section 20, shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. This agreement to arbitrate shall be specifically enforceable under the prevailing arbitration law. The award rendered by the arbitrators shall be final, and judgment may be entered upon it in any court having jurisdiction thereof.

30.2 Notice of the demand for arbitration shall be filed in writing with the other party to the CONTRACT DOCUMENTS and with the American Arbitration Association, and a copy shall be filed with the ENGINEER. Demand for arbitration shall in no event be made on any claim, dispute or other matter in question which would be barred by the applicable statute of limitations.

30.3 The CONTRACTOR will carry on the WORK and maintain the progress schedule during any arbitration proceedings, unless otherwise mutually agreed in writing.

### **31. TAXES**

The CONTRACTOR will pay all sales, consumer, use and other similar taxes required by the law of the place where the WORK is performed.

## **SUPPLEMENTAL GENERAL CONDITIONS**

The provisions of the Supplemental General Conditions as described herein change, amend, or supplement the General Conditions. Provisions of the General Conditions which are not changed, amended, or supplemented, remain in full force.

### **1. Contract Approval**

Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

### **2. Contract Change Orders**

2.1 All changes affecting the project's construction cost or modifications of the terms or conditions of the contract must be authorized by means of a written Contract change order which is mutually agreed to by the OWNER and the CONTRACTOR. The Contract change order will include extra work, work for which quantities have been altered from those shown in the bidding schedule, as well as decreases or increases in the quantities of installed units which are different than those shown in the bidding schedule because of final measurements. All changes must be recorded on a Contract change order before they can be included in a partial payment estimate.

2.2 When the CONTRACT sum is, in whole or in part, based on unit prices, the OWNER reserves the right to increase or decrease a unit price quantity as may be deemed reasonable or necessary in order to complete the work contemplated by this CONTRACT.

### **3. Partial Payment Estimates**

3.1 Forms supplied by the ENGINEER shall be used when estimating periodic payments due the CONTRACTOR.

3.2 The OWNER may, after consultation with the ARCHITECT/ENGINEER, withhold or on account of subsequently discovered evidence, nullify the whole or part of any approved partial payment estimate to such extent as may be necessary to protect the OWNER from loss on account of:

3.2.1. Defective work not remedied.

3.2.2. Claims failed.

3.2.3. Failure of CONTRACTOR to make payments properly to subcontractors or suppliers.

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- 3.2.4. A reasonable doubt that the WORK can be completed for the balance then unpaid.
- 3.2.5. Damage to another CONTRACTOR.
- 3.2.6. Performance of WORK in violation of the terms of the CONTRACT DOCUMENTS.

3.3 Where WORK on unit price items is substantially complete but lacks testing clean-up and/or corrections, amounts shall be deducted from unit prices in partial payment estimates to amply cover such testing, clean-up and/or corrections.

3.4 When the items in 3.2 and 3.3 are cured, payment shall be made for amounts withheld because of them.

3.5 Payments will not be made that would deplete the retainage nor replace in escrow any funds that are required for retainage nor invest the retainage for the benefit of the CONTRACTOR.

## **4. Conflict of Interest**

4.1 Unacceptable bids. An ENGINEER or ARCHITECT (individual or firm including persons they employ) who has prepared plans and specifications will not be considered an acceptable bidder. Any firm or corporation in which such ENGINEER or ARCHITECT (including persons they employ) who has prepared plans and specifications will not be considered an acceptable bidder. A firm or corporation in which such an officer, employee, or holds or controls a substantial interest will not be considered an acceptable bidder. Contracts or purchases by the CONTRACTOR shall not be awarded or made to a supplier or manufacturer if the ENGINEER or ARCHITECT (firm or individual) who prepared the plans and specifications has a corporate or financial affiliation with the supplier or manufacturer. Bids will not be awarded to firms or corporations which are owned or controlled wholly or in part by a member of the governing body of the OWNER or to an individual who is such a member.

4.2 The OWNER's officers, employees, or agents shall not engage in the award of administration of this CONTRACT if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when: (a) the employee, officer or agent; (b) any member of their immediate family; (c) their partner or (d) an organization which employs, or is about to employ, any of the above has financial or interest in the CONTRACTOR. The OWNER's officers, employees or agents shall neither solicit nor accept gratuities, favors or anything of monetary value from the CONTRACTOR. The OWNER's officers, employees, or agents shall neither solicit nor accept gratuities, favors or anything of monetary value from the CONTRACTOR or subcontractor.

**5. Protection of Lives and Property**

5.1 In order to protect the lives and health of its employees under the CONTRACT, the CONTRACTOR shall comply with all pertinent provisions of the Occupational Safety and Health Administration (OSHA) and any State Safety and Health agency requirement.

5.2 The CONTRACTOR alone shall be responsible for the safety, efficiency, and adequacy of its plant, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation.

**6. Remedies**

6.1 Unless otherwise provided in this CONTRACT, all claims, counterclaims, disputes, and other matters in question between the OWNER and the CONTRACTOR arising out of or relating to this CONTRACT or the breach thereof will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State in which the OWNER is located.

6.2 The arbitration provisions of this section may be initiated by either party to this CONTRACT by filing with the other party and the ENGINEER/ARCHITECT a WRITTEN REQUEST for arbitration.

6.3 Each party to this CONTRACT will appoint one arbitrator; the two arbitrators will select a third arbitrator.

6.4 The arbitrators will select a hearing location as close to the OWNER's locale as possible.

6.5 The procedure for conducting the hearings will follow the Construction Industry Arbitration Rules of the American Arbitration Association.

**7. Gratuities**

7.1 If the OWNER finds after a notice and hearing that the CONTRACTOR, or any of the CONTRACTOR's agents or representatives, offered or give gratuities (in the form of entertainment, gifts, or otherwise), to any official, employee, or agent of the OWNER or State officials in attempt to secure this CONTRACT or favorable treatment in awarding, or making any determinations related to the performance of this CONTRACT, the OWNER may, by written notice to the CONTRACTOR, terminate this CONTRACT. The OWNER may also pursue other rights and remedies that the law or this CONTRACT provides. However, the existence of the facts on which the OWNER bases such findings shall be an issue and may be reviewed in proceeding sunder the Remedies clause of this CONTRACT.

7.2 In the event this CONTRACT is terminated as provided in paragraph 7.1 the OWNER may pursue the same remedies against the CONTRACTOR as it could pursue in the event of a breach of the CONTRACT by the CONTRACTOR. As a

## Supplemental General Conditions

penalty, in addition to any other damages to which it may be entitled by law, the OWNER may pursue exemplary damages in an amount (as determined by the OWNER) which shall be not less than three nor more than ten times the costs the CONTRACTOR incurs in providing any such gratuities to any such officer or employee.

### 8. **Audit and Access to Records**

For all negotiated contracts (except those of \$10,000 or less), the Comptroller General, the OWNER or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the CONTRACTOR, which are pertinent to the CONTRACT, for the purpose of making audits, examinations, excerpts and transcriptions. The CONTRACTOR shall maintain all required records for three years after final payment is made and all other pending matters are closed.

### 9. **Small, Minority and Women Businesses**

If the CONTRACTOR intends to let any subcontracts for a portion of the work, the CONTRACTOR shall take affirmative steps to assure that small, minority and women's businesses are used when possible as sources of supplies, equipment, construction, and services. Affirmative steps shall consist of: (1) including qualified small minority, and women's businesses on solicitation lists; (2) assuring that small, minority and women's businesses are solicited whenever they are potential sources; (3) dividing total requirements, when economically feasible, into small tasks or quantities to permit maximum participation of small minority, and women's businesses; (4) establishing delivery schedule, where the requirements of the work permit, which will encourage participation by small, minority and women's businesses; (5) using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the U. S. Department of Commerce; (6) requiring each party to a subcontract to take the affirmative steps of this section; and (7) CONTRACTORS are encouraged to procure goods and services from labor surplus area firms.

### 10. **Anti-kickback**

The CONTRACTOR shall comply with the Copeland Anti-Kickback Act (18 USC 874) as supplemented in Department of Labor regulations (29 CFR, Part 3). This act provides that each CONTRACTOR shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public facilities, to give up any part of the compensation to which they are otherwise entitled. The OWNER shall report all suspected or reported violations.

### 11. **Violating Facilities**

Where this CONTRACT exceeds \$100,000 the CONTRACTOR shall comply with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C.

1368), Executive Order 11738, and Environmental Protection Agency regulations 40 CFR Part 15 which prohibits the awarding of non-exempt federal contracts, grants, or loans to facilities included on EPA's list of violating facilities. The CONTRACTOR will report violations to the OWNER.

**12. State Energy Policy**

The CONTRACTOR shall comply with the Energy Policy and Conservation Act (P.L. 94-163). Mandatory standards and policies relating to energy efficiency, contained in the State Energy Conservation Plan, shall be utilized.

**13. Equal Opportunity Requirements**

13.1 For all Contracts in excess of \$10,000 the CONTRACTOR shall comply with Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR Part 60).

13.2 The CONTRACTOR will execute the "Compliance Statement Regarding State and Federal Standards Provisions."

13.3 The CONTRACTOR's compliance with Executive Order 11246 shall be based on its implementation of the Equal Opportunity Clause, specific affirmation action obligations required by the Standard Federal Equal Employment Opportunity Construction Contract Specifications, as set forth in 41 CFR Part 60-4 and its efforts to meet the goals established for the geographical area where the CONTRACT is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the CONTRACT, and in each trade, and the CONTRACTOR shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the CONTRACTOR's goals shall be a violation of the CONTRACT, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

13.4 The CONTRACTOR shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the CONTRACT resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the CONTRACT is to be performed.

**14. Substitutions**

14.1 Requirements regarding "Substitutions" as described in paragraph 8 of the General Conditions shall be modified by adding the following:

14.2 Information on any requests for substitutions shall be submitted to the ENGINEER and must be approved in writing by the ENGINEER prior to the bid date. Substitutions not so approved will not be allowed.

**15. Deductions from Estimates**

With reference to Paragraph 3 of these Supplemental General Conditions, when computing the total estimate to date, 20 percent shall be deducted from unit prices on pipe when pressure testing, bacteriological testing, and rough cleanup work is not completed and 10 percent shall be deducted when only rough cleanup work is lacking. The ENGINEER may not require these deductions if the work is progressing in an organized, systematic, and expeditious manner.

**16. Additional Insurance Requirements and Summary**

16.1 In addition to the coverages listed in Paragraph 21 "Insurance," the CONTRACTOR shall also secure Explosion, Collapse, and Underground (XCU) coverage in the amounts listed herein for other liability coverages. The CONTRACTOR shall also obtain Products and Completed Operations Insurance for the term of the contract and warranty periods. CONTRACTOR's vehicle coverage in the amount specified herein for other liability coverages shall include "any auto" used on the project.

16.2 The CONTRACTOR's liability insurance shall be a total coverage in an amount such that the sum of the underlying coverage and the umbrella coverage shall total \$2,000,000 each occurrence and \$2,000,000 aggregate. A summary of insurance coverages and minimum amounts required is presented below (also see General Conditions, Paragraph 21 for further details of coverage requirements):

General public liability:	
Bodily injury	\$500,000
Property Damage	\$200,000
Personal Injury	\$500,000
Vehicle, "Any Auto"	\$500,000 / \$200,000
Explosion, Collapse & Underground	\$500,000 / \$200,000
Products and Completed Operations	Total Contract Amt.
"All Risks" Builders' Risk Insurance	Total Contract Amt.
Excess Liability Umbrella Coverage	Amt required for sum of general liability and umbrella to equal minimum of \$2,000,000
Workmen's Compensation	As req'd by Kentucky statutes

16.3 The CONTRACTOR's Certificate of Insurance acceptable to the OWNER shall be delivered to the OWNER with the executed Agreement, Performance Bond and Payment Bond according to the timetable described on Page 2 of the Information for Bidders. The OWNER shall not be required to execute the Contract and proceed with the project until an acceptable insurance certificate is delivered to the OWNER. If the Certificate of Insurance as specified is not delivered to the OWNER within 10 calendar days from the date when the Notice of Award is delivered to the Bidder, the OWNER may consider the Bidder in default, in which case the Bid Bond shall become the property of the OWNER.

16.4 The Certificate of Insurance shall include positive statements regarding Explosion, Collapse, and Underground Coverage and Products and Completed Operations coverage as specified above and all other coverages required in the General Conditions and Supplemental General Conditions. If any insurance coverage expires during the term of the Contract or warranty period the CONTRACTOR shall deliver to the OWNER a new Certificate of Insurance as specified prior to the expiration date of the former policy. The cancellation clause on the Certificate of Insurance shall be worded as shown on the sample certificate on the next page and the OWNER shall be listed as an "Additional Named Insured."

16.5 The insurance shall cover all OWNER-furnished materials and equipment stored at the Site or at another location prior to being incorporated in the Work and accepted by OWNER.

**17. Bid Bonds**

17.1 A certified check or cash in the amount of 5 percent of the total bid may be used in lieu of a bond from a surety company; however, an "Official" check is not an acceptable substitute. Throughout these Contract Documents, the term BID BOND shall be defined so as to include the certified check or cash, where such security is used in lieu of a bond from a surety company.

17.2 If the BIDDER fails to execute and deliver the Agreement, Performance Bond, Payment Bond, and Certificate of Insurance acceptable to the OWNER within 10 days from the date when the NOTICE OF AWARD is delivered to the BIDDER, the OWNER may consider the BIDDER in default. In this case the BID BOND accompanying the proposal shall become the property of the OWNER.

**18. Execution of Performance and Payment Bonds**

The Attorney-in-Fact that executes Performance and Payment Bonds for the Surety must be a resident of the Commonwealth of Kentucky. Otherwise, the bonds must be co-signed by an agent with residence in Kentucky who has Power of Attorney from the Surety.

## Supplemental General Conditions



# CERTIFICATE OF LIABILITY INSURANCE

 DATE (MM/DD/YYYY)  
MM/DD/20YY

<b>PRODUCER</b> Insurance Agent/Broker Name Insurance Agent/Broker Street Address or P.O. Box Insurance Agent/Broker City, State & Zip Code Contact & Phone Number		<b>THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.</b>	
<b>INSURED</b> Contractor Name Contractor Street Address or P.O. Box Contractor City, State & Zip Code		<b>INSURERS AFFORDING COVERAGE</b>	<b>NAIC #</b>
		INSURER A: Name of Insurance Company	NAIC#
		INSURER B: Name of Insurance Company (if applicable)	NAIC#
		INSURER C: Name of Insurance Company (if applicable)	NAIC#
		INSURER D: Name of Insurance Company (if applicable)	NAIC#
		INSURER E: Name of Insurance Company (if applicable)	NAIC#

## COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.							
INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	<input checked="" type="checkbox"/>	<b>GENERAL LIABILITY</b> <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> INCLUDES XCU COVERAGE <input type="checkbox"/> _____ GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC	Policy #	Effective Date	Expiration Date	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$100,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$500,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$1,000,000 \$	
A	<input checked="" type="checkbox"/>	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> _____	Policy #	Effective Date	Expiration Date	COMBINED SINGLE LIMIT (Each Occurrence) \$500,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$	
A	<input type="checkbox"/>	<b>GARAGE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> _____				AUTO ONLY - EA ACCIDENT \$ OTHER THAN EA ACC \$ AUTO ONLY: AGG \$	
A	<input checked="" type="checkbox"/>	<b>EXCESS/UMBRELLA LIABILITY</b> <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> RETENTION \$_____	Policy #	Effective Date	Expiration Date	EACH OCCURRENCE \$1,000,000 AGGREGATE \$1,000,000 \$ \$ \$	
A	<input checked="" type="checkbox"/>	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below	Policy #	Effective Date	Expiration Date	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000	
	<input checked="" type="checkbox"/>	<b>OTHER</b> "ALL RISKS" BUILDER RISK OR INSTALLATION FLOATER, AS APPLICABLE	Policy #	Effective Date	Expiration Date		MINIMUM OF CONTRACT AMOUNT
<b>DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS</b> "PROJECT NAME" Certificate holder is also additional insured.							

## CERTIFICATE HOLDER

 Owners Name  
 P. O. Box 10180  
 Bowling Green, KY 42102

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE INSURER AFFORDING COVERAGE WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

**19. Guarantee**

19.1 The following shall be added to Paragraph 29 of the General Conditions, "Guarantee":

19.2 When a failure of the CONTRACTOR's work creates an emergency which threatens service to the OWNER's customers and, in the opinion of the OWNER, the CONTRACTOR's forces cannot be mobilized in a timely fashion, the OWNER may perform Warranty work. Work may also be performed by the OWNER under the above conditions prior to commencement of the warranty period. The CONTRACTOR shall pay the OWNER for the actual cost of all such work.

**20. Subcontractors, Suppliers and Others**

The CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization (including those who are to furnish the principal items of materials and/or equipment) against whom the OWNER or ENGINEER may have reasonable objection. The CONTRACTOR shall deliver a list of all such Subcontractors, Suppliers, or other persons or organizations for acceptance by the OWNER and ENGINEER at least twenty (20) days prior to their being employed on the Project. Said list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each name listed. The CONTRACTOR shall supply any additional information regarding those named on said list that may be requested by the OWNER or ENGINEER. Acceptance of or objection to any Subcontractor, Supplier, or other person or organization shall be forwarded to the CONTRACTOR in writing within 10 days of receipt of said list by the OWNER or ENGINEER. If there are written objections, the CONTRACTOR shall then submit substitute names for acceptance.

No acceptance by the OWNER or ENGINEER of any Subcontractor, Supplier, or other person or organization shall constitute a waiver of any right of the OWNER or ENGINEER to reject defective work or to object to such party after further investigation or unacceptable performance.

**21. Progress Payment Subcontractors and Suppliers Release of Liens**

21.1 With each partial payment estimate the CONTRACTOR shall submit to the ENGINEER a "Progress Payment Subcontractors and Suppliers Release of Lien" on the forms provided by the ENGINEER. The purpose of the releases of lien is to indicate to the OWNER that the CONTRACTOR has paid for all subcontracted work, equipment rental, supplies and/or materials (either stored or installed) that were included on the previous partial payment estimate. A separate release form shall be executed by an authorized representative of each subcontractor or supplier that had items included for payment on the previous estimate.

21.2 If the CONTRACTOR fails to provide clear release(s) of lien, the OWNER may proceed with either of the alternatives set forth in the General Conditions, Section 19.6.

**22. Termination of Contractor's Services**

In regard to Paragraph 18.2 of the General Conditions, the OWNER may terminate the services of the CONTRACTOR, take possession of the project, and finish the work by whatever method the OWNER may deem expedient. The reasons for such action by the OWNER are listed in the first sentence of said Paragraph 18.2 and each reason separated by the conjunction "or" shall be considered independent of the others, therefore it is not necessary for one of the reasons listed to occur in combination with any other reason listed for the OWNER to rightfully take such action.

**23. Independent Contractor**

Throughout the term of the contract and the specified warranty period the CONTRACTOR is and shall be considered an independent contractor and as such, is not an agent of the OWNER.

**24. Required Documents for Processing Final Payment and Disbursement of Payment**

When the project is completed the CONTRACTOR shall execute the following documents:

24.1 Final Estimate shall be prepared and submitted in accordance with the General Conditions, Section 19 and Supplemental General Conditions Section 3.

24.2 Prior to Disbursement of Final Payment the CONTRACTOR shall provide a "Certification of Release of Contractors Liens" as set forth on page SGC-12 of the Supplemental General Conditions and as called for in the General Conditions, Section 19.6 Payment to Contractor.

24.3 "Warranty Agreement" as set forth on Page SGC-13 of the Supplemental General Conditions and as called for in the General Conditions, Section 29 Guaranty.

24.4 "Certification of Receipt of Final Payment" as set forth on page SGC-14 of the Supplemental General Conditions shall be executed by the CONTRACTOR upon receipt of payment.

24.5 In addition to the above the CONTRACTOR shall provide for contract closeout purposes all other information, documentation, and/or certifications as may be required by any agency involved with the project including the OWNER. It shall be the CONTRACTOR's responsibility to determine from the OWNER and execute any and all such documents that may be required prior to submitting Final Estimate.

**25. Wage Rates**

Prevailing wage rates as issued by the Kentucky Department of Labor **are NOT required** on this Contract.

**26. American Iron and Steel**

American Iron and Steel compliance **is NOT required** on this Contract.



**NOTICE OF AWARD**

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Description: **Alvaton Area Capacity Improvements.**

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated September 23, 2025 and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \_\_\_\_\_

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND, and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this \_\_\_\_ day of \_\_\_\_\_, 2025.

Owner: Warren County Water District

By: \_\_\_\_\_  
Jacob Cuarta

Title: General Manager

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE OF AWARD is hereby acknowledged by \_\_\_\_\_ this the \_\_\_\_ day of \_\_\_\_\_, 2025.

By: \_\_\_\_\_ Title: \_\_\_\_\_



## **AGREEMENT**

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_ 2025, by and between Warren County Water District, hereinafter called "OWNER" and \_\_\_\_\_, doing business as a Kentucky (Corporation, limited liability company,) hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements herein after mentioned:

1. The CONTRACTOR will commence and complete the Alvaton Area Capacity Improvements.

2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the PROJECT described herein.

3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within 10 calendar days after the date of the NOTICE TO PROCEED and will fully complete the same within     calendar days unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$ \_\_\_\_\_ or as shown in the BID schedule.

5. The term "CONTRACT DOCUMENTS" means and includes the following:

- (A) Advertisement for Bids
- (B) Information for Bidders
- (C) Bid
- (D) Bid Bond
- (E) Compliance Statement
- (F) Affidavit for Bidders Claiming Resident Bidder Status
- (G) General Conditions
- (H) Supplemental General Conditions
- (I) Notice of Award
- (J) Agreement
- (K) Performance Bond
- (L) Payment Bond
- (N) Notice to Proceed
- (O) Detailed Specifications prepared or issued by: Warren County Water District dated September 24, 2025.
- (P) Drawings prepared by: Warren County Water District.
- (Q) Addenda:
  - No.    , dated           .
  - No.    , dated           .

Agreement

No. \_\_, dated \_\_\_\_\_.  
(R) Change Order(s)

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.
7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed or caused to be executed by their duly authorized official, this Agreement in two (2) copies each of which shall be deemed an original on the date first above written.

OWNER:

\_\_\_\_\_  
Warren County Water District

By: \_\_\_\_\_

Name: Jacob Cuarta

Title: General Manager

(SEAL)

Attest:

\_\_\_\_\_  
Name: \_\_\_\_\_

\_\_\_\_\_  
Title: \_\_\_\_\_

CONTRACTOR:

\_\_\_\_\_  
By: \_\_\_\_\_

Name \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_  
Employer Identification No. \_\_\_\_\_

(SEAL)

Attest:

\_\_\_\_\_  
Name: \_\_\_\_\_

\_\_\_\_\_  
Title: \_\_\_\_\_

**PERFORMANCE BOND**

KNOW ALL PERSONS BY THESE PRESENTS: that

\_\_\_\_\_  
(NAME OF CONTRACTOR)

\_\_\_\_\_  
(ADDRESS OF CONTRACTOR)

a \_\_\_\_\_, hereinafter called  
(Corporation, Partnership, or Individual)

Principal, a \_\_\_\_\_  
(NAME OF SURETY)

\_\_\_\_\_  
(ADDRESS OF SURETY)

hereinafter called Surety, are held and firmly bound unto

\_\_\_\_\_  
Warren County Water District  
(NAME OF OWNER)

\_\_\_\_\_  
P. O. Box 10180, 523 US 31W Bypass, Bowling Green, KY 42102-4780  
(ADDRESS OF OWNER)

hereinafter called OWNER, in the total aggregate penal sum of \_\_\_\_\_  
(\$\_\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the \_\_\_\_ day of \_\_\_\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

\_\_\_\_\_  
Alvaton Area Capacity Improvements

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the SURETY and during the one year guaranty period

## Performance Bond

and if the PRINCIPAL shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that the said SURETY, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that it is expressly agreed that the BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the Contract not increasing the contract price more than 20 percent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND, and whether referring to this BOND, the Contract or the Loan Documents shall include any alteration, addition, extension, or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the PRINCIPAL shall abridge the right of the other beneficiary hereunder, whose claim may be unsatisfied. The OWNER is the only beneficiary hereunder.

