# Instructions

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## **Specifications**

for

# Waterline Construction Materials for the KYTC 04-0153.01 - KY251 - Shepherdsville Road Waterline Relocation

Bid Number 2025-002



April 9, 2025

Steve Weaver, Inventory Clerk 270-737-1056 ext. 251 • inventory@hcwd2.org

Bid Number 2025-002

Initial \_\_\_\_\_

### **Information to Bidders**

#### 1. ACCEPTANCE OF BIDS

Hardin County Water District No. 2 (the District) reserves the right to accept the bid deemed lowest and best evaluated, with consideration to lead times, as determined by the Hardin County Water District No. 2's Board of Commissioners. The District reserves the right to waive any informalities or minor defects in a bid or to reject any or all bids.

#### 2. SUBMITTING BIDS

- A. The bid must be received by the District at 1951 West Park Road/PO Box 970, Elizabethtown, Kentucky on Wednesday, April 9, 2025, by 10:00 am local time. Any bid received after the specified time shall be disqualified.
- B. Each bid must be in a sealed envelope and have typed on the envelope, 2025-002 SEALED BID, with the opening date and time. The District assumes no responsibility for the premature opening of or failure to open bids not properly addressed or identified.
- C. An authorized representative may withdraw their bid at any time up to the opening time of the bid, but no bid may be withdrawn once the opening process has started.
- D. The District will not be responsible for errors or omissions on the part of bidders in making up their bids. All bids must be signed by an authorized representative and any bid received unsigned will be rejected.
- E. All bids must be submitted under the specifications listed. The bidder must note any exceptions to the specification on the Bid Form, otherwise, it is assumed that the bid complies, in all respects, with the listed specifications.
- F. Bids must be completed in ink or typewritten. Failure to do so will result in the rejection of the bid.
- G. Because this packet contains the terms, conditions, and specifications for the bid, the entire packet must be returned. An authorized agent must initial at the bottom of each page acknowledging that they have read the entire page.
- H. All prices quoted shall be on a delivery prepaid basis to the District's Customer Service Center located at 1951 West Park Road, Elizabethtown, KY 42701.

- I. Bidders are invited to attend the public bid opening and to review the complete bid files after the bids have been opened. A bid tabulation showing all vendors' prices will be made available upon request.
- J. If a bidder is not bidding on an item or items, that fact must be clearly stated by placing "NO BID" on the bid form under the price column next to the item(s) not bid.
- K. Do not add or include Kentucky sales and/or use tax. The District will furnish the necessary exemption certificate, upon request.
- L. The District shall make payment within forty-five days after receiving an invoice for delivered materials.
- M. The District will require the bidder to hold their bid price for a period of 60 days from the date of award and to extend to complete delivery of materials.
- N. The District reserves the right to award on a per-item basis if determined to be more beneficial to the District.

#### 3. ADDENDA TO SPECIFICATIONS

The District reserves the right to issue addenda(s) to modify the documents referred herein at any time before the day and time set for the opening. However, no interpretation of the meaning of the plans, specifications, or other pre-bid documents will be made to any bidder orally. Every request for such interpretation should be in writing addressed to Hardin County Water District No. 2 and to be given consideration must be received at least five days before the date fixed for the opening of bids. All such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be mailed by certified mail with return receipt requested to all prospective bidders (at the respective addresses furnished for such purposes), not later than three days before the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his/her bid as submitted. All addenda so issued shall become part of the contract documents.

#### 4. QUALIFICATIONS OF BIDDERS AND MATERIALS

The bidder may be required to show to the complete satisfaction of the District that it has the necessary resources, facilities, and ability to provide the services specified. The bidder may also be required to give a history and references to satisfy the District regarding the bidder's qualifications. Should the bidder be deemed unsatisfactory the bid will be rejected.

#### 5. **ADDITIONAL ORDER**

Procurement is subject to regulations contained in 40 CFR Part 31.36 or with DOW Procurement Guidance. Bidders must comply with the Copeland "Anti-Kickback" Act, Davis-Bacon Act, Sections 103 and 107 of the Contract Work Hours and Safety Standards Act, requirements issued under section 306 of the Clean Air Act, Executive Order 11738, Executive Order Nos. 11246 and 11375, which prohibit discrimination in employment regarding race, creed, color, sex, or national origin, Title VI of the Civil Rights Act of 1964, Section 3 Segregated Facilities, Section 109, and the Contract Work Hours Standard Act. Minority firms are particularly encouraged to participate. In accordance with section 215 of the Clean Water Act and EPA regulations, the bidder shall agree that preference will be given to domestic construction materials.

