OMB Control No.2040-0292
Approval expires 12/31/2027

NOTE:
This waiver submission may include references to proprietary items and brand name products. These references have been retained to provide context for the waiver submission. EPA does not evaluate a waiver based on a proprietary item but reviews the performance-based specifications for the project/ products. As such, any references to brand or proprietary items are reviewed on an "or equal" basis by EPA.

Items and pages may have been intentionally redacted or excluded by the EPA. Contact WIFIAWaiver@epa.gov for more information if necessary.

# AIS/BABA Waiver Request Form

*Provide the following information in this form and attach any relevant supporting documentation.*

1. Legal name of borrower or prospective borrower and WIFIA Loan ID (if available):

   City of Pflugerville - N22164TX

2. WIFIA Project name:

   Master Program Water and Wastewater Capital Improv. Plan - Cottonwood West Force Main

   a. Is the WIFIA Project co-funded by another federal program? ☐ Yes ☑ No

   b. If so, specify (e.g., SRF, BOR Title XVI, EPA Community Grants): N/A

3. Waiver Request Contact List. Provide the names and email addresses of all person(s) who should be contacted in regards to this waiver request:

   Jeff Dunsworth (City of Pflugerville) - jeffd@pflugervilletx.gov
   Jessica Taylor (STV) - jessica.taylor@stvinc.com
   Denise Miller (STV) - denise.miller@stvinc.com

4. Under which domestic preference requirements is the waiver being requested? **Select only one.** If applying for a waiver under BABA, there is no need to apply for a separate waiver under AIS.

   ☑ AIS ☐ BABA

5. Type of waiver being requested:

   ☐ Public Interest ☐ Cost ☑ Product Availability

6. Identify the total estimated material cost of the project:

   Total Project Material Cost: $Redacted

7. ☑ N/A. For **public interest** waiver requests, please briefly explain why compliance with AIS or BABA is not in the public's interest. Public interest waivers may be requested for the entire project or for specific products. If the waiver is being requested for specific products, please include a list of the products in the narrative with relevant project timelines.

8. ☑ N/A. For **cost** waiver requests**,** identity the total project cost with and without domestic preference requirements. Attach supporting documentation to demonstrate that the total project cost increases by more than 25 percent with the requirements, such as itemized cost estimates comparing projects costs with and without the domestic preference requirements.

9. ☐ N/A. For **product availability** waiver requests,

   a. Complete the following table to provide information about the product(s) for which the waiver is being requested. ***For each product listed, attach a copy of the relevant technical specifications of the product to this form.***

| Product Name | Brief product description (include material type and size) | Unit Cost of foreign product | Unit Cost of domestic product * | Quantity Needed | Date product is needed |
|---|---|---|---|---|---|
| Plug Valve | 16-inch Ductile Iron | Redacted | Redacted | 5 | 9/26/25 |
| | | | | | |
| | | | | | |

*Complete this column only if domestic products are available.

   b. Describe the efforts made to source compliant products. Were AIS-compliant products identified, and if so, are there circumstances around the project that prevent their use (e.g., lead times, performance standards, quantity thresholds)? Include a list of manufacturers or suppliers contacted and responses received as an attachment.

The Contractor has collected quotes on Pricing and lead times from the following vendors: Pratt/Muller; Scruggs/Pratt; McWayne; VSI; Dezurik
The shortest lead times of the listed vendors is 20 weeks after approval for Domestic Plug Valves, and 2 weeks after approval for Imported Plug Valves.

*Signature:* The undersigned is an authorized representative of the (prospective) borrower. By signing below, the undersigned is certifying that the borrower or prospective borrower made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with the prime contractor.

Signature: Jeff L. Dunsworth, P.E.
Date Signed: 08/04/2025

| | |
|---|---|
| Name: | Jeff Dunsworth |
| Title: | City Engineer |
| Organization: | City of Pflugerville |
| Phone: | 512-990-6343 |
| E-mail: | jeffd@pflugerviletx.gov |

# SECTION 40 05 62

Plug Valves

## PART 1 - GENERAL

### 1.01 SCOPE OF WORK:

A. Furnish all labor, materials, equipment and incidentals required to install and put into operation, plug valves for wastewater service as specified herein and shown on the drawings.

### 1.02 REFERENCES:

A. Reference Standards
   1. Reference standards cited in this specification refer to the current reference standard published at the time of the latest revision date logged at the end of this specification, unless a date is specifically cited.
   2. American Water Works Association (AWWA)
      a) AWWA C111 Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings
      b) AWWA C517 Resilient-Seated Cast-Iron Eccentric Plug Valves
   3. American Society for Testing and Materials (ASTM)
      a) ASTM A48 Gray Iron Castings
      b) ASTM A126 Gray Iron Castings for Valves, Flanges, and Pipe Fittings
      c) ASTM A436 Austenitic Gray Iron Casting
      d) ASTM A536 Ductile Iron Casings
   4. American Society of Mechanical Engineers (ASME)
      a) ASME B36.10M Welded and Seamless Wrought Steel Pipe
      b) ASME/ANSI B16.1 Cast Iron Pipe Flanges and Flanged Fittings

### 1.03 SUBMITTALS:

A. Contractor shall submit manufacturer's technical information and materials of construction on all valves. All submittals shall be approved by the Owner prior to delivery and/or fabrication.