IN WITNESS WHEREOF, this instrument is executed in three counterparts, each one of which shall be deemed an original, this the \_\_\_\_ day of \_\_\_\_\_ . \_\_\_\_\_.

ATTEST:

\_\_\_\_\_  
(Principal) Secretary

(SEAL)

\_\_\_\_\_  
Principal

By: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Witness as to Principal)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Address)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Surety)

ATTEST:

\_\_\_\_\_  
Witness to Surety

\_\_\_\_\_  
Attorney-in-Fact

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Address)

\_\_\_\_\_

\_\_\_\_\_

NOTE: Date of BOND must not be prior to date of Contract.

If CONTRACTOR is partnership, all partners should execute BOND.

**IMPORTANT:** Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located.



**PAYMENT BOND**

KNOW ALL PERSONS BY THESE PRESENTS: that

\_\_\_\_\_  
(NAME OF CONTRACTOR)

\_\_\_\_\_  
(ADDRESS OF CONTRACTOR)

a \_\_\_\_\_, hereinafter called  
(Corporation, Partnership, or Individual)

Principal, a \_\_\_\_\_  
(NAME OF SURETY)

\_\_\_\_\_  
(ADDRESS OF SURETY)

hereinafter called Surety, are held and firmly bound unto

\_\_\_\_\_  
Warren County Water District  
(NAME OF OWNER)

\_\_\_\_\_  
P. O. Box 10180, 523 US 31W Bypass, Bowling Green, KY 42102-4780  
(ADDRESS OF OWNER)

hereinafter called OWNER and unto all persons, firms, and corporations who or which may furnish labor, or who furnish materials to perform as described under the CONTRACT and to their successors and assigns in the total aggregate penal sum of \_\_\_\_\_ (\$\_\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the PRINCIPAL entered into a certain CONTRACT with the OWNER, dated the \_\_\_\_ day of \_\_\_\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

\_\_\_\_\_  
Alvaton Area Capacity Improvements

NOW, THEREFORE, if the PRINCIPAL shall promptly make payment to all persons, firms, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such CONTRACT, and any authorized extensions or modifications thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in

## Payment Bond

connection with the construction of such WORK, and for all labor cost incurred in such WORK including that by a SUBCONTRACTOR, and to any mechanic or materialman lienholder whether it acquires its lien by operation of State or Federal law; then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, that beneficiaries or claimants hereunder shall be limited to the SUBCONTRACTORS, and persons, firms, and corporations having a direct contract with the PRINCIPAL or its SUBCONTRACTORS.

PROVIDED, FURTHER, that the said SURETY for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the CONTRACT or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no suit or action shall be commenced hereunder by any claimant: (a) Unless claimant, other than one having a direct contract with the PRINCIPAL shall have given written notice to any two of the following: The PRINCIPAL, the OWNER, or the SURETY above named within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials of which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the PRINCIPAL, OWNER, or SURETY, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer. (b) After the expiration of one (1) year following the date of which PRINCIPAL ceased work on said CONTRACT, is being understood, however, that if any limitation embodied in the BOND is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

PROVIDED, FURTHER, that it is expressly agreed that this BOND shall be deemed amended automatically and immediately, without formal and separate amendments hereto, upon amendment to the CONTRACT not increasing the CONTRACT price more than 20 percent, so as to bind the PRINCIPAL and the SURETY to the full and faithful performance of the CONTRACT as so amended. The term "Amendment", wherever used in this BOND and whether referring to this BOND, the CONTRACT or the loan Documents shall include any alteration, addition, extension or modification of any character whatsoever.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three counterparts, each one of which shall be deemed an original, this the \_\_\_\_ day of \_\_\_\_\_ . \_\_\_\_\_.

ATTEST:

\_\_\_\_\_  
(Principal) Secretary

(SEAL)

\_\_\_\_\_  
Principal

By: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Witness as to Principal)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Address)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Surety)

ATTEST:

\_\_\_\_\_  
Witness to Surety

\_\_\_\_\_  
Attorney-in-Fact

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Address)

\_\_\_\_\_

\_\_\_\_\_

NOTE:        Date of BOND must not be prior to date of Contract.

If CONTRACTOR is partnership, all partners should execute BOND.

**IMPORTANT:**        Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the Project is located.



**NOTICE TO PROCEED**

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DATE: \_\_\_\_\_

PROJECT: Alvaton Area Capacity Improvements

You are hereby notified to commence WORK in accordance with the Agreement dated \_\_\_\_\_, on or before \_\_\_\_\_. You are **to** fully complete the WORK within 210 consecutive calendar days thereafter. The date of completion of all WORK is therefore \_\_\_\_\_  
2026.

Owner: Warren County Water District

By: \_\_\_\_\_  
Jacob Cuarta

Title: General Manager

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE TO PROCEED is hereby acknowledged

by \_\_\_\_\_

\_\_\_\_\_

this the \_\_\_ day of \_\_\_\_\_, 2025

By: \_\_\_\_\_

Title: \_\_\_\_\_

Employer Identification

Number: \_\_\_\_\_



**CERTIFICATION OF RELEASE OF CONTRACTOR LIENS**

This is to certify that ( \_\_\_\_\_ ) has paid all debts for materials, supplies, labor, and subcontractors relative to the work which was performed on Alvaton Area Capacity Improvements for Warren County Water District under a Contract dated \_\_\_\_.

The only exceptions are those listed below. If there are no exceptions, write in "None".

<b><u>NAME</u></b>	<b><u>DOLLAR AMOUNT</u></b>
1. _____	\$ _____
2. _____	\$ _____
3. _____	\$ _____
4. _____	\$ _____

We further certify that to the best of our knowledge there are no litigations either in process or pending in connection with the subject work with the following exceptions. If there are no exceptions, write in "None".

1. \_\_\_\_\_

2. \_\_\_\_\_

We further certify that this work was performed in strict conformance with the Drawings, Specifications, and Contract.

DATE: \_\_\_\_\_ BY: \_\_\_\_\_

State of Kentucky  
County of \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public in and for the State of Kentucky at Large, do hereby certify that the foregoing certification from \_\_\_\_\_ was duly produced before me on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
NOTARY PUBLIC, STATE OF KENTUCKY

My Commission Expires: \_\_\_\_\_



## **WARRANTY AGREEMENT**

It is hereby agreed on this \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_, that the Warranty Period for the work performed on Alvaton Area Capacity Improvements. Contract dated \_\_\_\_\_, 20 \_\_\_\_, with Warren County Water District shall end at midnight on \_\_\_\_\_, 20 \_\_\_\_.

\_\_\_\_\_  
BY: \_\_\_\_\_

WARREN COUNTY WATER DISTRICT

BY: \_\_\_\_\_

State of Kentucky  
County of \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public in and for the State of Kentucky at Large, do hereby certify that the foregoing certification from \_\_\_\_\_ was duly produced before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC, STATE OF KENTUCKY

My Commission Expires: \_\_\_\_\_

State of Kentucky  
County of \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public in and for the State of Kentucky at Large, do hereby certify that the foregoing certification from \_\_\_\_\_ was duly produced before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC, STATE OF KENTUCKY

My Commission Expires: \_\_\_\_\_



**CERTIFICATION OF RECEIPT OF FINAL PAYMENT**

This is to certify that as of \_\_\_\_\_, 20\_\_\_\_, ( \_\_\_\_\_ ) has accepted full and final payment for all work performed on Alvaton Area Capacity Improvements, Contract dated \_\_\_\_\_, 20\_\_\_\_, with Warren County Water District. (OWNER) and having done so, has released the OWNER in accordance with Section 20 of the General Conditions.

\_\_\_\_\_  
BY: \_\_\_\_\_

State of Kentucky  
County of \_\_\_\_\_

I, the undersigned, a Notary Public in and for the State of Kentucky, do hereby certify that the above Certification from \_\_\_\_\_ was on this day sworn before me and acknowledged by him to be a free act and deed.

Witness my hand this \_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: \_\_\_\_\_



**SECTION 1**  
**GENERAL SCOPE AND SPECIAL PROVISIONS**

1. Scope

The instructions and information set out in the paragraphs of the Detailed Specifications shall supersede the instructions and information set out in the Information for Bidders, General Conditions, and Supplemental General Conditions if and when differences occur.

2. Shop Drawings, Product Data, and Samples

Shop drawings, product data, and samples as discussed in Paragraph 5 of the General Conditions shall be furnished by the CONTRACTOR to the ENGINEER. Unless otherwise set out, all shop drawings shall be furnished in five copies. It shall be clearly understood by the CONTRACTOR that the ENGINEER will examine the shop drawings for general design only, and that his approval stamped on such drawings shall be approval only for general design, and the CONTRACTOR shall in all cases be held responsible for detailed dimensions. In case of discrepancy between the shop drawings and the requirements of the Drawings, Specifications, and Contract Documents, the provisions of the Drawings, Specifications, and Contract Documents shall prevail even though the shop drawings have been approved by the ENGINEER, unless the conflict therein has been specifically waived in writing by a Change Order.

3. Owner's Right to Carry Out the Work

If the CONTRACTOR defaults or neglects to carry out the work in accordance with the Contract Documents and fails within ten days after receipt of written notice from the OWNER to commence and continue correction of such default or neglect with diligence and promptness, the OWNER may, (without prejudice to any other remedy he may have) make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the CONTRACTOR the cost of correcting such deficiencies. If the payments then or thereafter due the CONTRACTOR are not sufficient to cover such amount, the CONTRACTOR shall pay the difference to the OWNER.

4. Execution and Coordination of the Work

4.1 It is intended that the work covered by this Contract be done so as to cause the minimum amount of interference with traffic and/or existing utilities. The CONTRACTOR will be required to organize and schedule his work so as to keep the existing facilities in full operation during the construction period insofar as is consistent with the nature of the construction work to be performed. The manner in which shutdowns will be made and the work schedule of the CONTRACTOR during shutdowns will be subject to the approval of the OWNER. The CONTRACTOR shall schedule a proposed shutdown with the OWNER at least three days prior to the outage. All shutdowns shall be made by employees of the OWNER. Although every effort will be made to cause the minimum amount of interference with the CONTRACTOR's work, the interest of the OWNER in regard to the existing facilities must always take precedence over the construction work. Therefore, the right is

## General Scope and Special Provisions

reserved by the OWNER to put any lines or other facilities (that may be shut down for the construction work) back into service when an emergency arises.

- 4.2 The work on the project shall be scheduled so as to expedite service to new customers. The CONTRACTOR shall install meters and perform testing as each section of new water main is constructed. Water lines or sections of lines thus completed shall be placed in service while work proceeds on other lines or sections.
- 4.3 Following installation of the pipeline, "rough cleanup" work shall be performed. This shall consist of grading the trench to create a neat, low mound of backfill material and disposing of any excavated material, rubbish, etc. (See Section 3, Paragraph 21 and Section 7 Paragraph 13) Crushed stone shall be added to driveways where necessary and fences repaired to the satisfaction of the property owners. After trenches have had adequate time to settle, final grade work and seeding shall be performed as described in Section 3, Paragraph 22 and Section 7 Paragraph 14.

### 5. Progress Schedule, Construction Records, and Reports

- 5.1 The CONTRACTOR shall furnish the OWNER with proof that all payrolls for services rendered and invoices for materials supplied have been duly paid as herein required, and such other data as the OWNER may require.
- 5.2 The CONTRACTOR shall furnish (and keep current) a suitable progress chart or schedule showing the estimated (and actual) progress on the work. The progress chart or schedule shall be subject to the approval of the ENGINEER.
- 5.3 The CONTRACTOR shall furnish all the necessary information for and prepare the partial payment estimates on forms approved by the ENGINEER.
- 5.4 The OWNER, or his authorized representatives and agents, shall be permitted to inspect all payrolls, records of personnel, invoices of materials, and other relevant data and records.

### 6. Lines and Grades

- 6.1 The CONTRACTOR shall be held totally responsible for construction of the work according to the lines and grades shown on the Drawings. The CONTRACTOR shall also ensure that the work is constructed in proper relation to proposed highway construction where applicable.
- 6.2 The CONTRACTOR shall furnish all labor, equipment, stakes, and grade boards. The CONTRACTOR also shall be required to furnish equipment and aides when required by the ENGINEER in checking lines and grades. The labor and equipment shall be available to the ENGINEER on call, and the labor shall be fully capable of performing the duties of rodman and/or chainman.

### 7. Access to and Inspection of the Work

Representatives of the OWNER shall at all time have full access for inspection of the work and the CONTRACTOR shall provide proper facilities for such access and inspection.

8. Work on Private Property

- 8.1 In connection with work performed on private property, the CONTRACTOR shall take every precaution to avoid damage to the property owners' buildings, grounds, and facilities. Fences, hedges, shrubs, etc., within the construction limits shall be removed carefully, preserved, and replaced when the Construction is completed in accordance with the requirements set out hereinafter in these specifications. When construction is completed, the private property owner's facilities and grounds shall be restored to as good (or better) condition than found as quickly as possible at the CONTRACTOR's expense. The OWNER reserves the right to require the CONTRACTOR to obtain a signed Release from each property owner affected by the work. Said Release shall indicate that the property owner is satisfied with the restoration of his land. However, the execution of such a release shall not relieve the CONTRACTOR from any of his contractual obligations or other claims that may arise at a later date. The widths of construction easements obtained by the OWNER from property owners is normally 15 feet each side of the pipeline and the CONTRACTOR shall confine his activities to the area within the limits of the easements unless specific permission is obtained by the CONTRACTOR from property owners.
- 8.2 Large trees, or other facilities within the actual construction limits that cannot be preserved and replaced shall be removed by the CONTRACTOR but the OWNER will assume the responsibility for settling with the property owner for the loss of said trees or facilities. However, trees and facilities for which the OWNER has made such settlement will be designated on the Drawings and the CONTRACTOR shall be solely and entirely responsible for any damage to trees and facilities not so designated.
- 8.3 All trees and brush cleared along the route of the pipeline shall be disposed of by the CONTRACTOR in a manner suitable to the ENGINEER and property owner. If such trees and brush are left on the property the CONTRACTOR shall obtain a release for same from the property owner.

9. Traffic Control and Work in Highway Rights of Way

- 9.1 The CONTRACTOR shall (before beginning work on any public highway right-of-way) make arrangements for maintaining the traffic on said highways and/or roadways, or rerouting traffic as may be required. The applicable regulations of the Kentucky Transportation Cabinet, Department of Highways (KDOH) must be followed in this regard.
- 9.2 The CONTRACTOR shall furnish proper equipment which shall be available at all times for maintaining streets and roads upon which work is being performed. All such streets and roads shall be maintained suitable for traffic until complete and final acceptance of the work.
- 9.3 When the CONTRACTOR is cutting across a street or highway, he is to cut half of the street at one time, lay the pipe, and complete the backfilling operation so that traffic may pass over this trench before the opening of the trench for the other half of the street or highway. In lieu of the above, bridging of the trench may be required. The time and method of making these crossings shall be approved by the

## General Scope and Special Provisions

ENGINEER, and the agency or legal entity having responsibility for the maintenance of the street or highway.

- 9.4 The CONTRACTOR shall be responsible for erecting signs, providing flagmen, providing any other such items, and performing all work as required by KDOH regulations, the KDOH permit granted to the OWNER for construction of this specific project, and/or regulations of other agencies having jurisdiction over the right-of-way.
- 9.5 The CONTRACTOR shall plan his operations so as to cause a minimum of inconvenience to property owners and to traffic. No road, street or alley may be closed unless absolutely necessary, and then only if the following conditions are met:
  - 9.5.1 Permit is secured from appropriate, State, County or Municipal authorities having jurisdiction.
  - 9.5.2 Fire and Police Departments are notified before road is closed.
  - 9.5.3 Suitable detours are provided and are clearly marked.
- 9.6 No driveways shall be cut or blocked without first notifying the occupants of the property. Every effort shall be made to schedule the blocking of drives to suit to occupants' convenience, and except in case of emergency, drives shall not be blocked for a period of more than 8 hours.

### 10. Shoring, Sheet piling, and Bracing of Excavations

- 10.1 Where unstable material is encountered or where the depth of excavation warrants it, the sides of the trench or excavation shall be supported by substantial sheet piling, bracing, and shoring, or the sides sloped to the angle of repose. The design and installation of all sheet piling, sheet piling, bracing, and shoring shall be based on computations of pressure exerted by the materials to be retained under existing conditions. Adequate and proper shoring of all excavations and safety of workmen shall be the entire responsibility of the CONTRACTOR; however, the OWNER may require the submission of shoring drawings (accompanied by supporting computations) for approval prior to the CONTRACTOR undertaking any portion of the work.
- 10.2 Foundations, adjacent to where the excavation is to be made below the depth of the foundation, shall be supported by shoring, bracing, or underpinning as long as the excavation shall remain open and the CONTRACTOR shall be held strictly responsible for any damage to said foundations.
- 10.3 Care shall be taken to avoid excessive backfill loads on the completed pipe lines and the requirements regarding the width of the ditch as specified herein be strictly observed.
- 10.4 Trench sheet piling shall not be removed until sufficient backfill has been placed to protect the pipe.

- 10.5 All sheeting, planking, timbering, bracing, and bridging, shall be placed, renewed, and maintained, as long as is necessary. Sheeting is not a pay item unless the CONTRACTOR is required and/or instructed by the OWNER to leave same in place.

11. Existing Utilities

- 11.1 Special precautions shall be taken by the CONTRACTOR to avoid damage to existing overhead and underground utilities owned and operated by the OWNER, or by other public or private utility companies.
- 11.2 With particular respect to existing underground utilities, all available information concerning their location has been shown on the Drawings. While it is believed that the locations shown are reasonably correct, the OWNER cannot guarantee the accuracy or adequacy of this information.
- 11.3 The location of buried telephone cable often differs from the preliminary information given the OWNER by phone companies and shown on the Drawings. Therefore, in order to construct a pipeline that is parallel to the highway right-of-way as specified, the CONTRACTOR may be required to cross buried telephone cable at various locations not indicated on the Drawings. The CONTRACTOR shall consider these crossings as incidental to the pipeline construction.
- 11.4 Before proceeding with the work, the CONTRACTOR shall confer with all public or private companies, agencies, or departments that own and operate utilities in the vicinity of the construction work. The purpose of the conference (or conferences) shall be to notify said companies, agencies, or departments of the proposed construction schedule, verify the location of, and possible interference with, the existing utilities that are shown on the Drawings, arrange for necessary suspension of service, and make arrangements to locate and avoid interference with all utilities (including house connections). The OWNER has no objection to the CONTRACTOR arranging for the said utilities companies, agencies, or departments to locate and uncover their own utilities; however, the CONTRACTOR shall bear the entire responsibility for locating and avoiding, or repairing damage to said existing utilities.
- 11.5 Where existing utilities or other underground structures are encountered, they shall not be displaced or molested unless necessary and then only with the approval of the respective owner. In such cases they shall be replaced in as good (or better) condition than found as quickly as possible. All such utilities that are so displaced or molested shall be replaced at the CONTRACTOR's expense.
- 11.6 Should it become necessary to provide additional guying or support of power, lighting, or telephone facilities, the CONTRACTOR shall consult with the authorities of these utilities so that suitable arrangements can be made for the protection of same.
- 11.7 All costs for temporary or permanent work necessary for the protection of utilities, private or public, shall be included in the contract amount to which the items of work pertain, or may be considered to be incidental thereto. In addition, the CONTRACTOR shall be responsible for any damage to the existing utilities resulting from the construction operations and shall bear the cost of all repair or replacement necessary for correction.

## General Scope and Special Provisions

- 11.8 It is expected that the CONTRACTOR will be diligent in his efforts and use every possible means to locate existing utilities. Any claims for unavoidable damage, based on improper or unknown locations, will be examined thoroughly in the light of the CONTRACTOR's efforts to locate the said utilities or obstructions prior to beginning construction.

### 12. Utilities Required by CONTRACTOR

All electrical current and/or any utility service required by the CONTRACTOR shall be furnished at his own expense except as noted hereinafter.

### 13. Supervision of Installation

All special equipment or materials shall be installed under the supervision of a qualified installation engineer and/or representative furnished by the manufacturer of such equipment or materials.

### 14. Execution of the Contract

The construction Contract and the Performance Bonds shall be executed within the time specified in the Information for Bidders and in at least three (3) copies.

### 15. Permits, Codes, Etc.

Unless otherwise set out in the Specifications or required by the agencies involved, the CONTRACTOR shall make application for, obtain, and pay for all licenses and permits, and shall pay all fees and charges in connection therewith. The CONTRACTOR shall be required to comply with all state or municipal ordinances, laws, and/or codes insofar as the same is binding upon the OWNER.

### 16. Cleaning up and Removal of Rubbish

16.1 The CONTRACTOR shall at all times keep the premises free from accumulations of waste materials or rubbish caused by his employees or work and shall keep the work site in a clean and useable condition satisfactory to the ENGINEER. The CONTRACTOR shall direct his forces to promptly clean up streets, sidewalks, drainage channels, or private property, affected by his construction operations, when in the opinion of the ENGINEER such clean up is needed. At the completion of the work the CONTRACTOR shall remove all his rubbish from and about the site of the work and all of his tools, equipment, and surplus materials.

16.2 The Contract shall not be considered complete until all construction structures, equipment and rubbish from construction are cleaned from the site of the work. All damage to existing paving, grounds, and structures caused by the CONTRACTOR's operations must be repaired or the owners compensated for such damage before the contract will be considered complete. This includes the removal of rock from blasting (1 1/2 inches or larger in size), and the broom sweeping, or water removal, of dirt from pavement.

### 17. Items Deleted and Quantity Changes

Detailed Specifications  
Section 1

The OWNER reserves the right to delete any bid item or in the case of unit price items, the OWNER may delete, reduce, or increase the quantities involved. BIDDERS shall be aware of this possibility and shall base their BIDS accordingly.



## **SECTION 2**

### **QUALITY ASSURANCE**

1. Approval of Testing Agencies and Reports

When in these Contract Documents inspection and testing services are required, bureaus, laboratories, and/or agencies selected for such inspection and testing shall be approved by the ENGINEER. If inspection and testing services are provided by the OWNER or are performed in accordance with Section 7.8 of the General Conditions, the OWNER shall select the laboratories and/or agencies for such inspection and testing.

2. Suitability of Materials and Test Reports

Where prior inspection and testing of materials is required, documentary evidence in the form of test reports, in the form and number required by the ENGINEER, shall be furnished prior to the time the material is incorporated into the work. All rejected material shall be removed promptly from the premises.

3. Governing Specifications

It is the intention of the ENGINEER in the preparation of these Specifications to define properly the kind and quality of materials to be furnished. The standards of the American Society of Testing Materials (ASTM); standards of the American Water Works Association (AWWA); or other such agencies may be referred to in the Specifications. Where such standards are referred to, said references shall be construed to mean the latest amended and/or revised versions of the said standard specifications. In the selection of samples and the routine testing of materials, the testing laboratory shall follow the standard procedure as outlined by the ASTM, unless otherwise set out.

4. Extent of Inspection and Testing Service

It is intended that materials of construction, particularly those upon which the strength and durability of the work may depend, shall be inspected and tested to establish conformance with specifications and suitability for uses intended. The following is a schedule showing the extent of testing, and requirements and methods of reporting. If it is found that this list does not cover all items that will require testing, then such materials shall be tested as directed by the ENGINEER.