## **Specification and Special Instructions**

#### 1. **SPECIFICATIONS**

Listed below is a list of specific requirements that must be followed:

- A. The bidder in calculating the unit price must include any discounts and delivery fees or surcharges. The unit price on each bid item must be net.
- B. Bidder must include the Manufacturer of the item priced.
- C. All materials purchased from and delivered by the bidder must be the type and brand name specified on the attached Bid Form unless otherwise agreed upon by the District.
- D. All products purchased from and delivered by the bidder must be new.
- E. All materials delivered by the bidder must be new and cannot be 'second' quality or a "factory reject." The District will not accept any materials previously delivered to another customer and returned to the vendor for any reason.
- F. If delivered materials are found to be defective or do not meet quality standards, the District reserves the right to refuse the delivery and purchase the item(s) from another source.
- G. Delivery shall be made to the District within **a timely manner** after the order has been placed. The Bidder must specify expected delivery date. The District reserves the right to cancel the order and purchase the items from another bidder for excessive lead times.
- H. Deliveries must be between the hours of 8:00 a.m. to 3:00 p.m. during normal days of the District's operation (Monday Friday). Delivery times outside of these hours must be prearranged by the vendor and the District.
- I. All valves must be bid without restraint with accessory packs, restraints with accessory packs are a separate line item.
- J. The District will only accept Kennedy, Mueller, American Flow, Clow, and M & H, for bidding purposes of the butterfly, gate and/or tapping valves.
- K. All materials must meet AWWA and/or the District's specifications and standards.
- L. The Bidder shall also furnish all necessary lubricant required for the installation of the pipe supplied.

#### M. Polyvinyl Chloride C900 (PVC C900) Pressure Pipe

a. <u>General</u>: PVC C900 pipe shall meet the requirements of latest revision, "Standard for Polyvinyl Chloride (PVC) Pressure Pipe, 4" through 60" for water" and shall be furnished in cast-iron pipe equivalent outside diameters with rubber-gasketed slip-type joints.

PVC C900 pipe shall be made from Class 12454-A or Class 12454-B virgin compounds as defined in ASTM D-1784. The standard code designation shall be PVC 1120. The PVC compounds shall be tested and certified suitable for potable water products by the NSF Testing Laboratory and shall carry the NSF approval marking.

PVC joints using elastomeric gaskets shall be tested as assembled joints and shall meet the laboratory performance requirements specified in ASTM D-3139.

PVC C900 pipe shall be Pressure Class 235, DR 18 (Dimension Ratio).

- b. <u>Marking</u>: PVC C900 pipe shall be marked as follows:
  - i. Nominal size and OD base
  - ii. Material code designation (PVC 1120)
  - iii. Dimension ratio number
  - iv. AWWA pressure class
  - v. AWWA designation number (AWWA C900)
  - vi. Manufacturers name or trademark and production record code
  - vii. Seal of the NSF Laboratory
- c. <u>Test Requirements</u>: PVC C900 pipe shall meet or exceed the following test requirements: Sustained Pressure 500 psi (ASTM D-1598) and Burst Pressure 755 psi (ASTM D-1599)
- d. <u>Hydrostatic Integrity</u>: Each standard and random length of pipe shall be proof tested at four times its rated class pressure for a minimum of 5 seconds. Bells shall be tested with the pipe.
- e. <u>Flattening</u>: The pipe shall not split, crack, or break when tested by parallel-plato method as specified by ASTM D-2241.
- f. <u>Extrusion Quality</u>: The pipe shall not flake or disintegrate when tested by the acetone-immersion method as specified in ASTM D-2241.
- g. <u>Standard Length</u>: Pipe shall be furnished in standard laying lengths of 20ft.  $\pm 1$  in.

#### N. Ductile Iron Pipe

- a. <u>General</u>: Ductile iron pipe shall be designed in accordance with AWWA H3 (ASA A21.50) and for pressures and conditions as stated in these specifications or called for on the plans. Ductile iron pipe shall conform to AWWA C-151 (ASA A21.51.).
- b. <u>Minimum Nominal Thickness</u>: The specified thickness will be determined for the given internal and external loading requirements in accordance with ASA A21.50. The class of pipe, wall thickness, and coatings required will be shown on the plans or the bid form for all ductile iron pipe installation.
- c. <u>Lengths</u>: Pipe may be furnished in 16-, 18- or 20-feet nominal laying lengths.
- d. <u>Tests</u>: Hydrostatic and acceptance tests shall be in accordance with AWWA Specification C-106 for "Cast Iron Pipe Centrifugally Cast In Metal Molds" or C-108 for sand molds.