5. Requirements and Methods of Reporting

In general, four copies of all test reports will be required with two copies to the CONTRACTOR, one to the ENGINEER, and one to the OWNER. All copies shall be forwarded to the ENGINEER.

6. Coarse Aggregate (Backfill and Surfacing)

Regarding coarse aggregates for use in backfill and surfacing, certifications, which state that the aggregates comply with the Specifications and give the gradation for each size used, will be required from the material supplier.

## Quality Assurance

### 7. Concrete (Kickers, Anchors, Encasement and Pavement)

The mix design and a certification that the concrete supplied for this project is designed for a 28 day compressive strength of 3,000 psi shall be submitted by the supplier.

### 8. Fine Aggregate (For Use In Cement Concrete)

Standard tests shall be made in advance of concreting by an approved independent laboratory per ASTM C33, Paragraphs 2, 3, 4, and 5, and ASTM C40 on each fine aggregate proposed to be used. Other tests being satisfactory, the aggregate may be used pending results of 28 day concrete strength tests.

### 9. Coarse Aggregate (For Use In Cement Concrete)

Standard tests shall be made in advance of concrete placement by an approved laboratory on each grading of each coarse aggregate proposed to be used per ASTM C33, Paragraphs 6, 7, 8, 9, 10, and 11.

### 10. Concrete Tests (For Concrete Used In Structures)

#### 10.1. Standard Slump Tests

Slump tests shall be made per ASTM C143. Not less than one such test shall be made for each 50 cubic yards of concrete placed at one operation.

#### 10.2. Concrete Control Tests

10.2.1 During the progress of the work and for each different mix of concrete, standard concrete cylinders shall be made and tested. The testing shall be done per ASTM C39, and ASTM C31 (Paragraphs 7a and 7c). When field curing will be used in lieu of, or supplementing laboratory curing, care shall be exercised to avoid mistreatment of the cylinders in the field and testing shall be the same as specified for laboratory cured samples.

10.2.2 Test cylinders shall be made from each day's pour at the frequency specified by ACI 318 with a maximum of two (2) from each batch or ready-mix truck load. The maximum requirement will be imposed only when the ENGINEER deems necessary due to wide fluctuations in the concrete quality. A minimum of three (3) cylinders will be required for each day's pour if the concrete is used in structures or otherwise in a load-carrying capacity.

10.2.3 Each cylinder shall be numbered and logged, so as to adequately identify the representative concrete in the structure. Where three (3) cylinders are made from each day's pour, one (1) cylinder shall be tested at 7 days and two (2) at 28 days. Where more than three (3) cylinders per day are required, the "break" schedule shall be as requested by ENGINEER.

### 11. Reinforcing Steel

Reinforcing steel shall undergo a field inspection for section, rust, shape, and dimensions, plus certified test report for heat number(s).

12. Ductile Iron Pipe

Each piece of pipe shall bear the manufacturer's name or trademark and the date manufactured. Each piece of pipe shall also be certified by the manufacturer to have met the requirements of the governing standard specifications. Manufacturer Certifications and test reports shall be forwarded to the ENGINEER. Also, each piece shall be visually inspected in the field for any defects and specification conformance.

13. C900 PVC Pipe for Water Mains

13.1 PVC pipe shall be marked in accordance with AWWA C900, current edition. PVC pipe shall be certified in accordance with NSF/ANSI 61/14, current edition. The manufacturer shall supply certifications indicating that all pipe to be supplied for the project meets the applicable Specification and Standard. This information shall be furnished to the ENGINEER with the shop drawings.

13.2 Each truckload of pipe delivered to the project shall be subject to whatever field measurements and tests deemed necessary by the OWNER. These tests may be conducted by the OWNER or his representative. The cost of field testing shall be the responsibility of the OWNER, but the cost of any pipe destroyed during such testing shall be the responsibility of the CONTRACTOR.

13.3 In addition to the requirements and specifications of AWWA C-900, all PVC pipe supplied under this Contract shall be concentric from spigot to bell. Any PVC pipe delivered to the project that fails this concentricity requirement will be rejected. The cost of replacement of rejected pipe shall be the responsibility of the CONTRACTOR.

14. PVC and PVC(MO) Pipe for Force Mains (Not Applicable to C905 PVC Pipe)

14.1 PVC or PVC (MO) pipe shall be marked in accordance with ASTM D-2241. PVC or PVC (MO) pipe shall be certified in accordance with NSF/ANSI 14 – 2012. The manufacturer shall supply certifications indicating that all pipe to be supplied for the project meets the applicable Specification and Standard. This information shall be furnished to the ENGINEER with the shop drawings.

14.2 The total quality system of the pipe manufacturer shall meet the requirements set forth in ISO/IEC 17025: 2005 and the pipe manufacturer shall be capable of maintaining the specified requirements of both the pipe and material. Pipe manufacturer compliance shall be required prior to approval of any shop drawings for PVC or PVC (MO) pipe.

14.3 Each truckload of pipe delivered to the project shall be subject to whatever field measurements and tests deemed necessary by the OWNER. These tests may be conducted by the OWNER or his representative. The cost of field testing shall be the responsibility of the OWNER, but the cost of any pipe destroyed during such testing shall be the responsibility of the CONTRACTOR.

14.4 In addition to the requirements and specifications of ASTM D-2241, all PVC pipe supplied under this Contract shall be concentric from spigot to bell. Any PVC pipe delivered to the project that fails this concentricity requirement will be rejected. The

## Quality Assurance

cost of replacement of rejected pipe shall be the responsibility of the CONTRACTOR.

### 15. Testing Water Lines

- 15.1 Water lines shall be tested at a pressure equal to the rated working pressure of the pipe for a period of four hours. Line segments between gate valves shall be tested separately. During the duration of the test, the line segment shall display leakage not exceeding ten gallons per day per inch of pipe diameter per mile of pipeline. This rate of leakage is given below for 1,000 feet of pipeline and various diameters of pipe:

**TABLE 2.1**  
MAXIMUM RATE OF LEAKAGE FOR GIVEN DIAMETER OF PIPE

Pipe Diameter	Max. Leakage in 4 hrs. for 1,000 feet of pipe
4"	1.26 gallons
6"	1.89 gallons
8"	2.53 gallons
10"	3.16 gallons
12"	3.79 gallons
14"	4.42 gallons
16"	5.05 gallons
20"	6.13 gallons

- 15.2 Lines which fail to meet these criteria shall be repaired and retested as necessary until requirements are met. If the initial pressure test indicates that repairs must be made to a particular line segment, the ENGINEER may require a 24-hour pressure test to verify soundness of the construction work. This test shall be performed at no additional expense to the OWNER. Pressure tests shall be performed only after service line taps are completed.
- 15.3 The pressure gauge and/or recorder used for testing pipelines will be supplied by the OWNER. The CONTRACTOR shall supply the necessary pump, taps, connections, water meter, and all piping and fittings required for testing. All methods and equipment for pressure testing shall be as approved by the ENGINEER.
- 15.4 The CONTRACTOR shall schedule his work so that each section of water line or force main between gate valves shown on the Drawings shall be pressure tested in sequence as the pipeline work progresses. The CONTRACTOR's schedule in this regard shall be as approved by the ENGINEER.

### 16. Testing Tapping Sleeves

All tapping sleeves and valves shall be subjected to a pressure test while in place on the existing water line, prior to the existing line being tapped. The tapping sleeve and valve shall be tested at the rated working pressure of the sleeve over a period of 15 minutes. The connection being tested shall maintain 100 percent of the test pressure throughout the test period. The CONTRACTOR shall supply all necessary equipment for testing sleeves. Other details of the test shall be as directed by the ENGINEER.

17. Testing Force Mains

- 17.1 Following installation of the force main, the pipeline shall be filled with clean water; open ends shall be securely capped and braced; and the pipeline pressure tested. The CONTRACTOR shall be responsible for supplying water and providing whatever means necessary to fill the pipeline, release air from dead-end sections, install temporary kickers, and perform the pressure test.
- 17.2 Force mains shall be tested at a pressure equal to the rated working pressure of the pipe for a period of 4 hours. Line segments between gate valves shall be tested separately. During the duration of the test, the line segment shall display leakage not exceeding 10 gallons per day per inch of pipe diameter per mile of pipeline. This rate of leakage is given below for 1,000 feet of pipeline and various diameters of pipe:

**TABLE 2.2**

MAXIMUM LEAKAGE RATE AT RATED PRESSURE  
FOR SIZE OF FORCE MAIN INDICATED

Pipe Diameter		Max. Leakage in 4-hrs. for 1,000-Feet of Pipe
2"		0.63 gallons
3"		0.95 gallons
4"		1.26 gallons
6"		1.89 gallons
8"		2.53 gallons
10"		3.16 gallons
12"		3.79 gallons

- 17.3 Lines which fail to meet these criteria shall be repaired and retested as necessary until requirements are met. Pressure tests shall be performed only after all appurtenances are installed.
- 17.4 The pressure gauge and/or recorder used for testing pipelines will be supplied by the OWNER. The CONTRACTOR shall supply the necessary taps, connections, water meter, etc., for testing.
18. Testing Gravity Sewer Mains

18.1. Air Testing

- 18.1.1 Each gravity sewer line section shall be tested between manholes. The line section being tested shall be sealed at each end. The seal at one end shall have an orifice through which to pass air into the pipe. An air supply shall be connected to the orifice at one end of the line. The air supply line shall contain an ON-OFF gas valve and a pressure gauge having a range of from 0 to 5 psi. The gauge shall have minimum divisions of .10 psi and shall have an accuracy of  $\pm 0.04$  psi.
- 18.1.2 The pipe section under test shall be pressurized to 4 psig. The line shall be allowed to stabilize between 4 psig and 3.5 psig for a period of no less than 5 minutes. If necessary, air shall be added to the line to maintain the

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pressure above 3.5 psig. After the stabilization period, the gas valve shall be closed. When the line pressure drops to 3.5 psig, timing shall commence with a stopwatch. The stopwatch shall be allowed to run until such time as the line pressure drops to 2.5 psig. Then the watch should be stopped and the time lapse compared with the allowable time lapse shown below in Table A for the pipe size and length of pipe under test. If the time lapse is greater than that specified, the section undergoing test shall have passed, and the test may be discontinued at that time. If the time is less than that specified, the line shall not have passed and the CONTRACTOR will be required to repair the line and retest.

**TABLE 2.3**

TIME REQUIRED FOR A 1.0 PSIG PRESSURE DROP FOR SIZE  
AND LENGTH OF PIPE INDICATED FOR Q = 0.0015\*

Pipe Dia. (in.)	Minimum Time (min:sec)	Length for Minimum Time (ft.)	Time for Longer Length (sec)	Specified Minimum for Length Shown (min:sec)							
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft
8	7:34	298	1.520 L	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24
10	9:26	239	2.374 L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48
12	11:20	199	3.418 L	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	159	5.342 L	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04
18	17:00	133	7.692 L	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	114	10.470 L	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31
24	22:40	99	13.674 L	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33
27	25:30	88	17.306 L	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366 L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852 L	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768 L	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46
42	39:48	57	41.883 L	69:48	104:42	139:37	174:30	209:24	244:19	279:13	314:07
48	45:34	50	54.705 L	91:10	136:45	182:21	227:55	273:31	319:06	364:42	410:17

\* Q is the allowable leakage rate in cubic feet per min per square foot of inside surface area of pipe.

18.1.3 If the pipeline to be tested is beneath the ground water level, the test pressure shall be increased .433 psi for each foot the ground water level is above the invert of the pipe, or as directed by the ENGINEER.

18.1.4 The pressure gauge and/or recorder used for testing pipelines will be supplied by the OWNER. The CONTRACTOR shall supply all other equipment necessary to perform the test. All test equipment shall be subject to the approval of the ENGINEER.

18.1.5 If any subsequent tests reveal defects that require repairs, air testing as described above shall be repeated on the repaired section.

### 18.2. Deflection Testing

Thirty days after completion of backfilling or when in the opinion of the ENGINEER, adequate consolidation of backfill material has occurred, the pipeline shall be tested for deflection. A deflection of more than 5 percent of the inside diameter shall be cause for rejection and the line will be removed and replaced at the

CONTRACTOR's expense. A Go, No-Go deflection testing Mandrel shall be used. The Mandrel design shall be approved by the ENGINEER.

### 18.3. Alignment Inspection

18.3.1 After successful deflection testing, the pipeline shall be visually inspected for proper grade (vertical) and horizontal alignment. Each section of pipeline shall be inspected by camera between manholes to determine construction defects and/or if any displacement of pipe has occurred.

18.3.2 Prior to alignment inspection, the pipeline shall be thoroughly flushed with clean water. A visible "full moon" shall be required for grade alignment. A visible "half moon," or greater, shall be required for horizontal alignment. Any significant "ponding" of water in the pipeline or manholes in the opinion of the ENGINEER shall constitute a failure of the alignment inspection. Poor alignment, displaced pipe, significant ponding of water, or other discovered construction defects shall be repaired at the CONTRACTOR's expense.

### 19. Testing Manholes

19.1 All manholes shall be subject to vacuum testing in accordance with ASTM C1244. Vacuum testing shall be conducted in the presence of the ENGINEER or the ENGINEER's representative after Chimney Seal installation. Manholes shall be capable of holding a vacuum of 5 psi (10 inches of Mercury) without dropping more than 0.5 psi (1 inch of Mercury) for the times stated below:

**TABLE 2.4**

MINIMUM TEST TIMES FOR TYPICAL WCWD MANHOLES

Depth of Manhole (ft)	≤8	10	12	14	16	18	20	22	24	26	28	30
Time (sec)	20	25	30	35	40	45	50	55	59	64	69	74

19.2 Vacuum testing of manholes exceeding 15-feet in depth shall take groundwater into consideration and the vacuum pressure for testing shall be reduced by 0.5 psi (1 inch of Mercury) for every 5-feet of groundwater depth above the outgoing pipe. The CONTRACTOR shall determine the groundwater elevation immediately prior to vacuum testing. Manholes that do not pass the initial vacuum test shall be repaired and retested at no cost to the OWNER. A 100 percent pass rate shall be achieved.

19.3 The vacuum gauge and/or recorder used for testing pipelines will be supplied by the OWNER. The CONTRACTOR shall supply all other equipment necessary to perform the test. All test equipment shall be subject to the approval of the ENGINEER.



### **SECTION 3**

#### **WATER LINES AND APPURTENANCES**

1. Scope of Work

The work to be accomplished under this section of the Specifications consists of the furnishing of all materials and labor necessary for the construction of water lines, including all services, meters, fittings, blow-offs, valves, accessories, and appurtenances in strict accordance with the Specifications and the applicable Drawings.

2. Location of Water Lines

2.1 The approximate location of water lines in relation to the limits of rights-of-way, pavement, etc. is shown on the Drawings but is not guaranteed. The location shown was chosen to minimize the overall project cost with respect to rock excavation, pavement replacement, crushed stone for traffic bound roadway, customer water services, etc. Water lines shall generally be constructed in easements on private property parallel to and within 10 feet of highway rights-of-way.

2.2 The final location (as constructed) may be varied upon approval by the ENGINEER, provided: (1) the proposed location is approved by the Kentucky Transportation Cabinet, Department of Highways (KDOH), the County Highway Department, or other agency, legal entity or property owner having jurisdiction, and (2) the effect reduces the project cost. The final location may be varied by necessity due to construction conditions at the direction of the ENGINEER, or due to the requirements of the KDOH, the County Highway Department, or other agency, legal entity or property owner having jurisdiction. The construction of pipelines in the highway, road, or street right of way will not be allowed except where shown on the Drawings.

3. Excavation of Pipeline Trenches

3.1 Unless otherwise directed by the ENGINEER or as shown on the Drawings, trenches in which pipes 10 inches or less in diameter are to be laid shall be excavated in open cut to a depth which will allow a minimum of 2 feet 6 inches of cover above the top of the pipe or 2 feet 6 inches below the elevation of the proposed roadway, whichever is lower. The roadway based elevation provision is excluded in residential lawns. **For pipes 12 inches in diameter and greater, the trenches shall be excavated in open cut to a depth which will allow a minimum of 4 feet of cover above the top of the pipe.** The diameter of the pipe, proper bedding and construction of bell holes must be considered in determining the depth of excavation. Extra depth excavation may be required by the KDOH or as shown on the Drawings.

3.2 **Topsoil shall be stripped from the top of the trench and placed to the side for reuse during the final layer of backfill to facilitate productive growth of lawns, crops, and other vegetation.** Trenches shall be of sufficient width to provide free working space on each side of the pipe and to permit proper backfilling around the pipe, but unless specifically authorized by the ENGINEER, trenches

## Water Lines and Appurtenances

shall in no case be excavated or permitted to become wider (as measured at the top of the pipe) than 2 feet plus the nominal diameter of the pipe. The desired width shall be the nominal diameter of the pipe plus 16 inches. The minimum allowable trench width in rock excavation shall be the nominal diameter of the pipe plus 12 inches. The minimum allowable trench width in earth excavation shall be the nominal diameter of the pipe plus 6 inches. Trenching equipment that cannot maintain these minimum widths will not be allowed for use on the project.

- 3.3 Trench excavation shall proceed far enough ahead of pipe laying to reveal any obstructions that might necessitate changing the line or grade of the pipeline. The trench shall be reasonably straight and uniform in grade. Trenches shall be kept free of water during the construction of the pipeline and removal of water shall be at the CONTRACTOR's expense. Trench excavation shall proceed in a continuous manner from the beginning of the pipeline to the end.
- 3.4 Unless specifically authorized by the ENGINEER, no skipping by obstacles such as rock, road crossings, existing utilities, etc. shall be permitted. If skips are authorized by the ENGINEER and the CONTRACTOR does not close the resulting gaps in the pipeline in a timely manner, the ENGINEER may require the CONTRACTOR to discontinue all other operations until the gaps are closed.
- 3.5 Unless specifically directed otherwise by the ENGINEER, not more than 500 feet of trench shall be opened ahead of the pipe laying, and not more than 500 feet of open ditch shall be left behind the pipe laying. All barricades, lanterns, watchmen, and other such signs and signals as may be necessary to warn the public of the dangers in connection with open trenches, excavations, and other obstructions, shall be provided by and at the expense of the CONTRACTOR.
- 3.6 At the close of each working day all trenches that have been excavated shall be refilled unless exceptions are granted by the ENGINEER. All public or private drives shall be promptly backfilled or bridged at the direction of the ENGINEER.
- 3.7 All excavation shall be "unclassified" and therefore there will be no separate payment for rock excavation. The cost of all excavation should be merged into the cost of constructing the water line.

## 4. Blasting

### 4.1. General

- 4.1.1 All blasting operations shall conform to Kentucky Department of Mines and Minerals code for explosive disintegration of rock. CONTRACTOR shall obtain permits from local authorities having jurisdiction before explosives are brought to site or drilling is started.
- 4.1.2 The CONTRACTOR shall keep explosives on the site only in such quantity as may be needed for the Work under way and only during such time as they are being used. He shall notify the ENGINEER, in advance, of his intention to store and use explosives. Explosives shall be stored in a secure manner and separate from all tools. Caps or detonators shall be safely stored at a point over 100 feet distance from the explosives. When the need

for explosives has ended, all such materials remaining on the Work shall be promptly removed from the premises.

- 4.1.3 The CONTRACTOR shall observe all state, federal and municipal laws, ordinances and regulations relating to the transportation, storage, handling and use of explosives. In the event that any of the above-mentioned laws, ordinances or regulations require a licensed blaster to perform or supervise the Work of blasting, said licensed blaster shall, at all times have his license on the Work and shall permit examination thereof by the ENGINEER or other officials having jurisdiction.
- 4.1.4 No explosives shall be used within 20 feet of buildings and/or structures existing, constructed or under construction; or underground and/or overhead utilities whether existing or partially constructed.
- 4.1.5 Permission for any deviation from the restriction set forth above shall be secured from the ENGINEER, in writing; however, permission for any such deviations shall not relieve the CONTRACTOR from any responsibility in the event of damage to buildings, structures or utilities.
- 4.1.6 All operations involving explosives shall be conducted with all possible care to avoid injury to persons and property. Blasting shall be done only with such quantities and strengths of explosives and in such a manner as will break the rock approximately to the intended lines and grades and yet will leave the rock not to be excavated in an un-shattered condition. Care shall be taken to avoid excessive cracking of the rock upon or against which any structure will be built, and to prevent injury to existing pipes or other structures and property above or below ground. Rock shall be well covered with logs or mats, or both, where required. Sufficient warning shall be given to all persons in the vicinity of the Work before a charge is exploded.
- 4.1.7 The CONTRACTOR shall be solely responsible for his blasting operations. The CONTRACTOR shall not hold the OWNER and/or the ENGINEER liable for any damages resulting from his blasting operations on this project.
- 4.1.8 Blasting will not be permitted under or on CSXT's right-of-way.

#### 4.2. Pre-blast Structure Survey

- 4.2.1 CONTRACTOR shall perform a pre-blast survey to determine and document with pictures the condition of adjacent structures, utilities, wells, buried cables, and other features within a minimum of 400 ft. of the blast area unless otherwise required by applicable regulatory authorities. Determine safe distances to structures or other facilities according to NFPA 495, Appendix B. Where facilities are closer than these distances, and natural barriers are not present, or when the amount of explosive cannot be reduced economically, blasting mats shall be used. Provide mats to protect environmentally sensitive areas, trees within 20 feet from the blasting area, streams, and rock formations from throw rock.
- 4.2.2 Purpose of survey is to document existing condition of structures prior to

## Water Lines and Appurtenances

blasting, and is intended to be used as evidence in ascertaining whether and to what extent damage may have occurred as result of blasting. Survey shall be conducted prior to start blasting operations.

- 4.2.3 CONTRACTOR shall record information for each structure surveyed including:

- 4.2.3.1 Age and type of construction.
- 4.2.3.2 Location and character of cracks.
- 4.2.3.3 Evidence of settlement and leakage.
- 4.2.3.4 Other pertinent information.

- 4.2.4 Record pre-blast survey information on forms prepared specifically for pre-blast surveys. Supplement written records with photographs or videotape recordings. Submit copies of written records and photographs or videotapes to OWNER, and ENGINEER, prior to start of blasting.

### 4.3. Blast Design

- 4.3.1 Design each blast to avoid damage to existing facilities, adjacent property, and completed Work. Consider effects of blast-induced vibrations, air blast, and fly rock potential in design of each blast.
- 4.3.2 Establish appropriate maximum limit for vibration for each structure or facility that is adjacent to or near blast sites. Base maximum limits on expected sensitivity of each structure or facility to vibration, and federal, state, or local regulatory requirements, but not to exceed 1.25 in/sec. Whenever peak particle velocity exceeds vibration limits, change design of subsequent blasts, as necessary to reduce peak particle velocity to within limits established by Blaster-in-charge (BIC).
- 4.3.3 Establish appropriate maximum limit for air blast for each structure or facility that is adjacent to or near blast sites. Base maximum limits on expected sensitivity of each structure or facility to air blast, and federal, state, or local regulatory requirements, but not to exceed 0.015 psi peak overpressure (133 decibels). Whenever air blast exceeds limits, change design of subsequent blasts or provide controls necessary to reduce air blast to within specified limits.

### 4.4. Fly Rock Containment

Where fly rock may damage existing facilities, adjacent property, or completed Work, cover area to be blasted with blasting mats or provide other means that will contain and prevent scattering of blast debris.

### 4.5. Vibration and Air-Blast Monitoring

- 4.5.1 Monitor and record blast-induced vibrations and air blast using suitable sensors and recording equipment for each blast.
- 4.5.2 CONTRACTOR shall provide two (2) seismographs during blasting

operations capable of the following:

- 4.5.2.1 Designed for monitoring blast-induced vibrations and air blast. Capable of recording particle velocity in three mutually perpendicular directions in range from 0 to 6 inches per second.
- 4.5.2.2 Flat vibration frequency response between 4 and 200-Hz.
- 4.5.2.3 Capable of recording air-blast overpressure up to 140 decibels.
- 4.5.2.4 Flat air-blast frequency response between 2- and 500-Hz.
- 4.5.3 Monitor on, or at, structures or other facilities that are closest to point of blasting. Monitoring more distant facilities that are expected to be sensitive to blast-induced vibrations and air blast.
- 4.5.4 BIC shall supervise establishment of monitoring programs and initial operation of equipment; review interpretation of records and recommend revisions of blast designs.
- 4.5.5 Include following information in blasting plan:
  - 4.5.5.1 Vibration and air-blast limits as recommended by BIC.
  - 4.5.5.2 Name of qualified BIC who will be responsible for monitoring program and interpretation of records.
  - 4.5.5.3 Types and models of equipment proposed for monitoring.
  - 4.5.5.4 Numbers and locations of proposed monitoring stations.
  - 4.5.5.5 Procedures to be used for coordinating recording of each blast.
  - 4.5.5.6 Steps to be taken if blasting vibrations or air blast exceed limits.

#### 4.6. Blasting Records

- 4.6.1 For each blast, document the following:
  - 4.6.1.1 Location of blast in relation to Project stationing or state plane coordinate system and elevation.
  - 4.6.1.2 Date and times of loading and detonation of blast.
  - 4.6.1.3 Name of person in responsible charge of loading and firing.
  - 4.6.1.4 Details of blast design, as previously specified.
  - 4.6.1.5 Vibration records including location and distance of seismograph geophones to blast and to nearest structure, and measured peak particle velocity. Report peak particle velocity in units of inches per second.
  - 4.6.1.6 Air-blast records. Report peak air blast values in units of pounds per square inch overpressure above atmospheric or in decibels at linear response.
  - 4.6.1.7 Comments by BIC regarding damage to existing facilities, adjacent property, or completed Work, misfires, fly rock occurrences, unusual results, or unusual effects as required.

#### 4.7. Suspension of Blasting

- 4.7.1 In event damage to existing facilities, adjacent property, or completed Work occurs due to blasting, immediately suspend blasting and report damage

## Water Lines and Appurtenances

to ENGINEER and OWNER. CONTRACTOR shall be responsible for all costs of repairs or replacement due to damage from blasting.

4.7.2 Before resuming blasting operations, adjust design of subsequent blasts, or take other appropriate measures to control effects of blasting, and submit complete description of proposed changes for reducing potential for future damage.

4.7.3 Do not resume blasting until authorized by OWNER and applicable regulatory authorities.

### 5. Pipe Bedding and Initial Backfill

For PVC pipe, or all pipe or where rock excavation is encountered or in rocky soil as directed by the ENGINEER, the pipe shall be bedded with six (6) inches of crushed stone under the pipe. Crushed stone shall be used in the initial backfill from the bottom of the pipe to six (6) inches above the crown of the pipe. Initial backfill material shall be placed and thoroughly compacted by hand tamping. Initial backfill material shall be deposited in the trench for its full width on each side of pipe, fittings and appurtenances simultaneously. Care must be taken to compact fill along the sides of the pipe and appurtenances adjacent to pipe wall. Crushed stone shall be No. 9-M, #57, or manufactured limestone sand (pipe bedding) as described in the *Standard Specifications for Road and Bridge Construction* as published by the Kentucky Department of Transportation, Bureau of Highways. If manufactured limestone sand is used, mechanical compaction shall be required to assure sufficient compaction is achieved to prevent settlement. In certain cases the CONTRACTOR may be required to move earth of good quality from previous trench excavation for use as bedding material.

### 6. Pipe Laying

#### 6.1. General

6.1.1 The CONTRACTOR shall notify the ENGINEER as to the date and time of all pipe deliveries and shall not unload any pipe except in the presence of the Inspector. Pipe shall be transported and handled in strict conformance with the manufacturer's recommendations.

6.1.2 The CONTRACTOR will be required to stockpile all pipe in central locations. Pipe strung along the route of the pipeline, shall be limited to the current day's expected production.

6.1.3 Pipe laying shall be in strict accordance with the manufacturer's recommended practice. Special tools, lubricant and equipment for proper laying shall be provided by the manufacturer. If the CONTRACTOR proposes a method of installation not covered by the manufacturer's recommended procedures, the CONTRACTOR shall obtain written certification from the manufacturer that installation by this proposed method will in no way affect the manufacturer's warranty of the pipe.

6.1.4 Pipe shall not be rolled, or dropped, into the trench.

- 6.1.5 All angles or bends in the pipe lines, either vertical or horizontal shall be satisfactorily braced or anchored against the tendency of movement with concrete anchors to the satisfaction of the ENGINEER.
- 6.1.6 Open ends of unfinished pipelines shall be securely plugged or closed at the end of each day's work, or when the line is left temporarily at any other time.

## 6.2. Ductile Iron Pipe

- 6.2.1 The trench shall be excavated to the required depth and width, bell holes and/or joint holes shall be dug in advance of the pipe laying.
- 6.2.2 The beds of each piece of pipe shall be prepared carefully so that each individual piece of pipe shall have a uniform bearing. Pipe shall be laid in a straight line and grade without kinks or sags, and shall be laid in a workmanlike manner. Bell holes and/or jointing holes shall be large enough so that the bell or hub will clear the ground and leave ample room for making and inspection of joints.
- 6.2.3 Before each piece of pipe is lowered into the trench, it shall be swabbed out thoroughly to insure its being clean. Each piece of pipe shall be lowered into the trench separately.
- 6.2.4 Care shall be taken to prevent injury to the pipe coating both inside and outside. No piece of pipe or fitting which is known to be defective shall be laid or placed in the lines. If any defective pipe or fittings shall be discovered after the pipe line is laid, they shall be removed and replaced with a satisfactory pipe or fitting without additional charge. In case a length of pipe is cut to fit in a line, it shall be so cut as to leave a smooth end at right angles to the longitudinal axis of the pipe.

## 6.3. Plastic Pipe

- 6.3.1 Plastic pipe shall be installed in accordance with manufacturer's recommendations. A representative who is a direct employee of the pipe manufacturer shall conduct training sessions for CONTRACTOR's personnel regarding proper pipe installation. The manufacturer's representative shall certify to the ENGINEER the names of CONTRACTOR's personnel who have attended such training. Pipe laying and assembly work shall be performed only by personnel who appear on the manufacturer's certified list.
- 6.3.2 Backfilling shall be done in accordance with Paragraph 7, Backfilling Pipeline Trenches, where not in conflict with manufacturer's recommendations.

## 6.4 Tracer Wire

- 6.4.1 Tracer wire is to be installed with all buried pressure piping (water distribution, transmission, service lines and sanitary sewer force mains).

## Water Lines and Appurtenances

Tracer wire shall be installed along the centerline of the pipe at either the 2:00 or 10:00 position. Attach tracer wire to the pipe with either duct-style tape or plastic ties at a maximum 10-foot interval. All splices shall be made with approved direct bury tracer wire connectors. Wire ends shall be tied in a 'half-knot' beyond the splice to reduce tension on the splice.

- 6.4.2 Bring tracer wire to the surface at each valve, curb box, blow-off, air valve or at a maximum spacing of 1,000 feet. Refer to the Standard Water Detail sheet for the surface termination detail at each appurtenance. If the distance between pipe appurtenances exceeds 1,000 feet, install the specified access point for surface access.
- 6.4.3 Tracer wire for direct bury applications shall be #12 AWG copper clad steel conductor with 30 mil HDPE insulation rated for direct burial use at 30 volts. The tracer wire shall have minimum break strength of 450 pounds and supplied with insulation color coded to meet American Public Works Association (APWA) standards. Material shall be Copperhead Industries 1230-HS tracer wire or Owner-approved equivalent.
- 6.4.4. Tracer wire for boring/horizontal directional drilling applications shall be #12 AWG copper clad steel conductor with 45 mil HDPE insulation rated for direct burial use at 30 volts. The tracer wire shall have minimum break strength of 1150 pounds and supplied with insulation color coded to meet American Public Works Association (APWA) standards. Material shall be Copperhead Industries 1245-EHS tracer wire or Owner-approved equivalent.
- 6.4.5 Tracer Wire Connectors: Twist-on connectors for use at wire splice connections shall be designed for direct bury application and pre-filled with dielectric silicone sealant to protect wires from corrosion. Material shall be Copperhead Industries SCB-01 Twist-on connector or Owner-approved equivalent. Mainline to service connectors shall be self-stripping, designed for direct bury pre-filled with dielectric silicone sealant and rate for copper clad steel or solid/stranded copper wire. Material shall be Copperhead Industries 3WB-SS self-stripping mainline to service connector or Owner-approved equivalent.
- 6.4.6 Where indicated on the Drawings, provide a surface access point for tracer wire. The access point shall have the capability to connect to both the tracer wire and a ground wire, have a detectable lid that is color-coded to APWA standards and lockable. Unit shall be Copperhead Industries Snakepit® or Owner-approved equivalent.

## 7. Backfilling Pipeline Trenches

- 7.1 Backfilling shall be conducted at all times in a manner to prevent damage to the pipe and the exterior protection on the pipe. Placing of backfill shall be done only in the presence of the ENGINEER after his final inspection and acceptance of the pipe in place. If material for backfilling is not available at the construction site, the CONTRACTOR shall "import" earth of good quality from a site approved by the ENGINEER. This will not be a separate pay item.

- 7.2 In areas of earth excavation of the pipeline trench, earthen material reasonably free from rock and acceptable to the ENGINEER shall be used in the backfilling of the trench. Backfill material free of rock over one inch in diameter shall be placed around the pipe up to the point where the pipe is thoroughly covered with at least one foot of material. Walking or working on the completed pipe (except as may be necessary in backfilling) shall not be permitted until the trench has been backfilled to a height of at least one foot above the top of the pipe. The filling of the trench shall be carried on simultaneously on both sides of the pipe in such a manner that the completed pipeline will not be disturbed and injurious side pressures do not occur.
- 7.3 In areas of rock excavation of the pipeline trench, crushed stone as used for bedding shall be used as backfill material to a level 6 inches above the top of the pipe. Placement of this backfill material shall be performed as described above. In certain cases in lieu of or in addition to the crushed stone backfill the CONTRACTOR may be required to use earth of good quality as backfill material to a depth of 12 inches above the pipe as described above.
- 7.4 In filling the remainder of the trench above the initial backfill described above, whether in earth or rock excavation, earth backfill material reasonably free of rock may be shoved into the trench without compacting and heaped over, then compacted by rolling with the wheel of a grader or front-end loader. Earth backfill material containing rocks greater than 6 inches in diameter shall not be acceptable.
- 7.5 The final step in the backfill operation shall be to windrow good quality earthen material over the top of the ditch. The windrow shall be no higher than one foot and no wider than the width of the ditch plus 4 feet. All other excavated material except that required for the above described windrow shall be considered excess and shall be disposed of as described hereinafter.
- 7.6 Where street, driveway and highway crossings are made and where streets or highways are proposed, the CONTRACTOR will be required to tamp all backfill as described hereinafter and backfill the trench with No. 9-M crushed stone or flowable fill, as indicated on plans.
- 7.7 Where tamping is required, the backfilling shall all be done in layers not exceeding 6 inches and firmly tamped into place by tampers or rammers. The ENGINEER may permit puddling of ditches to compact the backfill in lieu of tamping with mechanical tampers except where street paving is to be replaced immediately after the backfilling is completed. The ENGINEER may also require puddling where (in his opinion) it is necessary for proper compaction.
8. Disposition of Excess Excavated Material

Excavated materials not used for backfill including "shot rock" and boulders shall be disposed of within one week of the adjacent trench being backfilled. Disposal of excavated material shall be performed so as to cause the least interference with the completed pipeline and operations of the OWNER, property owners, etc. and in a manner satisfactory to the ENGINEER.

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### 9. Replacing Streets and Roadways

9.1 The CONTRACTOR shall replace all streets, alleys, driveways, and roadways which may be removed, disturbed, or damaged in connection with his operations under this Contract. CONTRACTOR shall reconstruct same to the satisfaction of the KDOH, the County Highway Department, or other legal entity or property owner having jurisdiction. The reuse of materials removed in making excavations will be permitted, provided said materials are in good condition and acceptable to the ENGINEER.

9.2 The CONTRACTOR will be paid for street replacement only where the line is constructed within the paved surfaces. Care shall be exercised to minimize damage to graveled shoulders and paved surfaces.

9.3 Gravel, crushed limestone, bituminous materials, or other materials used in the resurfacing of streets, shall meet the current requirements of the KDOH Specifications.

#### 9.4. Traffic-Bound Base Course

9.4.1 On all trenches where replacing streets or drives is required, it shall be handled in the following manner:

9.4.2 After the backfill has been compacted (by mechanical tamping) and brought up to approximately finish grade, the CONTRACTOR then shall place crushed stone when and as directed by the ENGINEER as a traffic-bound base course, at the proper elevation to allow for settlement but not in such a way as to prevent traffic from using it. Crushed stone shall be Kentucky Department of Transportation, dense graded aggregate.

9.4.3 The CONTRACTOR may be required by the ENGINEER to maintain the traffic-bound base course (by adding crushed stone as specified hereinbefore) in a safe and passable condition for a period of 60 days (or until such time as sufficient settlement has taken place in the opinion of the ENGINEER) and the trenches are ready for final resurfacing. Crushed stone will be paid for at the unit bid price specified in the Contract.

#### 9.5. Subgrade for Final Resurfacing

9.5.1 The traffic-bound course hereinbefore described shall comprise the base course for all types of resurfacing.

9.5.2 When, in the opinion of the ENGINEER, the trench has reached a condition of settlement satisfactory for final resurfacing, the CONTRACTOR shall first strip the base course or backfill with crushed stone (size as specified hereinbefore) to obtain the proper subgrade elevation. The subgrade then shall be rolled with an approved type roller or tamped until thoroughly compacted. Any depressions shall be filled with crushed stone (as specified hereinbefore) and the process of rolling or tamping continued until the subgrade has a smooth and uniform surface.

9.6. Portland Cement Concrete Pavement

Where Portland Cement Concrete Pavement is to be replaced, or is required under bituminous pavement replacement, it shall conform to the existing pavement and/or the ENGINEER'S instructions (not less than 6 inches thickness), and the type concrete required by the Kentucky Department of Transportation shall be used.

9.7. Asphaltic Concrete Pavement

9.7.1 Where asphaltic concrete pavement is to be replaced, the subgrade shall be prepared as hereinbefore specified, and this subgrade shall comprise the base course upon which the concrete subslab and/or the bituminous pavement shall be laid. Asphaltic concrete shall be as required by the Kentucky Department of Transportation.

9.7.2 Where no Portland cement concrete subslab is required, the subgrade or base shall be cleaned and broomed thoroughly and a prime coat of medium tar shall be applied uniformly at the rate of 0.20 to 0.25 gallons per square yard. Where Portland cement concrete subslab is required, the prime shall be applied at the rate of approximately 0.05 gallons per square yard. The prime shall be applied by a pressure distributor or other approved pressure spray method.

9.8. Bituminous Surfacing (Surface Treatment)

9.8.1 Where bituminous surfacing is to be replaced as shown on the Drawings, or as directed by the ENGINEER, the traffic-bound base shall comprise the subgrade upon which the bituminous surfacing shall be constructed. After the subgrade or base has been prepared, thoroughly cleaned and broomed, a prime coat of medium tar shall be applied at the rate of 0.30 to 0.35 gallons per square yard.

9.8.2 When the prime coat has become tacky but not hard, the bituminous material (asphalt of the grade directed by the ENGINEER) shall be applied in two applications at the rate of 0.35 to 0.45 gallons per square yard for each application. The CONTRACTOR shall apply approximately 50 pounds of crushed stone chips per square yard between the two applications of bituminous material, and 35 to 40 pounds of chips per square yard after the final application of bituminous materials.

9.9. Untreated Surface

9.9.1 Where the existing surface is untreated gravel or stone, the CONTRACTOR shall reuse all native materials possible using crushed stone as required, replacing the surfacing that is disturbed or removed with crushed stone equal to the grade present prior to construction.

9.9.2 Prior to final acceptance, the CONTRACTOR shall fill in all depressions with crushed stone as hereinbefore specified, and shall thoroughly roll and grade to the existing surface.

## Water Lines and Appurtenances

### 9.10. General

The CONTRACTOR shall be held responsible for any and all damage occurring to street and road paving due to his operations outside the actual limits of his work, and shall replace any such damage to as good, or better, condition than that which existed prior to the CONTRACTOR's operations and at no additional expense to the OWNER.

### 10. Concrete Kickers, Anchors, Cradles, and/or Encasement

10.1 Concrete kickers, anchors, cradles, and/or encasement of water lines shall be placed where and as shown on the Drawings, or as directed by the ENGINEER.

10.2 Concrete for anchors, kickers, cradle, and/or encasement shall be minimum 3,000 psi concrete and shall be mixed sufficiently wet to permit it to flow under the pipe to form a continuous bed. In tamping concrete, care shall be taken not to disturb the grade or line of the pipe, or to injure the joints. Concrete placed outside the specified limits or without authorization from the ENGINEER will not be subject to payment.

10.3 Thrust blocks shall be provided in accordance with details shown on Drawings and must bear against an undisturbed trench face. Thrust blocks must be used even when special locked-joint fittings, anchoring fittings, or pipe clamps with tie rods are employed. Fitting bolts shall be protected from the concrete being poured for thrust blocks by using plastic sheeting to cover the area of the bolts.

### 11. Pipe and Fittings for Water Lines

#### 11.1. General

Pipe for water mains shall be nominal diameter and material indicated on the Drawings. The pipe shall be as specified herein and shall be either PVC or ductile iron.

#### 11.2. Fittings

11.2.1 Ductile iron mechanical joint fittings shall be required for all sizes of PVC and ductile iron pipe. Ductile iron mechanical joint fittings shall conform to AWWA specification C 153 and shall have a rated working pressure of 350 psi up to 24-inch diameter and 250 psi above 24-inch. Ductile iron fittings shall be furnished with a bituminous coating outside in accordance with AWWA specification C 153 and shall be cement mortar lined inside in accordance with AWWA specification C 104.

11.2.2 Only high strength low alloy steel T-bolts shall be used with all mechanical joints including fittings, valves, etc. All glands, T-bolts and other accessories shall be manufactured and provided by the same manufacturer as the fittings on which the accessories are used.

11.2.3 Fittings used in pipeline sections noted on the Drawings to be restrained shall be slip joint type fittings that incorporate the specified type of

restraining system used with ductile iron pipe or mechanical joint type fittings with approved restraining devices listed below.

- 11.2.4 Fittings shown on the Drawings are intended to convey the general configuration only. The CONTRACTOR shall be required to furnish fittings at each abrupt change (vertical or horizontal) in the pipeline alignment, as determined by the ENGINEER. The CONTRACTOR shall also be required to furnish any special gaskets, adaptors, etc. necessary for construction.
- 11.2.5 Where noted on the Drawings, bolt-thru mechanical joint restraints shall be used to anchor fittings and valves. The restraints shall be manufactured of ductile iron conforming to ASTM A536 and shall be compatible with standard mechanical joint fittings (AWWA C110 or C153) and valves. The restraints shall be provided with all accessories including standard styrene butadiene rubber (SBR) MJ gaskets and weathering (Corten) bolts. The restraint shall be Foster Adapter by Infact Corporation or approved equal.
- 11.2.6 All vertical bends and all bends greater than 12 inches in diameter shall include approved restraining devices. Approved restraining devices are Megalug by EBBA Iron, Inc., GripRing by Romac Industries, Inc., or approved equal.
- 11.2.7 Fittings and accessories shall be manufactured in the United States and shall be Tyler Union, ACIPCO, U.S. Pipe, or approved equal.

### 11.3. Ductile Iron Pipe

- 11.3.1 Ductile iron pipe shall conform to AWWA specifications C 150 and C 151 with a rated working pressure of 350 psi for 4-inch through 12-inch diameter pipe and 250 psi for pipe 14-inch and larger, under the laying conditions and depth of cover specified herein. All ductile iron pipe shall be manufactured in the United States in accordance with the latest revision of ANSI/AWWA C151/A21.51 and shall have an average minimum recycled content consisting of 90% scrap iron and steel.
- 11.3.2 Ductile iron pipe shall be furnished with an outside bituminous coating approximately one mil thick and shall be cement mortar lined inside according to AWWA specification C 104.
- 11.3.3 The joints for ductile iron pipe shall be in accordance with AWWA specification C111 and shall be the "push-on" type. The allowable deflection in each joint shall be a minimum of 3 degrees and gasket lubricant shall be used as recommended by the pipe manufacturer.
- 11.3.4 Unrestrained ductile iron pipe shall be "Fastite" as manufactured by American Ductile Iron Pipe, or "Tyton" as manufactured by McWane Ductile or U.S. Pipe.
- 11.3.5 In certain locations as described herein, ductile iron pipe and fittings shall be provided and installed with restrained joints. The restrained joint system for pipe shall be either "Flex-Ring" joint pipe by American Ductile Iron Pipe,

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"TR Flex" joint pipe by McWane Ductile or U.S. Pipe or restrained joint gaskets similar to SureStop 350, FieldLok 350 or Fast-Grip. If restrained joint gaskets are used for the restraint system, special attention must be made to assure they are compatible with the specific pipe brand supplied on the project. If mechanical joint fittings are used in lieu of push-on-joints, joint restraint shall be accomplished as specified in the preceding subsection.

11.3.6 The locations where restrained joints are required are as follows:

11.3.6.1 All ductile iron carrier pipes used in casing pipe for road crossings. Restrained joints shall be used between and include the adjacent fitting on each side of the crossing.

11.3.6.2 At all fittings used in the ductile iron water line, fittings, and joints shall be restrained to result in the following restrained footage each side of the fitting, as specified herein.

**TABLE 3.1**

MINIMUM RESTRAINED LENGTH  
EACH SIDE OF DUCTILE IRON PIPE

Fitting	Restrained Pipe Length				
	8"	12"	16"	20"	24"
90° Bend	46 LF	64 LF	84 LF	104 LF	124 LF
45° Bend	19 LF	27 LF	35 LF	43 LF	51 LF
22 ½° Bend	9 LF	13 LF	17 LF	21 LF	25 LF
11 ¼° Bend	5 LF	6 LF	8 LF	10 LF	12 LF
Tee	46 LF	64 LF	84 LF	104 LF	124 LF
Dead End	68 LF	99 LF	130 LF	162 LF	193 LF

### 11.4. C900 Plastic (PVC) Pipe

11.4.1 Plastic pipe shall be polyvinyl chloride (PVC) and shall meet the requirements set forth by ASTM D1784 for Type 1, Grade 1. All plastic pipe shall bear the National Sanitation Foundation Testing Laboratory seal for potable water. All plastic pipe shall be certified in accordance with NSF/ANSI 14 – 2012. The pipe shall also meet the requirements of ANSI/AWWA C900-22, ASTM D-3139 and all other specifications referred to therein.

11.4.2 In general and unless indicated otherwise on the Drawings, C900 PVC pipe shall be DR-18, pressure class 235 psi. However, in certain areas DR-14, pressure class 305 psi PVC pipe may be required.

11.4.3 Provision shall be made for contraction and expansion at each joint with either twin gasketed couplings or integral bell joints. Gasket systems meeting the requirements of ASTM F477 shall be Reiber or other locked-in type as approved by the ENGINEER. Twin gasketed couplings shall be rated for working pressure equal to that of pipe and shall be as

manufactured by the pipe manufacturer.