Any pipe not meeting the AWWA Specifications quoted above shall be rejected in accordance with the procedure outlined in the particular specifications.

- e. <u>Marking</u>: The net weight, class or nominal thickness and sampling period shall be marked on each pipe.
- f. <u>Coating and Lining</u>: All buried ductile iron pipe shall have manufacturers outside coal tar or asphaltic base coating and a cement lining and bituminous seal coat on the inside. Cement mortar lining and a bituminous seal coat inside shall conform to ANSI A21.4 (AWWA C-104) latest revision.
- O. <u>Restraints and Fittings</u>
  - a. <u>Material</u>: Restraints shall be as manufactured by Ford Meter Box Company or approved equal. All restraints shall be high strength ductile iron per ASTM A536, Grade 65-45-12. Compatible with all mechanical joints conforming to ANSI/AWWA C111/A21.11 and fittings conforming to AWWA C110 and C153. Restraints shall be rated for the allowable pressure of the pipe on which it is being installed.

#### P. <u>Butterfly Valves</u>

 <u>Material</u>: Butterfly valves shall meet or exceed the latest revision of ANSI/AWWA Standard C504 and shall meet or exceed the requirements of this specification. Valves shall have a working pressure of 250 psi (1720 kPa). When customer specified, valves shall meet NSF/ANSI 61/372.

Valve bodies shall be of ductile iron per ASTM A536 (65-45-12). Flanged end valves shall be of the short body design with Class 150 or 250 flanged ends faced and drilled per ASME B16.1 standard for cast iron flanges. Mechanical Joint end valves shall meet the requirements of ANSI/AWWA C111/ANSI 21.11.

Discs shall be offset to provide an uninterrupted 360-degree seating edge and shall be ductile iron per ASTM A536 Grade 65-45-12 or 316 stainless steel ASTM A743. The disc seating edge shall be solid 316 stainless steel. Sprayed mating seating surfaces are not acceptable. The disc shall be securely attached to the valve shaft utilizing a field removable/replaceable 17-4 PH stainless steel torque screw on sizes 3-12", tangential pin locked in place with a set screw on sizes 14-20", or 17-4 PH stainless steel taper pins for sizes 24-54".

Valve shafts shall be of ASTM A564 Type 630, 17-4 PH stainless steel. Valve shaft seals shall be self-compensating V-type packing with a minimum of four sealing rings. One-piece molded shaft seals and o-ring shaft seals are not acceptable.

Seat for valve sizes 3-18" shall be of Acrylonitrile-Butadiene (NBR) for water, or as required for other services, and shall be molded in and vulcanized to the valve body. The seat shall contain an integral shaft seal protecting the valve bearings and packing from any line debris. Seats vulcanized to cartridge inserts in the valve body and seats on the disc are not acceptable.

Seat for valves 20-54" shall be of Acrylonitrile-Butadiene (NBR) for water, or as required for other services, and shall be retained within a dovetail groove in the valve body and locked in place by an epoxy compound wedge. Compression between the seat and disc edge shall be adjustable from both the upstream and downstream side of the valve disc and the seat shall be field replaceable without disassembly of the disc and shaft. Seats with unidirectional adjustment, seats retained in the valve body using fasteners and/or retaining rings, and seats retained on the valve disc are not acceptable.

Valve shaft bearings shall be non-metallic and shall be permanently lubricated.

Coatings - unless otherwise specified by customer, exterior and interior metallic surfaces of each valve shall be painted per the latest revision of ANSI/AWWA C504. The interior of the body shall have a full rubber lining vulcanized to the valve body. Rubber lining on the flange face and boot style seats is not acceptable. Mechanical Joint valves shall be fully rubber lined to the point of pipe insertion.

#### Q. Gate Valves

a. <u>Material</u>: All gate valves shall be the resilient seat-type, iron body, non-rising stem, fully bronze mounted, and suitable for working water pressures of not less than 200 psi for installations on PVC pipe and not less than 250 psi for installations on DI pipe.

Valves shall be of standard manufacture and of the highest quality both of materials and workmanship and shall conform to the latest revision of AWWA C-509 Standard.

Valves shall be furnished with flanged connections for exposed piping and pushon or mechanical joint connections for buried service. Gate valves shall have a clear water way equal to the nominal diameter and shall be opened by turning counterclockwise. The operating nut or wheel shall have an arrow cast in the middle, indicating the direction of opening.