11.4.4 PVC pipe shall be manufactured by a company that has made pipe in accordance with ANSI/AWWA C900-22 under the brand name to be supplied on this project continuously over the previous five (5) year period. Pipe shall be manufactured at a plant that has been owned, operated and controlled by the same manufacturing company and has produced PVC pipe in accordance with ANSI/AWWA C900-22 as a routine standard procedure for the last three (3) years. The plant shall be certified in accordance with NSF/ANSI 14 – 2012 for the PVC pipe specified. PVC pipe shall be Diamond Plastics, JM Eagle, National Pipe, Pipelife-Jetstream, Vulcan Plastics or Westlake Pipe & Fittings.

11.4.5 Note special PVC pipe testing requirements, Section 2 Paragraph 13.

12. Gate Valves, Butterfly Valves, and Boxes

- 12.1 Gate valves shall comply with AWWA specification C 509 and shall be of the resilient wedge type, epoxy coated, iron body, non-rising stem and fully bronze mounted. Valves shall be suitable for water working pressures of 250 psi. Valves shall be of standard manufacture and of the highest quality both as to materials and workmanship. Gate valves shall be either the A-2360 series by Mueller Company, Style A067 by M & H Valve Company, or US Pipe equivalent.
- 12.2 All gate valves shall have the name or monogram of the manufacturer, the year the valve casting was made, the size of the valve, and the working water pressure cast on the body of the valve. Unless otherwise indicated on the Drawings, all gate valves shall be provided with a 2-inch square operating nut and shall open by turning counterclockwise.
- 12.3 Butterfly valves shall meet the requirements of AWWA C504 or AWWA C519. The butterfly valve shall be designed expressly for waterworks applications and shall be of the double offset design. They shall have mechanical joint connections with a 2-inch square operating nut and shall be suitable in all respects for underground service. Butterfly valves shall be AV-Tek DEX or Owner-approved equivalent.
- 12.4 All gate valves and butterfly valves installed in Ductile Iron water mains shall be restrained against movement by either installation of bolt-thru restraints to adjacent fittings or use of "Megalugs" or equal.
- 12.5 Valve boxes shall be cast iron, two piece, screw type 24-inch to 36-inch extension with drop covers marked "WATER" and they shall be set vertically, properly adjusted so that the cover will be in the same plane as the finished surface of the street or ground. The box shall have a 5 1/4-inch shaft. Valve boxes shall be as manufactured by Mueller, Clow, M & H, or an approved equal.
- 12.6 **Any valve that is installed at a depth to the operating nut greater than 3 feet below the final elevation of the valve box top shall be fitted with a valve operator extension.** The length of the extension shall place the operating nut 12 to 24 inches from the valve box top. The extension shall be secured to the valve nut with a set screw. The extension shall include a 1-inch solid steel shaft, 2-inch

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square top nut, and centering ring near the top. Valve operator extensions shall be manufactured by an entity regularly engaged in the manufacture of such equipment, and be Water Key Model VE-XX, or approved equal.

### 13. Tapping Sleeves and Valves

13.1 Tapping sleeves shall be fabricated type 304 stainless steel with a full circumferential gasket and stainless steel fasteners. Outlets shall be flanged with either stainless steel or epoxy coated carbon steel flanges. Tapping sleeves shall be rated for up to 250 psi working pressure. Tapping sleeves shall be style FTSS by Ford Meter Co., SSTIII by Romac Industries, H-304 by Hymax (a Mueller Co.) or owner approved equal.

13.2 Tapping valves shall meet the same general specifications as described herein for gate valves.

### 14. Blowoffs

Blowoff valves and appurtenances shall be constructed where shown on the Drawings and as detailed on the standard detail sheet. Gate valves as specified hereinbefore, and the meter boxes described below shall be used in the blowoff assembly. Bends used in blowoff assemblies may be PVC with gasketed joints, as approved by the ENGINEER.

### 15. Fire Hydrants

15.1 Fire hydrants shall be "dry barrel," cast iron bodied, fully bronze mounted, suitable for a working pressure of 150 psi, and shall meet all requirements of the latest AWWA C502 specifications. Each hydrant shall be given a 300 psi hydrostatic test in the shop. Hydrants shall be Mueller Model A-423.

15.2 The waterways of hydrants shall be as free as possible of obstructions, sharp turns, corners, or other causes for resistance. The base of the hydrant shall have a bell connection to admit a proper connection with a standard mechanical joint. Bury depth shall be 3 feet 6 inches minimum or as required to bring the hydrant to the proper grade.

15.3 Hydrants shall have a 6-inch connection to 6-inch and larger mains, 2 1/2-inch brass nozzles with threads for steamer couplings, together with caps fastened securely to each hydrant and threaded to fit nozzles. The main valve of the hydrant shall be not less than 5 1/4 inches in diameter with 7-inch inside diameter riser barrel. All connection threads shall comply with standard specifications of the National Board of Fire Underwriters.

15.4 The hydrant main valve shall be of the compression type, closing with pressure. The valve shall be faced with heavy impregnated waterproof balata or other approved material. The main valve of the hydrant shall be not less than 5 1/4 inches in diameter when installed on 6-inch or larger mains and 4 1/2 inches in diameter on 4-inch mains.

15.5 Hydrants shall have a safety "breakable flange" section located above the ground line. The distance from the ground line of the hydrant to the top of the hydrant head

shall be not less than 30 inches. A maximum of one section of vertical riser shall be accepted. Vertical riser, if required, shall be incidental to hydrant installation. In most situations the CONTRACTOR shall be required to turn the hydrant top 180 degrees so that the pumper nozzle will face the street.

- 15.6 **Hydrants shall be supplied with factory applied paint. The color shall be Safety Yellow.** The factory applied paint shall be protected during transport and installation. Any hydrants which have excessive chips, scratches, or other abrasions, in the opinion of the ENGINEER, shall be subject to rejection. After installation, exposed surfaces of hydrants shall be painted with two (2) coats of the paint indicated below. The bonnets of the hydrants shall be painted with two (2) coats of a contrasting color to indicate potential flow rate as directed by the ENGINEER. The paint shall be: primer – Wasser MC Univeral 100, top coat – Wasser MC Luster 100, thinner – Wasser MC Thinner or MC Thinner XMT. Paint shall be thinned 10-15% for smooth application. Barrel color shall be Safety Yellow. Bonnet colors shall be Safety Red, Safety Orange, Safety Green, or Safety Blue.

16. Meters, Meter Boxes and Meter Equipment

16.1. General

16.1.1 Where shown on the Drawings, existing water meters shall be relocated in new meter settings. The CONTRACTOR shall install on the new mains entire new meter settings as shown on the standard detail sheet and as specified herein. When all new meter settings are installed and pressure testing, disinfection and bacteriological testing is completed, the water meters which are in existing settings shall be removed and installed in the new settings. (In special situations where new meters are required in a particular location, it shall be so noted on the Drawings.)

16.1.2 At the time the water meter is relocated the CONTRACTOR shall also connect the new meter setting to the existing customer's service line which is between the meter and the house or business. Pipe used in making this connection shall be of the same size, material, and type as the existing customer service line, unless otherwise indicated on the Drawings, but in general will be either Sch 40 PVC pipe or P.E. tubing to match existing customer service line. The connection at the meter setting to the new customer service line shall be made with a galvanized or brass compression coupling on a brass nipple which is to be threaded into the yoke. The method and materials used to connect new customer service pipe to existing customer service pipe shall be Style 65 Dresser couplings, or as approved by the ENGINEER. The work of relocating existing meter installations shall be performed in such a way that interruptions of service to each customer are minimized.

16.2. Meter Boxes

16.2.1 Meter boxes shall be cylindrical with a height of 24 inches. The meter box diameter for 3/4 inch services shall be 18 inches. Boxes with a diameter of 20 inches shall be used for all 1-inch and regulated 3/4-inch services.

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- 16.2.2 Boxes shall be a PVC "shell" meter box manufactured from SDR 51 PVC irrigation pipe as manufactured by Mueller Company.
- 16.2.3 Meter box covers shall be cast iron with locking lid using "large" pentagon bolts. Covers shall have an 18-inch or 20-inch inside diameter as required and an 11 1/2-inch lid opening. The lid shall be marked "Water Meter". Meter box covers shall be Type A32-LB or Type A3-LB as manufactured by the Ford Meter Box Company.
- 16.2.4 Meter boxes and covers for meters larger than 1-inch shall be as shown on the standard detail sheet.

### 16.3. Meter Fittings

- 16.3.1 The necessary corporation stops, curb valves, and all other fittings and accessories shall be furnished as indicated on the Drawings. Service saddles shall be Mueller Series H-134 for PVC pipe and Mueller Series BR-1-B for ductile iron pipe. Corporation stops shall be Mueller # H-15008.
- 16.3.2 Service saddles for 2-inch taps shall be Mueller, Smith Blair, or approved equal, double strap type with 1.P threads for use with a 2-inch by 4-inch brass nipple. A 2-inch Mueller A-2360 gate valve, or approved equal, with threaded connections shall be used in lieu of a cooperation stop.
- 16.3.3 For 3/4-inch services, yokes shall be Mueller #H-1404-2 except where a regulator is required and then yokes shall be Mueller #H-1404-012. All 1-inch yokes shall be Mueller #H-1404-2 (See the Standard Detail Sheet). All yokes shall include a lock wing stop and check valve. Inlet connections shall be either Mueller #H-14227 or #H-14222 as required by the particular situation and all outlet connections shall be #H-14222. See the standard detail sheet for additional information regarding fittings for services.
- 16.3.4 Pressure regulators, where required, shall be Wilkins 600DM-HR, or approved equal for 3/4-inch services and Watts 223HP-Z3, or approved equal or 1-inch services. The adjusting screw on pressure regulators shall remain at the factory setting.

### 16.4. Service Connection Tubing

- 16.4.1 Service connection tubing shall be 3/4-inch or 1-inch plastic tubing of the length necessary to run a direct and continuous line from the main to the meter at property line. The service tubing shall be manufactured from very high molecular weight polyethylene as PE 4710; the material cell classification shall be 445574E as defined by ASTM D-3350; and it shall bear the name of the National Sanitation Foundation Testing Laboratory Seal for potable water. Tubing dimensions shall be copper tubing size in accordance with the provisions of ASTM D-2737. Tubing shall be SDR 9, rated for 200 psi working pressure and shall be covered by a lifetime warranty. The service tubing shall be Endopure PE-4710 by Endot Industries, Inc. Special care shall be taken to protect the service tubing (with earthen materials) from sharp and/or hard objects. Cover is to be at

least 30 inches at all points. Rigid liners (inserts) shall be used with PE tubing where compression connections are made. Liners shall be stainless steel as manufactured by Mueller Co., Part #504281 or #504385.

16.4.2 Where indicated on the Drawings, copper or brass service line shall be utilized. Service line tubing for 1-inch copper connections shall be Type K. Service line for 1 1/2- and 2-inch connections shall be stick brass, field threaded to appropriate lengths.

16.4.3 Where it is necessary to cross a street, highway, or railroad, the CONTRACTOR shall install service tubing under said street, highway, or railroad by the method indicated on the Drawings and the Bid Form. Such service line shall be installed at least 4 feet under the surface. Road crossings for both 5/8-inch x 3/4-inch and 1-inch meters shall be made with 1-inch tubing as shown on the standard detail sheet.

17. Highway and/or Railroad Crossings (Water Mains)

17.1 All water line crossings of County, State and United States Highways, and/or railroads, shall be in smooth wall steel casing pipe (0.25-inch minimum wall thickness). Joints in casing pipe shall be welded continuously all around. The minimum depth of cover shall be 42 inches for highway and road crossings, as measured from the top of the casing pipe to the low point of the crossing cross section. The minimum depth of cover shall be 48 inches, as measured from the top of the casing pipe to the low point of the crossing cross section and 66 inches as measured from the top of the casing pipe to the bottom of the rails for railroad crossings.

17.2 Carrier pipe used inside steel casing shall generally be the material shown on the Drawings and the Bid Schedule unless otherwise directed. For casing lengths greater than 50', restrained joint DIP shall be utilized as the carrier pipe. This applies to ALL cased crossings, not exclusive to highways and railroads. Where PVC carrier pipe is used, and for bores beneath railroads the carrier pipe shall be supported on casing spacers (Advance, Calpico, CCI, or approved equal) inside the casing at intervals that are in accordance with the spacer manufacturer's recommendations. Casing spacers for ductile iron pipe shall be Advance Model SI.

17.3 The spacer manufacturer shall be supplied the following information when ordering the spacers: carrier pipe O.D., carrier pipe bell O.D., casing pipe I.D., type of pipe being used and SDR information. All carrier pipe shall be centered with maximum clearance of 1-inch between spacer runner and casing. For PVC carrier, the spacer shall be a polyethylene spacer and for DIP carrier the spacer shall be a stainless steel spacer. The CONTRACTOR shall also supply end seals for all steel casings. End seals may be pull-on or wrap around types with stainless steel bands.

17.4 Split casing for ductile iron pipe shall be sized to match existing casing. The two sides of the split casing shall be field butt welded one to the other and to existing casing to provide a water-tight seal. Lugs shall be provided as required to provide for proper pipe alignment. All appurtenances shall be provided as indicated above.

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### 18. Air Release Stations

- 18.1 Automatic air release stations shall be located and constructed as shown on the Drawings and the Standard Detail Sheet. The Air Release Stations shall include an Apco Model 200A, or approved equal. The valve shall be supplied with a 2-inch NPT inlet, 5/32-inch orifice, and be complete with a blow-off valve. Inlet valve shall be a 2-inch ball valve as specified below.
- 18.2 Manual air release stations shall include a 2-inch full-port ball valve and 10-feet of polybutylene tubing. The tubing shall be connected to the ball valve by a Mueller IP x PE Adaptor. Ball valves shall be Apollo, or approved equal, with bronze body and 316 stainless steel ball and stem.
- 18.3 All piping, nipples and fittings used in air release stations shall be brass. Saddles shall be Smith-Blair Series 313 or Owner-approved equivalent.

### 19. Inspection of the Lines

Before the CONTRACTOR backfills any of the lines, they first shall be inspected by the ENGINEER's Representative and the ENGINEER's Representative shall give the CONTRACTOR permission to proceed with the backfilling. If any joints, pipes, fittings, or materials or workmanship are found to be defective, they shall be removed and replaced by the CONTRACTOR without any additional compensation.

### 20. Connecting to the Existing Lines

- 20.1 Work under this item shall include the connecting of new water lines to the existing water lines in the manner shown on the Drawings, and as directed by the ENGINEER. The work of connecting new lines to existing lines is not a separate pay item under this Contract.
- 20.2 Where such a connection will result in an interruption of service, the CONTRACTOR shall propose the schedule for such a connection to the ENGINEER several days in advance. The ENGINEER will present the proposal to the OWNER for approval. The interest of the OWNER in regards to service to existing customers shall take precedence over the new construction. The CONTRACTOR's schedule shall permit the OWNER to provide notification to customers at least 24 hours before the suspension of service.

### 21. Disinfection and Flushing of the Lines

- 21.1 The new water lines shall not be placed in service either temporarily or permanently until they have been disinfected thoroughly in accordance with the following requirements to the satisfaction of the ENGINEER.
- 21.2 After pressure testing procedures have been completed, the CONTRACTOR shall flush the line thoroughly, removing all foreign material, dirt, etc. Then a solution of hypochlorite using HTH or equal, sufficient to insure a chlorine dosage of at least 50 parts per million through the entire length of the line, shall be introduced into the line.

- 21.3 The chlorine solution shall remain in the line for 24 hours and a residual of at least 25 parts per million should be present in the pipe at the end of the 24-hour period. The line shall be flushed until 2 parts per million chlorine residual remains, then bacteriological samples taken. One sample shall be taken per mile of pipeline with a minimum of 2 samples per line. Each sample shall be collected from a different point along the line. If negative samples are obtained, the lines may be put into service. If a positive sample is obtained however, the disinfection procedure shall be repeated until negative samples are obtained. Bacteriological test costs shall be paid by the CONTRACTOR.
- 21.4 Disinfection, pressure testing, other required testing and flushing are not pay items. The CONTRACTOR shall pay for all water used for testing, disinfection, and flushing, except the amount required to fill the pipelines twice. This amount will be computed and deducted from the total amount metered.
- 21.5 The CONTRACTOR shall install a temporary bypass with a meter around a valve at the point of connection to the existing water system. This meter will be for the purpose of measuring water used by the CONTRACTOR for flushing, testing, and disinfecting the new water lines. The meter shall be large enough to pass the required flows. It shall be tested for accuracy before being installed.
22. Rough Grade Work and Cleanup
- 22.1 Rough Grade Work and Cleanup (Rough Cleanup) shall be defined to include the final backfill and windrowing of the ditch line, disposal of excess excavated material, level grading of the disturbed areas adjacent to the ditch line, filling and leveling street and driveway cuts, cleaning up and removal of rubbish, repair of fences and structures, and any other such work that may be required to result in a neat, orderly project area. Rough Cleanup shall be performed as other construction progresses and must be completed within one week of the adjacent pipeline construction.
- 22.2 Rough Cleanup is not a separate pay item. The cost for this work shall be included in the unit bid price for water lines. If Rough Cleanup is not performed as specified, the OWNER will require deductions from partial payment estimates in accordance with the Supplemental General Conditions, Sections 3.3 and 18.
23. Final Cleanup (Also See Basis of Payment)
- 23.1 Final cleanup, grade work and seeding shall be performed on each line when backfilled trenches have had adequate time to settle, but at least within 2 months from the date each line is constructed. Final grade work and seeding on KDOH rights-of-way shall be done in accordance with Sections 211 and 212 of the KYTC Standard Specifications, 2019 Edition and the permit granted to the OWNER specifically for this project.
- 23.2 Where work was performed on private property in lawns, earth of good quality, free from rock shall be spread over the disturbed area and graded and compacted to match adjacent ground contours. The previously removed topsoil shall be used for the final layer of backfill to facilitate productive growth of lawns, crops, and other vegetation. The graded area shall be hand raked until smooth and free from rock,

## Water Lines and Appurtenances

potholes, and humps. The disturbed area shall then be seeded with the seed variety used on the original lawn (e.g., a bluegrass lawn shall be reseeded with bluegrass seed) and the seed raked in lightly. The seeded area shall be fertilized and then uniformly covered with straw to a depth of approximately 1 1/2 inches. **Final Cleanup in lawns must be completed within 2 weeks after Rough Cleanup.**

- 23.3 Where work was performed on private property and not in lawns the trench line shall be graded and filled if necessary to match adjacent contours. All rock larger than 1 1/2 inches in diameter shall be removed from the disturbed area. The previously removed topsoil shall be used for the final layer of backfill to facilitate productive growth of lawns, crops, and other vegetation. In general, pasture and fallow land shall be fertilized and seeded with Kentucky 31 Fescue and plowed fields shall be left unseeded, however, the desire of each property owner shall govern regarding seeding. Disturbed areas not in lawns are not required to be strawed unless erosion problems are anticipated by the ENGINEER.
- 23.4 In all cases on private property the rate of seed and fertilizer application shall be that recommended by the University of Kentucky Cooperative Extension Service for new plantings of the variety of grass seed used.
- 23.5 If the trench line settles following final grade work or if grass seed fails to germinate within a reasonable time, the CONTRACTOR shall regrade or reseed the area in question as specified above and as directed by the ENGINEER.
- 23.6 Final cleanup is a separate pay item (not applicable for water lines included in lump sum pay item).

## **SECTION 4**

### **BASIS OF PAYMENT**

1. General

The CONTRACTOR shall furnish all necessary labor, machinery, tools, apparatus, materials, equipment, services, and other necessary supplies and do and perform all work including all excavation and backfilling (without additional compensation except where specifically set out in these Specifications) at the unit or lump sum prices for the following items.

2. Steel Casing by Bore

Payment for installation of steel casing with water main by bore shall be paid for at the Contract unit price per linear foot, complete in place, measured from casing end to end, and shall include casing, restrained joint carrier pipe, casing spacers, casing end seals excavation and shall include all labor, materials, equipment, and other accessories required for a complete installation as shown on the Drawings and as described in these Specifications.

3. Water Lines - Unpaved

3.1 Payment for the construction of new water lines of the sizes and materials shown on the Bid Form shall be made at the Contract unit price per linear foot, complete in place and in operating condition, including testing, disinfection, and rough cleanup work.

3.2 The cost of the specified crushed stone bedding and initial backfill as noted on the Standard Waterworks Detail Sheet is incidental to water line installation and shall be included in the Contract unit price for water lines.

4. Tapping Sleeves, Valves and Boxes

Payment for furnishing and installing tapping sleeves, valves, and boxes of the sizes shown on the Bid Form will be made at the Contract unit price per sleeve and valve complete in place. This item shall also include the valve and appurtenances shown on the Standard Detail Sheet and tapping existing lines.

5. Butterfly Valves and Gate Valves

Payment for furnishing and installing gate valves and boxes in the pipelines of the sizes shown on the Bid Form will be made at the Contract unit price per valve and box, complete in place, as shown on the Standard Detail Sheet.

## Basis of Payment

### 6. Air Release Valve Assembly

Payment for furnishing automatic air release stations for water, as described on the Drawings and in the Specifications, shall be made at the Contract price per each station, and shall include all materials, equipment, labor and other accessories required for a complete installation as shown on the Drawings and as described in these Specifications.

### 7. Fittings

Payment for furnishing and installing fittings on the pipeline of the sizes shown on the Bid Form will be made at the contract unit price per pound, complete in place, as shown on the Standard Detail Sheet. Restraint glands and concrete thrust blocks shall be incidental to the installation and will not be counted in fitting poundage.

### 8. 5 1/4" Fire Hydrant

Payment for furnishing and installing fire hydrant and accessories shown on the Bid Form will be made at the Contract unit price per unit complete in place. This item shall also include the tee on the water main, valve, swivel adapter, restraints, hydrant assembly and appurtenances as shown on the Drawings and as described in these Specifications.

### 9. End of Line Blow Off Assembly

Payment for furnishing and installing and end of line blow off assembly and accessories shown on the Bid Form will be made at the Contract unit price per unit complete in place. This item shall also include all materials as shown on the Blow-off Assembly detail minus the gate valve and as described in these Specifications.

### 10. Water Service Line and Meter Reconnection

Payment for providing material, equipment and labor to install water service tubing, tapping saddle, corporation stop, curb stop and other accessories and appurtenances for disconnecting existing meter assemblies from the existing water main to be abandoned and re-connecting to the proposed water main. Water line side services will be installed by open cut methods. Long side services will be installed by a combination of open cut and bore methods. Payment will be made at the Contract unit price per linear foot for each service type (line side or long side).

### 10. Water Meter Assembly

Payment for providing material, equipment and labor to install a meter box, meter box cover, copper meter setter, meter yoke couplings and all other appurtenances connecting the meter assembly to the service tubing from the proposed water

## Basis of Payment

main. The meter will be provided to the CONTRACTOR by WCWD. Payment will be made at the Contract unit price per unit.

### 11. Miscellaneous Concrete

Concrete as specified for cradles, paved surface restoration, or pipe encasement shall be paid for at the Contract unit price per cubic yard complete in place.

### 12. Crushed Stone for Bedding, Backfill, and Surfacing

The crushed stone specified herein for bedding, backfill, and surfacing for water line construction will be paid for at the Contract unit price per ton of material furnished and placed as specified. The CONTRACTOR shall furnish the ENGINEER with a duplicate weigh slip for all such materials delivered on the job, but the pay quantities may be computed at the discretion of the ENGINEER using unit weight of crushed stone and the following trench cross-section. Payment for crushed stone for water line installation shall be limited to a cross-section having a width of 16 inches plus the nominal pipe diameter and a depth of 12 inches plus the nominal pipe diameter, minus the area of the pipe. The density of crushed stone shall be assumed to be 95 lb. per cubic foot.

### 13. Silt Fence

Payment for furnishing, installing, maintaining and removing any silt fence as an erosion prevention and sediment control measures in the project area, and performance of SWPPP inspection & reporting shall be made at the Contract unit price per linear foot as specified herein and shall include inspection and reporting for the entirety of the project.

### 14. Rock Check Dam

Payment for furnishing, installing, maintaining and removing rock check dams as an erosion prevention and sediment control measures in the project area, shall be made at the Contract unit price per ton as specified herein and shall include inspection and reporting for the entirety of the project.

### 15. Crushed Stone Channel Lining

Payment for furnishing and installing crushed stone channel lining as an erosion prevention and sediment control measure in the project area, shall be made at the Contract unit price per ton as specified herein.

### 16. Final Cleanup

Payment for the performance of final cleanup work for water and sewer mains shall be made at the Contract unit price per linear foot as specified on the Bid Form.

## Basis of Payment

Payment for final cleanup shall not be made where the water and sewer mains are constructed in paved streets, driveways, sidewalks, or other areas where final cleanup is not performed.

### 17. Summary

The above items, 2 through 16 inclusive, refer to and are the same items as listed on the Bid Form, and constitute all of the pay items for this Contract. Any other items of work listed in the Specifications, or shown on the Drawings, shall be considered to be incidental to the above items or other items listed in the Bid Form.

## **STORM WATER POLLUTION PREVENTION PLAN**

Project Name: Alvaton Area Capacity Improvements

Project Location: Bowling Green/Warren County, Kentucky

Owner: Warren County Water District  
PO Box 10180  
Bowling Green, KY 42102  
270-842-0052

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

### **1. General**

- 1.1. This Storm Water Pollution Prevention Plan (SWPPP) shall be implemented at the commencement of construction disturbance. All operators working on this project will comply with the SWPPP or obtain separate coverage under this permit.
- 1.2. This SWPPP includes erosion prevention measures, sediment controls measures, and other site management practices necessary to prevent the discharge of sediment and other pollutants into waters of the Commonwealth. It is intended that the site management practices be adequately protective to minimize receiving waters from being degraded and failing to support their designated uses. These sediment control measures may include retention basins, erosion control measures, and other site management practices, as required, based on site-specific conditions. Appropriate installation and maintenance will be provided to effectively minimize such discharges for storm events up to an including a 2-year, 24- hour event.
- 1.3. The site, erosion prevention measures, sediment control measures and other site management practices have been designed to minimize post-construction stormwater runoff using low-impact technologies. Soil compaction will be minimized except in specific site areas where intended function dictates compaction and topsoil will be preserved if at all practical.
- 1.4. This SWPPP includes and / or addresses the following:
  - 1.4.1. A site description and map identifying sources of pollution to stormwater discharges associated with construction activity on site.
  - 1.4.2. Description of erosion prevention & sediment control measures that have been developed and will be implemented in accordance with sound practices and have been developed specific to the project and site. The goal of these devices are 80% removal of Total Suspended Solids that exceed predevelopment levels. The Kentucky Erosion Prevention and Sediment Control Field Guide and the Kentucky Best Management Practices Technical Manual shall provide general guidelines for this project.

## SWPPP

- 1.4.3. All construction activities within the common plan of development. Each individual site operator will be a signatory of the SWPPP and shall not conduct activities that are not consistent with the SWPPP or result in failure or ineffectiveness of erosion & sediment control measures, or any other site management practices that have been implemented.
- 1.5. The primary sediment control measure for this project is vegetative buffer strips along the pipeline alignment.

## 2. Site Description

- 2.1. The project site consists of a twenty (20) foot wide construction easement, centered along a proposed water and/or sewer pipeline(s), and construction of a new water pump station.
- 2.2. Soil disturbing activities will include excavation of a trench along the proposed pipeline alignment, installation of the pipeline, backfill of the excavation, and cleanup/restoration of surface. These activities will be performed concurrently to minimize areas of open excavation.
- 2.3. The estimated total project area is 8 acres. It is estimated that approximately 50 percent, or 4 acres, of this project area will be disturbed.
- 2.4. The water quality classification of the receiving waters for this project is: not impaired.

## 3. Site Map

- 3.1. A Site Map is attached. Generally, the map includes the following:
  - 3.1.1. Property lines.
  - 3.1.2. Drainage patterns within the project area.
  - 3.1.3. Soil will be disturbed along the proposed pipeline alignment.
  - 3.1.4. Locations of sediment control measures and erosion control measures. Note that the primary sediment control measure is vegetative buffer strips along the entire length of the project (where practical), and stabilization measures will be re-vegetation in all location where vegetation existed prior to construction.
  - 3.1.5. Locations of surface waters within the project area.
  - 3.1.6. Locations of karst features within the project area.
  - 3.1.7. Locations of discharge points.
  - 3.1.8. The location of equipment and material storage areas is to be determined. Once determined by the Contractor, appropriate BMP's will be identified and indicated on the Drawings.

- 3.1.9. The use of concrete is very limited for this project. A designated concrete washout station will be utilized as needed and will be identified on available site plans.
- 3.1.10. Areas in which final stabilization has been completed will be shown on the Drawings.
- 3.1.11. Other potential pollutant sources, as applicable.
- 3.2 There are no known industrial discharges in the project area other than construction.
- 4. Stormwater Controls
  - 4.1. Erosion prevention measures, sediment controls, and other site management practices shall be as described in *Best Management Practices Manual for Erosion Prevention and Sediment Control, City of Bowling Green, KY*, dated December 2004 and as shown on the Drawings.
  - 4.2. The primary sediment control measure for this project is vegetative buffer strips along the pipeline alignment.
  - 4.3. Stabilization will be employed as soon as practicable, meeting criteria noted in Section 12 of this SWPPP, in critical areas.
- 5. Erosion Control Measures
  - 5.1. General
    - 5.1.1. The total disturbed area shall be minimized.
    - 5.1.2. Trenching, backfill, and restoration shall be performed concurrently along the pipeline alignment so that only a portion of the alignment is disturbed at one time.
    - 5.1.3. Clearing and grading should be scheduled to reduce the probability that bare soils will be exposed to rainfall.
  - 5.2 Managing Stormwater flows on the Site
    - 5.2.1 When practicable, soil from the pipeline trench should be placed on the upslope side of the trench to form diversion berms or conveyance channels.
    - 5.2.2 Vegetated buffers shall remain in place whenever practicable.
    - 5.2.3 Slope drains or other adequately protective alternate practices may be required.
  - 5.3 Energy Dissipation Approaches
    - 5.3.1 Vegetated filter strips shall remain in place whenever practicable.

## SWPPP

5.3.2 Other adequately protective alternate practices may be required.

### 5.4 Minimization of Exposure of Bare Soils

5.4.1 Vegetation shall be used as required to stabilize bare soils. Vegetation may include annual grasses, perennial grasses, or other measures.

5.4.2 Other measures to minimize exposure to bare soils may include geotextiles, straw, rolled erosion control mats, mulch, etc.

## 6. Sediment Control Measures

### 6.1. General

6.1.1. Sediment control measures shall be utilized as required to control and trap sediment that is entrained in stormwater runoff.

### 6.2 Sediment Barriers

6.2.1 Sediment barriers shall be utilized as required including: silt fences with filter fabric, fiber rolls, etc.

### 6.3 Slope Protection

6.3.1 Slope protection shall be utilized as required including: tread tracking, erosion blankets, mulching, etc.

### 6.4 Conduit/Ditch Protection

6.4.1 Conduit/ditch protection shall be utilized as required including: inlet protection, outlet protection, etc.

### 6.5 Stabilizing Drainage Ditches

6.5.1 Ditches shall be stabilized as required through the use of check dams, ditch lining, etc.

### 6.6 Sediment Trapping Devices

6.6.1 Sediment trapping devices shall be utilized as required to settle out sediment eroded from disturbed areas. These devices include: sediment traps, sediment basins, adequate mechanical or chemical settlement enhancers, etc.

### 6.7 Perimeter Controls

6.7.1 Perimeter controls shall be utilized as required including: silt fences, berms, swales, etc. However, due to the nature of this pipeline project's area and associated disturbed areas, perimeter controls are generally impractical to surround the entirety of the site.

## 7. Other Construction Site Management Practices

- 7.1 Construction materials shall be handled, stored, maintained, and disposed of properly to avoid contamination of runoff to the maximum extent practicable.
- 7.2 Construction materials, chemicals, and lubricants shall be protected from exposure to rainfall.
- 7.3 Litter, construction debris, and construction chemicals shall not enter receiving waters.
- 7.4 The discharge of pollutants from equipment and vehicle washing, wheel wash water and other wash waters will be minimized. Wash waters will be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge. Soaps or solvents used in vehicle washing are prohibited.
- 7.5 Exposure of freshly placed concrete rainfall shall be limited.
- 7.6 Stormwaters and other wastewaters from fuels, lubricants, sanitary wastes, and other chemicals such as pesticides, herbicides, and fertilizers shall be segregated to prevent runoff being contaminated. Discharges of fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance are prohibited.
- 7.7 Chemicals, pesticides, herbicides, fertilizers and fuels shall be stored in a neat, orderly fashion.
- 7.8 Trash and sanitary waste shall be collected and managed promptly.
- 7.9 Spills of liquids and solid materials that could pose a pollutant risk shall be cleaned promptly.
- 7.10 Off-site accumulations of sediment shall be removed regularly to minimize the potential for discharge
- 7.11 Wastewater from washout of concrete is prohibited, unless managed by an appropriate control.
- 7.12 Wastewater from cleanout of stucco, paint, form release oils and curing compounds is prohibited.
- 7.13 Any alternate protective practices will be described on the Drawings with locations indicated.
- 7.14 Stormwater controls will be installed, as necessary, for each section of the project as the pipeline construction progresses. Sections will be determined by the direction of natural stormwater flow. Stormwater controls will be removed as final stabilization is completed.
- 7.15 Permanent stabilization shall occur as soon as practical for each section of the project after sufficient time is allowed for trench line settlement. Allowing for

settlement reduces the overall disturbance required. Where required, interim stabilization will be implemented.

- 7.16 Proposed off-site locations of equipment and material storage will be marked on the Drawings.
- 7.17 The estimated construction schedule shall be as indicated on the DOW Notice of Coverage Letter.
- 7.18 All materials shall be stored in accordance with manufacturers' recommendations regarding contamination of stormwater. Construction materials consist of polyvinyl chloride or ductile iron pipe and associated appurtenances. Materials for water distribution must be NSF Standard 61 approved for drinking water use.
- 7.19 There are no known pollutant sources from areas untouched by construction. Therefore, no stormwater controls are anticipated to be required in undisturbed areas.

#### 8. Maintenance of Stormwater Controls

- 8.1. Erosion prevention measures, sediment controls measures, and other site management practices shall be maintained in accordance with manufacturers' recommendations at an interval as required to maintain effective, operating condition. Sediment control devices shall be maintained at no more than 1/3 capacity to allow for sediment capture.
- 8.2. If site inspections identify sediment controls measures, erosion control measures, and other site management practices that are not operating effectively or otherwise require maintenance, maintenance shall be performed, prior to the next storm event. If maintenance before the next storm event is impracticable, the required maintenance shall be completed as soon as possible.

#### 9. Non-Stormwater Discharge Management

- 9.1. The following non-stormwater discharges shall *not* be combined with stormwater discharges.
  - 9.1.1. Discharges from fire-fighting activities.
  - 9.1.2. Fire hydrant flushing.
  - 9.1.3. Waters used for vehicle washing where detergents are not used.
  - 9.1.4. Water used for dust control.
  - 9.1.5. Potable water including uncontaminated water-line flushing.
  - 9.1.6. Routine external building wash down that does not use detergents.
  - 9.1.7. Pavement wash waters where spills or leaks or toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used.
  - 9.1.8. Landscape irrigation.
  - 9.1.9. Clean, non-turbid water-well discharges of groundwater.
  - 9.1.10. Construction dewatering provided the requirements of this permit are met.

## 10. Inspections

10.1. **The CONTRACTOR shall be responsible for conducting EPSC inspections as indicated herein.**

### 10.2. Scope:

10.2.1. Inspections will generally be conducted at least every seven (7) calendar days. Alternatively, inspections will be conducted at least every fourteen (14) calendar days and within 24 hours of the end of a rain event resulting in 0.5 inches of precipitation or greater.

10.2.2. For sections of the project area which have undergone temporary or final stabilization, inspections will be performed at least every thirty (30) days.

10.2.3. Inspections shall be performed by personnel knowledgeable and skilled in assessing conditions at the construction site that could impact stormwater quality and assessing the effectiveness of erosion prevention measures, sediment control measures, and other site management practices chosen to control the quality of the stormwater discharges. Inspectors shall have training in stormwater construction management.

10.2.4. Visual inspections will be performed to determine whether erosion prevention measures, sediment controls measures, and other site management practices are properly installed, properly maintained, and effective. Visual inspection will be made to determine if excessive pollutants are entering the drainage system.

10.2.5. Visual inspection shall comprise erosion prevention measures, sediment control measures, other site management practices, points of site egress, areas used for storage of materials exposed to precipitation, and disturbed areas.

10.2.6. Discharge points will be inspected, if accessible, to ascertain whether erosion prevention measures, sediment control measures, other site management practices, and points of site egress are effective in preventing impacts to waters of the Commonwealth by inspecting the receiving water bodies for evidence of new erosion and/or the introduction of newly deposited sediment or other pollutants. If discharge points are not accessible, nearby downstream points can be inspected.

10.2.7. Representative inspections can be made of the project area 0.25 miles above and below each point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the construction site.

### 10.3. Reporting:

10.3.1. **The CONTRACTOR shall be responsible for reporting EPSC inspections as indicated herein.**

## SWPPP

10.3.2. Inspection reports shall be prepared for all inspections and shall be retained with the SWPPP. Inspection reports will generally include:

- 10.3.2.1. The date and time of inspection.
- 10.3.2.2. The name and title of the inspector.
- 10.3.2.3. A synopsis of weather information for the period since the last inspection (or since start of construction for the initial inspection) including an estimate of the beginning of each storm event, the duration of each storm event, and the approximate amount of rainfall for each storm event (in inches).
- 10.3.2.4. Weather conditions and a description of any discharges occurring at the time of the inspection.
- 10.3.2.5. Location(s) of discharges of sediment or other pollutants from the site.
- 10.3.2.6. Location(s) of sediment controls measures, erosion control measures, or other site management practices that require maintenance.
- 10.3.2.7. Location(s) of any erosion prevention measures, sediment controls measures, or other site management practices that failed to operate as designed or proved inadequate for a particular location.
- 10.3.2.8. Location(s) where additional erosion prevention measures, sediment controls measures, or other site management practices are needed that did not exist at the time of the inspection.
- 10.3.2.9. Identify any actions taken in response to inspection findings.
- 10.3.2.10. Identify any incidents of non-compliance with the SWPPP.
- 10.3.2.11. A certification that the site is in compliance with the SWPPP, if no incidents of non-compliance are identified.
- 10.3.2.12. A signature in accordance with the requirements of 401 KAR 5:060, Section 4.

## 11. Plan Maintenance

**11.1. The CONTRACTOR shall maintain the plan Drawings as provided by the OWNER.**

11.2. SWPPP will be revised whenever erosion prevention measures, sediment controls measures, or other site management practices are significantly modified in response to a change in design, construction method, operation, maintenance procedure, etc., that may cause a significant effect on the discharge of pollutants to receiving waters or municipal separate storm sewer systems.

11.3. The SWPPP will be amended if inspections or investigations by site staff or by local, state, or federal officials determine that the existing sediment controls measures, erosion control measures, or other site management practices are ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the construction site.

11.4. If an inspection reveals design inadequacies, the site description and sediment controls measures, erosion control measures, or other site management practices identified in the SWPPP will be revised.

- 11.5. All necessary modifications to the SWPPP will be made within seven (7) calendar days following the inspection unless granted an extension of time by Kentucky Division of Water (DOW).
- 11.6. If existing sediment controls measures, erosion control measures, or other site management practices need to be modified or if additional sediment controls measures, erosion control measures, or other site management practices are necessary, implementation shall be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation will be documented in the SWPPP and the changes shall be implemented as soon as practicable.

## 12. Plan Availability

- 12.1. This SWPPP will be signed & certified in accordance with the signatory requirements in 401 KAR 5:065, Section 1(11).
- 12.2. A current copy of the SWPPP will be made readily available to the construction site from the date of project initiation to the date of Notice of Termination.
- 12.3. The person with day-to-day operational control over the plan's implementation will keep a copy of the SWPPP readily available whenever on site.
- 12.4. If an on-site location is unavailable to store the SWPPP when no personnel are present, notice of the plan's location shall be posted in a convenient location at the construction site.
- 12.5. The SWPPP will be made available to DOW or its authorized representative for review and copying during on-site inspections.
- 12.6. Upon request, the SWPPP will be made available to the Environmental Protection Agency and other federal agencies or their contractor, and local governmental agencies and officials approving sediment and erosion plans, grading plans or stormwater management plans; including the operator of any MS4 receiving discharges from the site.

## 13. Critical Areas – Minimize Size and Duration of Disturbance

- 13.1. No "critical areas" have been identified in the project area.

## 14. Stabilization

- 14.1. Final stabilization for portions of the project where construction has permanently ceased will be initiated within fourteen (14) days of the date of cessation of construction. Final stabilization will be initiated as soon as practical on portions of the project area where construction has been suspended for more than 180 days, and within no more than 14 days.
- 14.2. Temporary stabilization for portions of the project where construction has temporarily ceased will be initiated, as required, within fourteen (14) days of the date of cessation of construction activities.

## 15. Buffer Zones

- 15.1. No waters categorized as High Quality Waters or Impaired Waters (Non-construction related impairment) have been identified within the project area.

## SWPPP

- 15.2. No waters categorized as Impaired Waters (Sediment impaired, but no TMDL) have been identified within the project area.

## SWPPP APPENDIX A

**EPSC INSPECTION REPORT**Project Name: Alvaton Area Capacity ImprovementsNOI #: TBD

Date &amp; Time: \_\_\_\_\_

Inspection Type:

☐ Weekly Inspection☐ Post Rain Inspection

Amount of Rain: \_\_\_\_\_ inches

	Parameter of Inspection	YES	NO	N/A
1	Is the Erosion Control Plan on site?			
2	Are all modifications and deviations up to date and noted on the Drawings?			
3	Is the Storm Water Pollution Prevention Plan (SWPPP) being followed?			
4	Are required sediment controls in place at storm drain inlets and other required areas?			
5	Are sufficient measures in place to prevent mud from entering roadways and/or is sediment, debris, and/or mud cleaned from public roads as required?			
6	Are required slit fences in place properly and maintained on a regular schedule?			
7	Are required temporary sediment traps maintained according to the Drawings?			
8	Are required inlet protection devices installed and maintained properly?			
9	Are required check dams installed and maintained according to the Drawings?			
10	Are all disturbed areas stabilized according to the Drawings?			
11	Are all temporary stockpiles or construction materials located in approved areas and protected according to the Drawings?			
12	Are dust control measures being appropriately implemented?			
13	Are all discharge points where water is leaving the site maintained properly?			
14	Are all material storage and secondary containment properly maintained and shown on the Drawings?			

For any item marked "NO" above, see corresponding note with matching number below or on additional pages.

Issues of Non-compliance, other comments, and corrective action summary:


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By signing below, I certify under penalty of law this document and all attachments were prepared under my supervision and the information submitted is, to the best of my knowledge, true, accurate and complete.

\_\_\_\_\_  
Site Foreman's Name (Print)\_\_\_\_\_  
Inspector's Name (Print)\_\_\_\_\_  
Site Foreman's Signature\_\_\_\_\_  
Inspector's Signature\_\_\_\_\_  
Inspector's Qualifications

## SWPPP APPENDIX B

### EPSC CERTIFICATION

Project Name: Alvaton Area Capacity Improvements

Project Location(s): Warren County, Kentucky

Contractor Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone Number: \_\_\_\_\_

Check One: ☐ Prime Contractor ☐ Sub-Contractor

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification."

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

State of Kentucky

County of \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public in and for the State of  
Kentucky at Large, do hereby certify that the foregoing certification from  
\_\_\_\_\_ was duly produced before me on this \_\_\_\_ day of  
\_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
NOTARY PUBLIC, STATE OF KENTUCKY

My Commission Expires: \_\_\_\_\_

# **Exhibit 9**

Grant Documents

CWP Grant 22CWW036



## KENTUCKY INFRASTRUCTURE AUTHORITY

**Andy Beshear**  
Governor

100 Airport Road  
Frankfort, Kentucky 40601  
(502) 573-0260  
<https://kia.ky.gov>

**Sandy Williams**  
Executive Director

November 21, 2022

Tad Donnelly  
Chairman  
Warren County Water District  
PO Box 10180  
Bowling Green, KY 42102

## KENTUCKY INFRASTRUCTURE AUTHORITY CONDITIONAL COMMITMENT LETTER

KIA Grant Number 22CWW036  
WRIS Project Number WX21227108

Dear Official,

Congratulations on receiving an award of Kentucky Cleaner Water Program (the "CWP") Round 2 grant funds for your Project! The Kentucky Infrastructure Authority (the "Authority") approved the grant request to the Warren County Water District (the "Grantee") in the amount of \$2,200,000 for the Alvaton Capacity Improvements project. We look forward to working with you to successfully complete your Project!

Please be aware that these Round 2 CWP Grant Project funds are provided through the American Rescue Plan Act of 2021, Coronavirus State Fiscal Recovery Fund and must be obligated by December 31, 2024 and fully expended by **December 31, 2026**. Any funds not obligated by December 31, 2024 or expended by December 31, 2026 will be forfeited and will not be available for the project.

An Assistance Agreement will be executed between the Authority and the Grantee upon satisfactory performance of the conditions set forth in Attachment A. Funds will be available for disbursement only after execution of the Assistance Agreement.

During the course of implementing your project, please inform the Authority of any changes in the project scope and financing plan as soon as possible.



We wish you every success for this project, which will benefit both your community and the Commonwealth as a whole.

Sincerely,



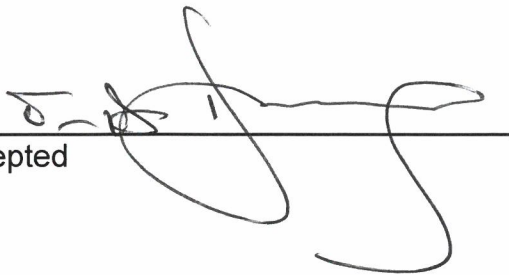
Sandy Williams,  
Executive Director

Attachments

cc: Ryan J Leisey, Project Administrator  
Jacob C Cuarta, Warren County Water District  
Morgan Hershey, ADD Coordinator  
Kelly Cunnagin, KIA Grant Analyst  
File

Please sign and return a copy of this letter indicating your acknowledgement and acceptance of the commitment and its terms and conditions incorporated by reference and in the Attachments and Exhibits.

Accepted



3-12-2024

Date



## KENTUCKY INFRASTRUCTURE AUTHORITY

**Andy Beshear**  
Governor

100 Airport Road  
Frankfort, Kentucky 40601  
(502) 573-0260  
<https://kia.ky.gov>

**Sandy Williams**  
Executive Director

September 3, 2024

Tad Donnelly  
Chairman  
Warren County Water District  
PO Box 10180  
Bowling Green, KY 42102

### KENTUCKY INFRASTRUCTURE AUTHORITY CONDITIONAL SUPPLEMENTAL COMMITMENT LETTER

KIA Grant Number 22CWW036  
WRIS Project Number WX21227108

Dear Official,

Congratulations on receiving an increase to your existing Kentucky Cleaner Water Program (the "CWP") grant funds for your Project! The Kentucky Infrastructure Authority (the "Authority") approved the additional grant funds to the Warren County Water District (the "Grantee") in the amount of \$286,720 for the Alvaton Capacity Improvements project. This brings your total grant award to \$2,486,720. We look forward to working with you to successfully complete your Project! All terms, conditions, and Exhibits previously provided to the Authority by the Grantee for this Grant are incorporated herein by reference. Note that this Conditional Supplemental Commitment Letter, Attachments and Exhibits hereto do not include certain exhibits that were included in your original Conditional Commitment Letter because updated versions of those exhibits are not needed for this supplemental grant. We have left the original Exhibit numbers in place for clarity.