Each valve shall have the maker's initials, pressure rating and the year in which manufactured, cast on the body. Prior to shipment from the factory each valve shall be tested by hydraulic pressure of at least 300 pounds per square inch.

#### R. Fire Hydrants

- a. <u>Material</u>: All fire hydrants shall have a six-inch bell connection, shall have two hose outlets and one pumper connection, shall be designed for 250 pounds working pressure or 300 pounds hydrostatic pressure and shall conform to the latest specifications of the AWWA C502. All working parts shall be bronze. Both hose outlets shall be 2 1/2 inch with NST threads and the pumper outlet shall be 4 1/2 inch with NST thread. Hydrants shall be designed so that no water will be lost when they are broken off and so they can be repaired with a repair kit. Design, materials, and workmanship shall be similar and equal to the latest stock pattern ordinarily produced by the manufacturer. All hydrants shall have a 5 1/4 inch valve opening against pressure. The hydrants must comply with the "low lead" rule from the EPA.
- b. <u>Paint</u>: Hydrants shall be painted one coat of primer and two finish coats of approved paint of color directed by the DISTRICT (Body National Blue, Caps Silver). Painting shall conform to AWWA C902-85, Section 4.2 Painting.

#### S. <u>Tapping Sleeves</u>

a. Material: Tapping sleeves shall be as manufactured by Ford Meter Box Company or approved equal and have a mechanical joint adapter outlet (i.e. FAST-905-6A-MJ-TB) and shall be rated for a minimum working water pressure of 200 psi.

#### 2. SPECIAL INSTRUCTIONS

Listed below is a list of specific instructions that should be followed:

- A. Bidders shall fill out the accompanying form(s) for all items they are bidding.
- B. Bidders shall list the Manufacturer, Unit Price (net), Total and Estimated Delivery (weeks) for all material items listed.
- C. If a bidder is not bidding on an item or items, that fact must be clearly stated by placing "NO BID" on the bid form under the price column next to the item(s) not bid.
- D. The bidder shall submit all printed documents as defined under Information to Bidders, Section 2: Submitting Bids.
- E. The bidder must specify the expected delivery date on the attached Bid Form.

## **BID FORM**

### Hardin County Water District No. 2

### Waterline Construction Materials for the KYTC 04-0153.01 - KY251 - Shepherdsville Road Waterline Relocation

#### **Base Bid**

Item Description	Manufacturer	Quantity	Unit	Unit Price	Total	Est. Delivery
12" x .250 Bare Steel Casing		1640	LF			
36" Split Steel Casing		40	LF			
6" PVC C900 DR18 Pipe, Blue		17,020	LF			
4" PVC C900 DR18 Pipe, Blue		1640	LF			
6" Ductile Iron Pipe w/ Nitrile Gaskets		420	EA			

Retain one complete copy of the bid for your file.

#### HARDIN COUNTY WATER DISTRICT NO. 2 INVITATION TO BID

#### **BY ORDER OF THE COMMISSIONERS**

#### **BID NUMBER 2025-002**

HARDIN COUNTY WATER DISTRICT NO. 2 (the "District") will receive sealed bids for **KYTC 04-0153.01 - KY251 - Shepherdsville Road Waterline Relocation** at the District office, located at 1951 West Park Road/P.O. Box 970, Elizabethtown, Kentucky 42702, until 10:00 a.m. local time on Wednesday, April 9, 2025.

Bidders must comply with the Copeland "Anti-Kickback" Act, Davis-Bacon Act, Sections 103 and 107 of the Contract Work Hours and Safety Standards Act, requirements issued under section 306 of the Clean Air Act, Executive Order 11738, Executive Order Nos. 11246 and 11375, which prohibit discrimination in employment regarding race, creed, color, sex or national origin, Title VI of the Civil Rights Act of 1964, Section 3 Segregated Facilities, Section 109 and the Contract Work Hours Standard Act. Prevailing Federal and State wage rates are to be paid, if applicable. Minority firms are particularly encouraged to participate. In accordance with section 215 of the Clean Water Act and EPA regulations, the bidder shall agree that preference will be given to domestic construction materials.

For more information and specifications contact Steve Weaver at (270) 737-1056 ext. 251 or visit our website at www.hcwd2.org/bid-documents. Bids will be awarded to the lowest and best-evaluated bidder as determined by the District's Board of Commissioners, and further provided, that any or all bids may be rejected for any reason.