Please be aware that these CWP Grant Project funds are provided through the American Rescue Plan Act of 2021, Coronavirus State Fiscal Recovery Fund and must be obligated by December 31, 2024 and **fully expended by December 31, 2026**. Any funds not obligated by December 31, 2024 or expended by December 31, 2026 will be forfeited and will not be available for the project.



An Assistance Agreement (or Supplemental Assistance Agreement if your Assistance Agreement is already signed) will be executed between the Authority and the Grantee upon satisfactory performance of the conditions set forth in Attachment A. Funds will be available for disbursement only after execution of the Assistance Agreement and / or Supplemental Assistance Agreement.

During the course of implementing your project, please inform the Authority of any changes in the project scope and financing plan as soon as possible.

We wish you every success for this project, which will benefit both your community and the Commonwealth as a whole.

Sincerely,

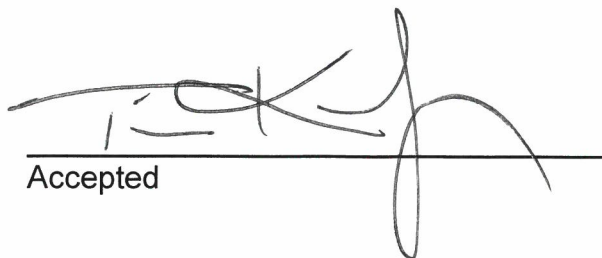


Sandy Williams,  
Executive Director

Attachments

cc: Clinton Harbison, Project Administrator  
Jacob C Cuarta, Warren County Water District  
Ryan J. Leisey  
Zach Bell, ADD Coordinator  
Julie Bickers, KIA Grant Analyst  
File

Please sign and return a copy of this letter indicating your acknowledgement and acceptance of the commitment and its terms and conditions incorporated by reference and in the Attachments and Exhibits.

  
Accepted

9-6-2024  
\_\_\_\_\_  
Date

**AMENDED AND RESTATED SUPPLEMENTAL GRANT ASSISTANCE AGREEMENT**

This AMENDED AND RESTATED SUPPLEMENTAL Grant Assistance Agreement (the “Agreement”) is made and entered into by and between the Kentucky Infrastructure Authority (the “Authority”), a body corporate and politic, constituting a public corporation and governmental agency and instrumentality of the Commonwealth of Kentucky, and the Warren County Water District (the “Grantee”), acting herein through its Authorized Official, each a party to this Agreement, which shall be effective upon the date of signing by the Executive Director of the Authority,

**W I T N E S S E T H:**

WHEREAS, the General Assembly of the Commonwealth of Kentucky, being the duly and legally constituted legislature of Kentucky at its 1988 Regular Session, enacted House Bill 217 amending Chapter 224A of the Kentucky Revised Statutes (the “Act”), creating the “Kentucky Infrastructure Authority” to serve the public purposes identified in the Act; and

WHEREAS, the Authority, attached to the Governor’s Office, is charged pursuant to Section 224A.300 of the Act with coordinating the funding and implementation of infrastructure projects and to this end maintains the Water Resource Information System (the “WRIS”) a comprehensive database of community water and wastewater projects across Kentucky; and

WHEREAS, Senate Bill 36 of the 2021 Regular Session of the Kentucky General Assembly approved a \$250,000,000 allocation in Federal Funds for Fiscal Year 2021 from the American Rescue Plan Act of 2021/Coronavirus State Fiscal Recovery Fund to the Authority for the Drinking Water and Wastewater Grant Program, known as the Kentucky Cleaner Water Program (the “CWP”), and House Bill 1 of the 2022 Regular Session of the Kentucky General Assembly approved another \$250,000,000 allocation in Federal Funds for Fiscal Year 2022 from the American Rescue Plan Act of 2021/Coronavirus State Fiscal Recovery Fund to the Authority for the CWP, a portion of which funds are the subject of this Agreement; and

WHEREAS, the Grantee is acquiring and constructing a project as described in the Grantee’s Project Profile in the WRIS (the “Project”) and the Authority has determined that the Project meets the guidelines of the Cleaner Water Program and the directives of the General Assembly;

WHEREAS, the Grantee and the Authority previously entered into that certain Grant Assistance Agreement dated August 23, 2024 (the “Original Agreement”); and now wish to amend and restate the Original Agreement in its entirety by their adoption of this Agreement for the purpose of increasing the amount of the Grant (as defined below); and

WHEREAS, the Grantee and the Authority desire to enter into this Agreement which sets forth and revises their respective duties, rights, covenants, and obligations

with respect to the acquisition and construction of the Project and the application of the proceeds of a grant, as increased hereunder, from the Cleaner Water Program as administered by the Authority.

NOW THEREFORE, in consideration of the mutual covenants and conditions contained herein, the grant hereby effected, and for other good and valuable consideration, the receipt, mutuality and sufficiency of which is hereby acknowledged by the parties hereto, the Authority and the Grantee each agree as follows:

## **SECTION 1 – DEFINITIONS**

All terms utilized herein shall have the same definitions and meaning as ascribed to them in the Act, which Act is hereby incorporated in this Agreement by reference, the same as if set forth herein verbatim; provided, however, that those definitions utilized in the Act having general application are hereby modified in certain instances to apply specifically to the Grantee and its Project.

**Act** shall mean Chapter 224A of the Kentucky Revised Statutes, as amended (the “KRS”).

**Agreement** shall mean this Amended and Restated Supplemental Grant Assistance Agreement made and entered into by and between the Grantee and the Authority, as authorized by the Act, providing for a Grant to be made to the Grantee or its approved agent, subject to approval by the Authority.

**Area Water Management Council** shall mean the entity designated as the regional planning body for the respective counties within an Area Development District in Kentucky, which shall prepare and maintain an Area Water Management Plan, listing and prioritizing Project Profiles for water and wastewater projects within that region.

**Engineer(s)** shall mean the professional engineer or firm of professional engineers properly procured in accord with KRS Chapter 45A and 2 CFR 200.317 through 2 CFR 200.327 (where applicable), as amended, by the Grantee in connection with the Project, as identified in the WRIS Cleaner Water Program Database.

**Exhibit** shall refer to a specific document, or to the completion of a process or procedure to be accomplished as a prerequisite to release of funds to the Grantee by the Authority.

**Grant** shall mean that portion of the Kentucky CWP funds made available to the Commonwealth by the American Recovery Program Act and allocated by the Kentucky General Assembly in its 2021 and 2022 Regular Sessions, which shall be incrementally transferred under this Agreement from the Commonwealth to the Grantee through Grant Number 22CWW036 in the principal amount of \$2,486,720 for the purpose of defraying the costs incidental to the Project.

**Grantee** shall mean any unit of local government, or its designated agent, as approved by the Authority, or any special purpose governmental entity within the Commonwealth eligible for funds under the CWP in accordance with the Act, now having been or hereafter being granted the funds for the Project; and for the purposes of this Agreement shall mean the Grantee identified on the front page of this Agreement.

**Project** shall mean, when used generally, a water, wastewater or other infrastructure project authorized pursuant to the Act, and when used in specific reference to the Grantee's Project funded by the Authority through the CWP, it shall refer to that project as described in the Grantee's Project Profile in the WRIS, which has an 8 digit number following the designation WX or SX.

**Project Administrator** shall mean that individual designated in the Project Profile by that title, who has the capacity and responsibility of supervising the Project and coordinating the preparation of all related documentation on behalf of the Grantee with respect to the Project.

**Project Budget** shall mean a list of Project expenses and funding sources, in the form set forth in the current Project Profile as set forth in the WRIS.

**Project Profile** shall mean those specific details of the Project, presented by the Grantee to the respective Area Water Management Council for review and incorporation into the Area Water Management Plan and the WRIS.

**System** shall mean the utility system owned and operated by the Grantee or the agent of the Grantee, as approved by the Authority, to which the Project shall become a part, and any revenues generated by the Project, which are used to operate and maintain the utility system in the typical manner of a local public utility in Kentucky.

## **SECTION 2 - OBLIGATIONS OF THE AUTHORITY**

The Authority covenants and agrees, conditioned upon the timely performance by the Grantee of its respective obligations, to undertake the following obligations:

- A. The Authority shall review and approve Project related documentation provided by the Grantee. Once the Project is under construction, the Authority shall review requests for payment submitted for payment of costs of the Project. Any deficiencies found in said requests will be reported immediately to the Grantee. If there are no deficiencies in said requests or deficiencies have been resolved satisfactorily by the Grantee, the Authority will approve the requests and disburse grant funds to the Grantee in an amount not to exceed, cumulatively, the approved grant amount for the Project.
- B. The Authority will communicate and cooperate with the Grantee to best assist the Grantee in meeting its obligations set out in this Agreement.

**SECTION 3 - OBLIGATIONS OF THE GRANTEE**

The Grantee covenants and agrees to undertake the following obligations:

- A. The Grantee shall complete and submit executed copies of all required Exhibits to the Authority, in accordance with the Conditional Commitment Letter and Supplemental Conditional Commitment Letter instructions.
- B. The Grantee may consider utilizing the option for partial funding set out in Section 6, below. Over the course of the acquisition and construction of the Project, the Grantee shall provide such status reports as may be requested by the Authority, and once the Project is under construction submit periodic requests for payment to the Authority accompanied by copies of invoices for costs incurred in accordance with the Authority's standard draw-down request format.
- C. The Grantee shall perform and/or cause to be performed all necessary acts consistent with all federal and state labor and procurement laws in connection with the planning, design, acquisition and construction of the Project, including: the proper procurement of land, easements and rights of way; professional services, including but not limited to architectural and engineering services; construction contractor(s) services; and the acquisition of necessary equipment and/or materials.
- D. The Grantee shall obtain and keep on file all required permits, licenses and approvals from the appropriate federal, state, and/or local governmental agencies prior to starting construction of the Project.
- E. The Grantee shall comply with all applicable federal and state statutes, executive orders, regulatory requirements, and policies relating to the planning and construction of the Project.
- F. The Grantee shall cooperate fully with the Authority and provide any documentation requested by the Authority in order to facilitate completing the obligations set out in this Agreement.
- G. The Grantee will proceed expeditiously to complete the Project in accordance with the approved final engineering plans and specifications or amendments thereto, prepared by the Project Engineer for the Grantee, if required and as approved by the Authority and other state and federal agencies, as appropriate.
- H. The Grantee agrees that throughout the reasonable life of the infrastructure facilities developed under the Project it will retain ownership of, operate, and maintain these facilities, and all appurtenances thereto, keeping them in good and sound repair and good operating condition at its own expense so that the completed Project will continue to provide the services for which it was designed.

Change of ownership or disposal of the Project facilities during their useful life may occur only with written approval of the Authority.

- I. If the Grantee is a local unit of government, city or county, and determines that it is in the best interest of its citizens, it may enter into a memorandum of agreement with a Kentucky corporation to serve as its agent for the implementation and long term operation and management of the Project, subject to the Agreement. The form and content of such a memorandum of agreement is subject to the prior approval of the Authority.
- J. General Compliance with all Duties. The Grantee shall faithfully and punctually perform all duties with reference to the System required by the American Rescue Plan Act of 2021, and by the terms and provisions of the Act, and this Assistance Agreement.
- K. Further Covenants under the American Rescue Plan Act of 2021. The Grantee shall comply with all further requirements or conditions which may arise from time to time in order to assure compliance with the American Rescue Plan Act of 2021, including but not limited to the following:
  1. Records Retention. The Grantee shall provide to the Authority access to all records related to the Project for review in determining compliance with this Agreement and all applicable laws and regulations, including the American Rescue Plan Act of 2021/Coronavirus State Fiscal Recovery Fund. The Grantee shall retain all records, including all invoices, relating to the Project for five (5) years after full execution of the Certificate of Completion.
  2. Single Audit Requirements. Grantees that expend more than \$750,000 in Federal awards during their fiscal year will be subject to an audit under the Single Audit Act and its implementing regulation at 2 CFR Part 200, Subpart F regarding audit requirements. Grantees may also refer to the Office of Management and Budget (OMB) Compliance Supplements for audits of federal funds and related guidance and the Federal Audit Clearinghouse to see examples and single audit submissions.
  3. Civil Rights Compliance. The Grantee is required to meet legal requirements relating to nondiscrimination and nondiscriminatory use of Federal funds. Those requirements include ensuring that entities receiving Federal financial assistance from the U.S. Department of the Treasury do not deny benefits or services, or otherwise discriminate on the basis of race, color, national origin (including limited English proficiency), disability, age, or sex (including sexual orientation and gender identity), in accordance with the following authorities: Title VI of the Civil Rights Act of 1964 (Title VI) Public Law 88-352, 42 U.S.C. 2000d-1 et seq., and the Department's implementing regulations, 31 CFR part 22; Section 504 of the Rehabilitation Act of 1973 (Section 504), Public Law 93-112, as amended by Public Law 93-516, 29 U.S.C. 794; Title IX of the Education Amendments of 1972 (Title IX), 20 U.S.C. 1681 et seq., and the

Department's implementing regulations, 31 CFR part 28; Age Discrimination Act of 1975, Public Law 94-135, 42 U.S.C. 6101 et seq., and the Department implementing regulations at 31 CFR part 23.

- L. General. The Grantee shall do and perform or cause to be done and performed all acts and things required to be done or performed by or on behalf of the Grantee under the provisions of the American Rescue Plan Act of 2021 and this Assistance Agreement in accordance with the terms of such provisions.

#### **SECTION 4 - MUTUALITY OF OBLIGATIONS**

- A. The parties agree that the funds granted by the Commonwealth to the Grantee are to be used solely for the purposes of the acquisition and construction of the Project. Further, the parties agree that the obligations imposed upon them are for their respective benefit and the timely fulfillment of the obligations set herein are necessary for the Project.
- B. Except as may otherwise be provided herein, the parties to this Agreement shall be solely responsible for any incidental costs incurred in fulfilling their respective obligations under this Agreement and neither party shall have any claim against the other party for reimbursement of incidental costs whether or not a party is in default.

#### **SECTION 5 - TERMS OF AGREEMENT**

- A. This Agreement shall be valid only after both parties have duly signed and provided the executed document to the other.
- B. This Agreement may be terminated by either party at any time for cause and may be terminated by either party without cause upon 30 days written notice to the other party. Termination of this Agreement shall not diminish or in any other manner affect any other remedy that may be available to the parties for any breach of the Agreement that occurs prior to the termination.
- C. If, after execution of this Agreement, additional financial assistance is found to be required for the acquisition and construction of the Project and the required additional assistance does or does not become available to the Grantee from any source, the Project may be modified so long as any change in scope and budget is mutually agreed to by the parties to this Agreement, and clearly documented in a revision of the Project Budget within the Project Profile.

## **SECTION 6 - ADVANCE FUNDING FOR PROJECT PLANNING AND DESIGN**

- A. The Grantee may request, in writing, that a portion of the grant funds be disbursed prior to Project bidding to pay up to 50% of the budgeted engineering fee for Project planning and design to the Project Engineer to expedite submission of the Project plans and specifications for review by the Kentucky Division of Water. The balance of the budgeted engineering fee for project planning and design may be paid only after approval of the plans by the Kentucky Division of Water.
- B. It is specifically understood and agreed by the Grantee in the event that the Project has not been advertised for bids within twenty-four (24) months from the date of signing of the Original Agreement, for whatever reason, any funds disbursed for Project planning and design are subject to full and immediate repayment by the Grantee to the Authority.
- C. No funds shall be released under this Section until the requirements of Exhibits 1 through 7 of this Agreement have been completed.

## **SECTION 7. - EVENTS OF DEFAULT AND REMEDIES.**

### **Section 7.1. Events of Default Defined.**

The following will be "Events of Default" under this Agreement and the term "Event of Default" or "Default" will mean, whenever it is used in this Agreement, any one or more of the following events:

- A. Any unauthorized or improper expenditure of funds by the Grantee, or expenditure of funds by the Grantee other than in accordance with the terms of this Agreement.
- B. Failure by the Grantee to observe or perform any covenant, condition or agreement on its part to be observed or performed, other than as referred to in subsection (A) of this Section, for a period of thirty (30) days after written notice specifying such failure and requesting that it be remedied will have been given to the Grantee by the Authority unless the Authority agrees in writing to an extension of such time prior to its expiration; provided, however, if the failure stated in the notice cannot be corrected within the applicable period, the Authority will not unreasonably withhold its consent to an extension of such time if corrective action is instituted by the Grantee within the applicable period and diligently pursued until such failure is corrected.
- C. The dissolution or liquidation of the Grantee, or the voluntary initiation by the Grantee of any proceeding under any federal or Kentucky law relating to bankruptcy, insolvency, arrangement, reorganization, readjustment of debt or any other form of debtor relief, or the initiation against the Grantee of any such

proceeding which remain undismissed for sixty (60) days, or the entry by the Grantee into an agreement of composition with creditors or the failure generally by the Grantee to pay its debts as they become due.

- D. A default by the Grantee under the provisions of any agreements relating to its debt obligations.

### **Section 7.2. Remedies on Default.**

Whenever any Event of Default referred to in Section 7.1 has occurred and is continuing, the Authority may, without any further demand or notice, take one or any combination of the following remedial steps:

- A. Declare this Agreement void from the beginning without further obligation to the Grantee and may commence appropriate legal action to enforce its rights under this Agreement including action for recovery of funds expended hereunder.
- B. Terminate any remaining grant payments to the Grantee.
- C. Exercise all the rights and remedies of the Authority set forth in the Act.
- D. Take whatever action at law or in equity may appear necessary or desirable to enforce its rights under this Agreement.
- E. Submit a formal referral to the appropriate federal agency.

### **Section 7.3. No Remedy Exclusive.**

No remedy herein conferred upon or reserved to the Authority is intended to be exclusive, and every such remedy will be cumulative and will be in addition to every other remedy given hereunder and every remedy now or hereafter existing at law or in equity. No delay or omission to exercise any right or power accruing upon any default will impair any such right or power and any such right and power may be exercised from time to time and as often as may be deemed expedient.

### **Section 7.4. Consent to Powers of Authority Under Act.**

The Grantee hereby acknowledges to the Authority its understanding of the provisions of the Act, vesting in the Authority certain powers, rights and privileges in respect of the Project upon the occurrence of an Event of Default, and the Grantee hereby covenants and agrees that if the Authority should in the future have recourse to said rights and powers, the Grantee shall take no action of any nature whatsoever calculated to inhibit,

nullify, void, delay or render nugatory such actions of the Authority in the due and prompt implementation of this Agreement.

#### **Section 7.5. Waivers.**

In the event that any agreement contained herein should be breached by either party and thereafter waived by the other party, such waiver will be limited to the particular breach so waived and will not be deemed to waive any other breach hereunder.

#### **Section 7.6. Agreement to Pay Attorneys' Fees and Expenses.**

In the event that either party hereto defaults under any of the provisions hereof and the non-defaulting party employs attorneys or incurs other expenses for the enforcement of performance or observance of any obligation or agreement on the part of the defaulting party herein contained, the defaulting party agrees that it will pay on demand therefor to the non-defaulting party the fees of such attorneys and such other expenses so incurred by the non-defaulting party.

### **SECTION 8 - MISCELLANEOUS PROVISIONS**

- A. The Grantee may sign this Agreement electronically via a program subject to the approval by the Authority, or manually on a paper copy that is scanned to the portable document format (.pdf) and emailed to the Authority. Transmittal of all other correspondence or documentation, including the required Exhibits identified in the Attachment shall be scanned and attached as a file to email. The Authority and the Grantee, working through the Project Administrator, shall assist each other in securing and maintaining a complete, current Project document file for reference, records, and audit purposes.
- B. The headings set forth in this Agreement are for convenience and the terms contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.
- C. The terms and conditions of this Agreement shall be binding upon and shall inure to the benefit of the successor and assigns, respectively, of the parties. Except for the limited use of a memorandum of agreement (as provided in Section 3 herein), this provision shall not be construed to permit an assignment by any party of any of its rights and duties under this Agreement which assignment shall be prohibited except with the prior written consent of the parties hereto.
- D. This Agreement sets forth the entire understanding of the parties with respect to the subject matter hereof and may be modified only by a written instrument duly executed by each of the parties hereto.
- E. Timely and accurate performance of all actions by the respective parties are mutually recognized by the parties of this Agreement to be of importance to the citizens of the Commonwealth generally, and particularly to those citizens directly affected by the Project.

- F. This Agreement will be governed by and construed in accordance with the laws of the Commonwealth of Kentucky.
- G. The Authority may audit or review all documentation and records of the Grantee relating to this Project pursuant to the provisions of Section 45A.150 of the KRS or any other applicable federal or state law.
- H. The Grantee agrees that the Authority, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other documentation or evidence, which are directly pertinent to this Agreement for the purpose of financial audit or program review. Furthermore, any books, documents, papers records, or other evidence provided to the Commonwealth, the Finance and Administration Cabinet, the Auditor of Public Accounts, or the Legislative Research Commission, which are directly pertinent to this Agreement, shall be subject to public disclosure regardless of the proprietary nature of the information, unless specific information is identified and exempted and agreed to by the Secretary of the Finance and Administration Cabinet as meeting the provisions of KRS 61.878(1)(c) prior to the execution of this Agreement. The Secretary of the Finance and Administration Cabinet shall not restrict the public release of any information which would otherwise be subject to public release if a state government agency was providing the services.
- I. This Agreement amends, supplements, and replaces the Original Agreement in its entirety effective as of the date of execution by the Executive Director of the Authority on the signature page hereof. The Original Agreement shall continue to govern the relationship of the parties hereto with respect to the Grant and other matters set out herein and in the Original Agreement for the period beginning from the effective date of the Original Agreement to, but excluding, the effective date of this Agreement.
- J. During the performance of this contract, the Grantee agrees to the following Appendix II to 2 CFR Part 200 contract provisions, as amended:

### **Equal Employment Opportunity**

- 1. The Grantee will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Grantee will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:
  - a. Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The

contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- b. The Grantee will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- c. The Grantee will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- d. The Grantee will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- e. The Grantee will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- f. The Grantee will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- g. In the event of the Grantee's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part, and the contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- h. The Grantee will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every

subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a Grantee becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

### **Contract Work Hours and Safety Standards Act**

All contracts that are in excess of \$100,000 and involve the employment of mechanics or laborers must include provisions requiring compliance with the Contract Work Hours and Safety Standards Act as follows:

1. Overtime requirements: No contractor or subcontractor contracting for any part of the Agreement work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such a workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such a workweek.
2. Violation: liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
3. Withholding for unpaid wages and liquidated damages. The Grantee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums

as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower-tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

### **Clean Air Act**

1. The Grantee agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The Grantee agrees to report each violation to the Authority and understands and agrees that the Authority will, in turn, report each violation as required to assure notification to the Treasury Department and the appropriate Environmental Protection Agency Regional Office.
3. The Grantee agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with American Rescue Plan Act funding.

### **Federal Water Pollution Control Act**

1. The Grantee agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
2. The Grantee agrees to report each violation to the Authority and understands and agrees that the Authority will, in turn, report each violation as required to assure notification to the Treasury Department and the appropriate Environmental Protection Agency Regional Office.
3. The Grantee agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with American Rescue Plan Act funds.

### **Debarment and Suspension**

Contracts shall not be awarded to parties listed on the governmentwide exclusions in the System for Award Management (SAM) listed at [www.sam.gov](http://www.sam.gov).

### **Byrd Anti-Lobbying Amendment**

Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not

used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier, up to the recipient.

*[Signature Page Follows]*

**IN WITNESS WHEREOF**, the parties have caused this Agreement to be executed by their respective duly authorized officials as of the day and year above written.

**KENTUCKY INFRASTRUCTURE  
AUTHORITY**

By: \_\_\_\_\_  
Sandy Williams, Executive Director

Date: \_\_\_\_\_

**WARREN COUNTY WATER DISTRICT**

By: \_\_\_\_\_  
Authorized Official

Print Name: Jacob Cuarta 09/26/2024

**THIS AGREEMENT HAS BEEN EXAMINED  
BY:**

By: \_\_\_\_\_  
**LEGAL COUNSEL TO THE KENTUCKY  
INFRASTRUCTURE AUTHORITY**

## CWP GRANT CONDITIONS – COMPLIANCE FORMS & EXHIBITS

***Note A: Exhibits 1 through 3 must be completed, scanned, and emailed to the Authority on or before the date the Grantee signs the Conditional Commitment Letter. The Conditional Commitment Letter may be signed electronically or manually, then scanned and emailed to the Authority.***

- Exhibit 1      Notification to the Authority of completed Review / Update of Project Profile
- Exhibit 2      Confirmation of Grantee Vendor Number – via KY Finance Cabinet Application
- Exhibit 3      Copy of the Transparency Act Reporting Information Form

***Note B: Upon receipt of the signed Conditional Commitment Letter and the Authority's verification of Exhibits 1-3, the Authority will forward to the Grantee the Grant Assistance Agreement. The Grantee should proceed to complete Exhibits 4 through 7, scan and send each Exhibit to the Authority by email; and then the Authorized Official may sign the Assistance Agreement, either electronically or by scanning and send attached to email.***

- Exhibit 4      A) Grantee Resolution (Accepting Grant, Approving Agreement, Amending Budget, Designating an Authorized Official)  
B) Certificate of Recording Officer
- Exhibit 5      Opinion of Legal Counsel Relating to the Grantee Resolution
- Exhibit 6      A) Copy of the Engineering Services Contract; and  
B) Grantee & Engineer Fee Confirmation

***Note C: The Grantee may request 50% of the engineering design fee (as budgeted in the Project Profile) at this point and may request the balance of the engineering design fee once Exhibit 8 has been sent to the Authority.***

- Exhibit 7      Copy of the Kentucky eClearinghouse Endorsement Letter with Comments.
- Exhibit 8      Copy of the DOW Approval Letter of Project Engineering Plans & Specifications.
- Exhibit 9      Copy of the bid package signed by (A) Engineer, (B1) Authorized Official, and (B2) Title Attorney, as appropriate.
- Exhibit 10      Certification Regarding Utility Accounting, Cost-Based Rates and Auditing.
- Exhibit 11      Certificate of Project Completion.

**CWP SUPPLEMENTAL GRANT CONDITIONS – COMPLIANCE FORMS & EXHIBITS**

***Note A: Exhibit 1S must be completed, scanned, and emailed to the Authority on or before the date the Grantee signs the Supplemental Conditional Commitment Letter. The Supplemental Conditional Commitment Letter may be signed electronically or manually, then scanned and emailed to the Authority.***

Exhibit 1S     Notification to the Authority of completed Review / Update of Project Profile (as increased)

***Note B: Upon receipt of the signed Supplemental Conditional Commitment Letter and the Authority's verification of Exhibit 1S, the Authority will forward to the Grantee the Amended and Restated Supplemental Grant Assistance Agreement. The Grantee should proceed to complete Exhibits 4S and 5S, scan and send each Exhibit to the Authority by email; and then the Authorized Official may sign the Assistance Agreement, either electronically or by scanning and send attached to email.***

Exhibit 4S     A) Grantee Supplemental Resolution (Accepting Increased Grant, Approving Agreement, Amending Budget, Designating an Authorized Official)  
                    B) Certificate of Recording Officer

Exhibit 5S     Opinion of Legal Counsel Relating to the Grantee Supplemental Resolution

# **Exhibit 10**

DOW Approval



**Andy Beshear**  
GOVERNOR

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

300 Sower Boulevard  
Frankfort, Kentucky 40601  
Phone: (502) 564-2150  
Fax: 502-564-4245

**Rebecca W. Goodman**  
SECRETARY

**Anthony R. Hatton**  
COMMISSIONER

October 14, 2025

Clint Harbison, P.E.  
Warren Co Water District  
PO Box 10180  
Bowling Green, KY 42102-4780

RE: Alvaton Area Capacity Improvements  
Warren County, KY  
Warren Co Water District  
AI #: 44217, APE20250002  
PWSID #: 1140487-25-002

Dear Clint Harbison:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 16,875 linear feet of 16-inch DI water line. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the attached construction permit.

If you have any questions concerning this project, please contact Stephen Kietz at 502-782-0769.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Humphries", written over a horizontal line.

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

TH:SK  
Enclosures

c: Warren County Water District  
Warren County Health Department  
Division of Plumbing

# **Exhibit 11**

Department of Highways

Encroachment Permit



Kentucky Transportation Cabinet  
Department of Highways  
Division of Maintenance  
Permits Branch

TC 99-1 (B)  
07/2018  
Page 1 of 1

**ENCROACHMENT PERMIT**

**KYTC KEPT #:** 03-2025-00235

**Permittee:** Warren County Water District

**Permit Type / Subtype:** Utilities / Water

**Work Completion Date:** 10/6/2026

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

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

Sarah Payton	D3 Permits - Supervisor	10/13/2025
<b>SIGNATURE</b>	<b>TITLE</b>	<b>DATE</b>

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

LOCATION(S)			
Description	County - Route	Latitude	Longitude
Water Line	Warren - KY 2629	36.888689	-86.358328

# **Exhibit 12**

Bid Advertisement  
&  
Affidavit of Publication

## **ADVERTISEMENT FOR BIDS**

Separate sealed BIDS for the construction of the Alvaton Area Capacity Improvements (construction of approximately 16,900' of 16" water main and appurtenances) will be received by Warren County Water District. at the office of the General Manager at 523 U.S. Hwy 31-W Bypass, Bowling Green, Kentucky 42101 until 10:00 AM, Central Daylight Time, October 15, 2025, and then at said office publicly opened and read aloud.

The CONTRACT DOCUMENTS may be examined beginning Thursday, September 25, 2025 at the office of Warren County Water, 523 U.S. Hwy 31-W Bypass, Bowling Green, KY.

Copies of the CONTRACT DOCUMENTS may be obtained at the office of the General Manager located at 523 U.S. 31W Bypass, Bowling Green, KY 42101, upon payment of \$150.00 for each set.

Refer all inquiries to: Clint Harbison, P.E., [clinth@warrenwater.com](mailto:clinth@warrenwater.com), 270-842-0052, ext. 556.

September 23, 2025

Jacob Cuarta, General Manager



# BOWLING GREEN DAILY NEWS

P.O. Box 90012, Bowling Green, Ky., 42102 • (270) 781-1700

## AFFIDAVIT OF PUBLICATION

COMMONWEALTH OF KENTUCKY  
COUNTY OF WARREN

**BEFORE ME**, the undersigned authority, personally appeared **Joe Imel** who, being by me duly sworn, deposed and said:

1. My name is **Joe Imel**. I am of sound mind, over the age of eighteen (18), and competent to make this affidavit. I have personal knowledge of the facts stated herein.
2. I am an authorized representative of the **Bowling Green Daily News**, the operator of the website [www.bgdailynews.com](http://www.bgdailynews.com).
3. A **Public Notice for Advertisement of Bids** related to the **Alvaton Area Capacity Improvements** was published in the "Public Notices" section of the website [www.bgdailynews.com](http://www.bgdailynews.com).
4. The public notice ran on the website on **September 24, 2025**.
5. This publication was made in accordance with applicable legal requirements for public notification of bid advertisements.

FURTHER AFFIANT SAYETH NAUGHT.

Joe Imel  
Regional Publisher  
Bowling Green Daily News

Subscribed and sworn to before me on this 21st day of October, 2025, by **Joe Imel**, who is personally known to me or has produced appropriate identification.



# BOWLING GREEN DAILY NEWS

P.O. Box 90012, Bowling Green, Ky., 42102 • (270) 781-1700

Wendy Dawn Stewart

**Notary Public, State of Kentucky**

My commission expires: July 20, 2028

Copy of Warren Water from website. The cached image is all we have, we do not have the entire page. I am adding documentation from our ad system that sends directly to web that confirms the notice was placed on [www.bgdailynews.com](http://www.bgdailynews.com) in the public notices section.

Copy of Warren Water from website. The cached image is all we have, we do not have the entire page. I am adding documentation from our ad system that sends directly to web that confirms the notice was placed on [www.bgdailynews.com](http://www.bgdailynews.com) in the public notices section.

### ADVERTISEMENT FOR BIDS

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Refer all inquiries to:  
Clint Harbison, P.E  
[clinth@warrenwater.com](mailto:clinth@warrenwater.com),  
270-842-0052, ext. 556

September 23, 2025  
Jacob Cuarta, General Manager

This screen shot is from our internal Ad Software system that show the Warren Water notice was moved to the web on 09/24/25.

This screen shot is from our internal Ad Software system that show the Warren Water notice was moved to the web on 09/24/25.

(Unformatted)

Ad.Perks : BRAINWORKS-BNI - WARREN COUNTY WATER - AcctID 274175

Ad.Perks Panels Rates Ad Bookmarks Prompts Help Mobile

Ra Hist Din Nor Media

Find Ad Find Cust Def Account Cust Ad Ad+ Disp Digital Buy Web Cal Pay Gang A/R Con User

P	Publication	Inserts	Start	Stop	Deadlines
	Bowling Green D...	1	09/24/25	09/24/25	
	bgdailynews.com	1	09/24/25	09/24/25	
	Bowling Green H...				
	Living Fit Magazine				
	South Central KY ...				
	South Central KY ...				
	Austin Daily Herald				
	Tribune Early Editi...				
	Austin Living Mag...				
	Alabaster Reporter				
	Albert Lea Magazi...				
	Albert Lea Tribune				
	@More Advance				
	The Star-News E...				
	Alexander City O...				
	The Andalusia St...				
	The Atmore Adva...				
	The Butler County...				
	The Brookhaven ...				
	Blackbelt Gazette				

Legend

☒ Move Pubs with Inserts to Top ☐ Bold Digits

Zone Filter

Total Inserts 2

September 2025

S	M	T	W	T	F	S
		2	3	4	5	6
	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

October 2025

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					2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

November 2025

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

< Year < Month Ad Start Month Ad Stop Month Month > Year >

# **Exhibit 13**

Bid Tabulation  
&  
Engineer's Recommendation of Award




**Alvaton Area Capacity Improvements**  
Bid Opening: October 15, 2025, 10:00 AM CDT

**TABULATION OF BIDS**

BID SCHEDULE				Smith Brothers, LLC Alvaton, KY		Stewart Richey Construction Bowling Green, KY		Cumberland Pipeline, Inc. Columbia, KY		Twin States Utilities Mt. Hermon, KY		Scott & Ritter, Inc. Bowling Green, KY		Cleary Construction, Inc. Tompkinsville, KY	
No.	ITEM	UNIT	QTY.	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE	UNIT PRICE	TOTAL PRICE
1	16" Class 250 Rest. Joint DIP Water Line	LF	1,235	\$151.00	\$186,485.00	\$145.36	\$179,519.60	\$181.00	\$223,535.00	\$222.00	\$274,170.00	\$193.00	\$238,355.00	\$220.00	\$271,700.00
2	16" Class 250 DIP Water Line	LF	14,948	\$121.00	\$1,808,708.00	\$111.43	\$1,665,655.64	\$125.00	\$1,868,500.00	\$156.00	\$2,331,888.00	\$157.00	\$2,346,836.00	\$180.00	\$2,690,640.00
3	10" DIP Water Line	LF	50	\$77.00	\$3,850.00	\$103.50	\$5,175.00	\$84.00	\$4,200.00	\$122.00	\$6,100.00	\$103.00	\$5,150.00	\$110.00	\$5,500.00
4	6" DIP Water Line	LF	50	\$66.00	\$3,300.00	\$91.15	\$4,557.50	\$67.00	\$3,350.00	\$106.00	\$5,300.00	\$82.00	\$4,100.00	\$90.00	\$4,500.00
5	24" Steel Casing by Bore w/ 16" Rest. Joint DIP Carrier	LF	335	\$755.00	\$252,925.00	\$999.00	\$334,665.00	\$912.00	\$305,520.00	\$844.00	\$282,740.00	\$762.00	\$255,270.00	\$1,445.00	\$484,075.00
6	24" Steel Casing by Bore w/ 16" DIP Carrier	LF	385	\$740.00	\$284,900.00	\$941.50	\$362,477.50	\$891.00	\$343,035.00	\$809.00	\$311,465.00	\$736.00	\$283,360.00	\$1,445.00	\$556,325.00
7	Ductile Iron Fittings	LBS	8,000	\$12.00	\$96,000.00	\$11.78	\$94,240.00	\$6.00	\$48,000.00	\$3.00	\$24,000.00	\$8.00	\$64,000.00	\$25.00	\$200,000.00
8	Reconnect 5/8"x3/4" Water Meter	EA	15	\$895.00	\$13,425.00	\$721.40	\$10,821.00	\$890.00	\$13,350.00	\$1,338.00	\$20,070.00	\$1,595.00	\$23,925.00	\$915.00	\$13,725.00
9	Relocate 5/8"x3/4" Water Meter	EA	1	\$1,100.00	\$1,100.00	\$713.65	\$713.65	\$1,978.00	\$1,978.00	\$2,414.00	\$2,414.00	\$2,700.00	\$2,700.00	\$2,000.00	\$2,000.00
10	3/4" Service Line (Line Side)	LF	50	\$33.00	\$1,650.00	\$36.05	\$1,802.50	\$19.00	\$950.00	\$26.00	\$1,300.00	\$15.00	\$750.00	\$15.00	\$750.00
11	1" Service Line (Road Crossing)	LF	700	\$45.00	\$31,500.00	\$70.17	\$49,119.00	\$57.00	\$39,900.00	\$51.00	\$35,700.00	\$59.00	\$41,300.00	\$110.00	\$77,000.00
12	Customer Service Line	LF	50	\$33.00	\$1,650.00	\$70.10	\$3,505.00	\$18.00	\$900.00	\$26.00	\$1,300.00	\$15.00	\$750.00	\$15.00	\$750.00
13	10" x 10" Tapping Sleeve & 10" Tapping Valve	EA	2	\$8,800.00	\$17,600.00	\$9,822.65	\$19,645.30	\$7,500.00	\$15,000.00	\$9,326.00	\$18,652.00	\$9,650.00	\$19,300.00	\$12,000.00	\$24,000.00
14	6" x 6" Tapping Sleeve & 6" Tapping Valve	EA	1	\$5,500.50	\$5,500.50	\$5,820.00	\$5,820.00	\$4,104.00	\$4,104.00	\$5,654.00	\$5,654.00	\$5,770.00	\$5,770.00	\$7,500.00	\$7,500.00
15	6" Gate Valve	EA	2	\$2,000.00	\$4,000.00	\$2,425.15	\$4,850.30	\$2,040.00	\$4,080.00	\$2,363.00	\$4,726.00	\$2,050.00	\$4,100.00	\$2,150.00	\$4,300.00
16	12" x 12" Tapping Sleeve & 12" Tapping Valve	EA	1	\$9,700.00	\$9,700.00	\$12,971.10	\$12,971.10	\$9,758.00	\$9,758.00	\$12,507.00	\$12,507.00	\$12,460.00	\$12,460.00	\$18,000.00	\$18,000.00
17	16" Butterfly Valve	EA	11	\$14,000.00	\$154,000.00	\$15,889.85	\$174,788.35	\$14,388.00	\$158,268.00	\$12,845.00	\$141,295.00	\$16,330.00	\$179,630.00	\$17,500.00	\$192,500.00
18	Blow-off Assembly	EA	1	\$2,600.00	\$2,600.00	\$1,700.85	\$1,700.85	\$3,315.00	\$3,315.00	\$4,083.00	\$4,083.00	\$1,260.00	\$1,260.00	\$1,200.00	\$1,200.00
19	5-1/4" Fire Hydrant Assembly	EA	9	\$9,315.00	\$83,835.00	\$10,269.10	\$92,421.90	\$9,221.00	\$82,989.00	\$9,700.00	\$87,300.00	\$10,335.00	\$93,015.00	\$11,000.00	\$99,000.00
20	Automatic Air Release Valve	EA	5	\$3,700.00	\$18,500.00	\$4,755.40	\$23,777.00	\$6,500.00	\$32,500.00	\$2,971.00	\$14,855.00	\$5,140.00	\$25,700.00	\$5,750.00	\$28,750.00
21	Miscellaneous Concrete	CY	20	\$370.00	\$7,400.00	\$984.20	\$19,684.00	\$214.00	\$4,280.00	\$230.00	\$4,600.00	\$630.00	\$12,600.00	\$250.00	\$5,000.00
22	Full Depth Stone Backfill	TN	250	\$26.00	\$6,500.00	\$76.65	\$19,162.50	\$25.00	\$6,250.00	\$34.00	\$8,500.00	\$35.00	\$8,750.00	\$55.00	\$13,750.00
23	Rock Check Dam	TN	100	\$40.00	\$4,000.00	\$68.40	\$6,840.00	\$35.00	\$3,500.00	\$55.00	\$5,500.00	\$35.00	\$3,500.00	\$85.00	\$8,500.00
24	Silt Fencing	LF	1,000	\$2.75	\$2,750.00	\$2.41	\$2,410.00	\$3.00	\$3,000.00	\$2.00	\$2,000.00	\$3.00	\$3,000.00	\$3.00	\$3,000.00
25	Channel Lining	TN	50	\$47.00	\$2,350.00	\$46.15	\$2,307.50	\$35.00	\$1,750.00	\$55.00	\$2,750.00	\$35.00	\$1,750.00	\$60.00	\$3,000.00
26	Final Clean-up	LF	16,903	\$7.50	\$126,772.50	\$2.27	\$38,369.81	\$8.00	\$135,224.00	\$2.00	\$33,806.00	\$4.00	\$67,612.00	\$13.00	\$219,739.00
TOTAL BASE BID:				\$3,131,001.00		\$3,137,000.00		\$3,317,236.00		\$3,642,675.00		\$3,704,943.00		\$4,935,204.00	

I hereby certify that this is a true and accurate tabulation  
of bids as received October 15, 2025.

 Digitally signed  
by Clint Harbison  
Date: 2025.10.15  
13:14:51 -05'00'

Clint Harbison, P.E.





Warren County  
Water District

October 22, 2025

Warren County Water District Board of Commissioners  
523 US 31-W Bypass  
Bowling Green, KY 42101

RE: Alvaton Area Capacity Improvements  
KIA Grant Number 22CWW036  
Recommendation of Award

Dear Commissioners:

Warren County Water District received bids for the Alvaton Area Capacity Improvement project on October 15, 2025. Six bids were received on the project, with Smith Bros, LLC submitting the lowest bid of \$3,131,001.00. All bids were accompanied by the required supplemental documentation, including the Bid Bond, Compliance Statement Regarding State and Federal Standards Provisions, and Affidavit for Bidders Claiming Resident Bidder Status.

After review of the bids and supplemental documentation, Staff has determined all Bidders submitting on the project are deemed responsible Bidders. Therefore, as is noted in the 'Information for Bidders' section of the Project Manual, staff recommends awarding the project to the lowest responsible Bidder; Smith Bros. LLC in the amount of \$3,131,001.00

Respectfully,

Clint Harbison, P.E.  
Manager of Engineering

Providing high-quality  
water and wastewater  
services to families  
and businesses  
throughout Warren

*Delivering Quality  
and Commitment  
in Every Drop*

# **Exhibit 14**

Board Resolution Awarding Contract

**RESOLUTION NO. 2025-10-01**

**RESOLUTION OF WARREN COUNTY WATER DISTRICT  
ACCEPTING BID AND AWARDING CONTRACT FOR  
THE ALVATON AREA CAPACITY IMPROVEMENT  
PROJECT**

**WHEREAS**, Warren County Water District (the "District") caused to be published on its website as well as the websites maintained by the Kentucky Bid Network, DODGE Construction Network, and BidPrime an advertisement for bids for the Alvaton Area Capacity Improvement Project (the "Contract" or "Project") in accordance with the provisions of KRS 45A.365;

**WHEREAS**, six firms submitted bids on the Contract in accordance with the terms of the advertisement and the Bid Specifications;

**WHEREAS**, Smith Brothers, LLC, a responsible bidder, submitted the lowest responsive bid of the six responsive bids with a bid of \$3,131,001.00, to construct the Project;

**WHEREAS**, the Kentucky Infrastructure Authority ("KIA") has now approved an award increase of \$286,720.00 to KIA Grant 22CWW036, for a total grant amount of \$2,486,720.00; and

**WHEREAS**, the District's engineer has recommended that the District award the Contract to construct the Alvaton Area Capacity Improvement Project to Smith Brothers, LLC, contingent upon the Kentucky Public Service Commission ("PSC") granting a Certificate of Public Convenience and Necessity ("CPCN") for the Project.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF WARREN COUNTY WATER DISTRICT AS FOLLOWS:**

**Section 1.** The facts, recitals, and statements contained in the foregoing preamble of this Resolution are true and correct and are hereby affirmed and incorporated as a part of this Resolution.

**Section 2.** The Board of Commissioners hereby accepts the recommendations of its engineer.

**Section 3.** The Board of Commissioners hereby declares the bid of Smith Brothers, LLC in the amount of \$3,131,001.00 to construct the Project to be the lowest responsible and responsive bid.

**Section 4.** Smith Brothers, LLC is awarded the Contract for the Project in the amount of \$3,131,001.00 contingent upon the PSC granting a CPCN to construct the Project as proposed by the District.

**Section 5.** The Chairman and General Manager are authorized and directed as follows: (a) to execute the Notice of Award; (b) to execute the Agreement; (c) to execute the Notice to Proceed; and (d) to take any and all other actions reasonably necessary to implement the award of the Contract to Smith Brothers, LLC, including the execution of any and all other documents necessary for such purpose.

**Section 6.** This Resolution shall take effect upon its adoption.

**Adopted by the Board of Commissioners of Warren County Water District at a meeting held on October 22, 2025, signed by the Chairman, and attested by the Secretary.**

**WARREN COUNTY WATER DISTRICT**

By:

  
**Tim Kanaly, Chairman**

ATTEST:

  
**R. Harvey Johnston III., Secretary**

### **CERTIFICATION**

The undersigned Secretary of Warren County Water District (the "District") does hereby certify that the foregoing is a true copy of a Resolution duly adopted by the District's Board of Commissioners at a meeting properly held on October 22, 2025, signed by the Chairman of the Board of Commissioners, attested by the Secretary of the Board of Commissioners, and now in full force and effect.

WITNESS my hand this 22<sup>nd</sup> day of October 2025.

  
R. Harvey Johnston III., Secretary

# **Exhibit 15**

Estimated Annual Cost to Operate

### **Alvaton Area Capacity Improvements**

Estimated Annual Cost to Operate

Warren County Water District

Description	Project Initial Cost	Deprication Sch. (yr)	Annual Cost
Initial Project Cost (w/ 3% Contingency)	\$3,224,931.03	62.5	\$51,598.90

**\$51,598.90**

# **Exhibit 16**

Detailed Estimate of Acquired Property  
by  
USoA Account Number

**Detailed Estimate of Acquired Property Classified According  
To The Uniform System of Accounts for  
Class A/B Water Districts and Associations**

**Warren County Water District  
Alvaton Area Capacity Improvement Project**

<b>Account No.</b>	<b>Account Description</b>	<b>Estimate</b>
331	Transmission and Distribution Mains	\$3,091,771
333	Services	\$ 34,800
334	Meters and Meter Installation	\$ 14,525
335	Hydrants	\$ 83,835
	<b>TOTAL</b>	<b>\$3,224,931</b>