### 1.04 ACTION SUBMITTALS/INFORMATIONAL SUBMITTALS:

A. Product Data

### 1.05 CLOSEOUT SUBMITTALS:

A. Operation and Maintenance Data

### 1.06 QUALITY ASSURANCE:

A. The valve shall be the product of a manufacturer regularly engaged in the manufacture of plug valves having similar service and size. The valves covered by the specifications are intended to be standard equipment of that which has proven ability.
B. The Contractor shall cause all equipment specified under this section to be furnished by the valve manufacturer who shall be responsible for the adequacy and compatibility of all unit components

including but not limited to the valve, actuator and extension stems. Valve and actuator shall be shipped assembled.

C. Any component of each complete unit not provided by the valve manufacturer shall be designed, fabricated, tested, and installed by factory-authorized representatives experienced in the design and manufacture of the equipment. This requirement, however, shall not be construed as relieving the Contractor of the overall responsibility for this portion of the work.

## 1.07 DELIVERY, STORAGE, AND HANDLING:

A. Storage and Handling Requirements
   1. All parts shall be properly protected so that no damage or deterioration will occur during a prolonged delay from the time of shipment until installation is completed and the units and equipment are ready for operation.
      a) All equipment and parts must be properly protected against any damage during a prolonged period at the site.
      b) The finished surfaces of all exposed flanges shall be protected by wooden blank flanges, strongly built and securely bolted thereto.
      c) Finished iron or steel surfaces not painted shall be properly protected to prevent rust and corrosion.
   2. Take special care to prevent plastic and similar brittle items from being directly exposed to the sun, or exposed to extremes in temperature, preventing any deformation.

## 1.08 WARRANTY:

A. Manufacturer Warranty
   1. The equipment shall be warranted to be free from defects in workmanship, design and materials. If any part of the equipment should fail during the warranty period, it shall be replaced and the unit(s) restored to service at no expense to the Owner. Warranty shall be for 2 years from Final Acceptance.

# PART 2 - PRODUCTS

## 2.01 PLUG VALVES:

A. Manufacturers
   1. Manufacturer List
      a) M&H Style 1820
      b) Approved equal
   2. The listing above does not imply that the valve or the manufacturer's standard product is acceptable. The successful manufacturer will be required to conform to all specifications

B. Description
   1. Plug valves shall work without damage to the valve over the entire range of operating conditions
   2. Valve shall be for wastewater service, of the 1/4 turn, eccentric non-lubricated type, serviceable under full line pressure, and capable of sealing in both directions at the rated pressure.
   3. Plug valves shall be manufactured in accordance with AWWA C-517
   4. The valve port area shall meet or exceed standard pipe area per ASME/ANSI B36.10M.

C. Performance/Design Criteria
   1. Ports shall be rectangular, eccentric, and 100% port.
   2. Valve Seating
      a) The valve seating design shall be resilient and of the continuous interface type having consistent opening/closing torques, and shall be non-jamming in the closed position.
      b) Closure shall be accomplished by means of an offset plug design with a resilient seating face that achieves full 360 degree seating contact.
      c) Valves shall be of the bolted bonnet design. The resilient faced plug shall be replaceable without removing the valve body from the line.
   3. Valve bearings shall be replaceable.
   4. Valves shall be designed such that they can be repacked without removing the bonnet.
   5. Joint Type
      a) Valves shall be mechanical joint unless otherwise shown in the Drawings.
         (1) Mechanical joints shall conform to ANSI/AWWA C111/A21.11
      b) Flanges shall be ANSI B16.1, Class 125 when required
   6. Pressure Ratings
      a) Valves 12" and Smaller – 175 psi
      b) Valves 14" and Larger – 150 psi

D. Materials
   1. Valve Body
      a) Ductile iron, ASTM 536 grade 65-45-12
   2. Valve Plug
      a) Ductile iron ASTM 536 grade 65-45-12 with Chloroprene (CR) resistant facing.
   3. Valve Seat
      a) Welded-in overlay of not less than 95% pure nickel. Sprayed or plated seating surfaces will not be acceptable.
   4. Bearings
      a) Permanently lubricated Type 316 stainless steel bearings on the upper and lower plug stem journal.
   5. Packing
      a) Buna N (Vee Type).
   6. Bolts and Nuts
      a) All bolts and nuts shall be 316 stainless steel.

E. Finishes
   1. Plug valve internal and external coatings shall provide a corrosion resistant barrier due to service conditions.
      a) External Coating
         (1) Manufacturer's standard coating
      b) Internal Coating
         (1) Protecto 401 applied at a thickness of 40 mils DFT
         (2) Or approved equal
   2. For buried valves, the valve in its entirety (including valve body, nuts, and bolts) shall be wrapped in petrolatum tape system. Petrolatum tape system shall consist of Densyl Mastic, Densyl Paste, and Densyl Tape, as manufactured by Denso.

## 2.02 MANUAL ACTUATORS:

A. Description
   1. Regulatory Requirements
      a) Worm gear manual operator shall comply fully with AWWA C-517, latest edition.

B. Performance / Design Criteria
   1. Valves shall be provided with manual actuators unless otherwise specified or indicated on the plans.
   2. Valves shall be opened by turning the actuator counter clockwise and close clockwise.
   3. Manual actuators shall be fully greased, packed and have stops in the open and closed position. The actuator shall have a mechanical stop which will withstand an input torque of 300 ft. lbs. against the stop. The actuator shall have a built in packing leak bypass to eliminate possible packing leakage into the actuator housing.
   4. Plug valves for buried service shall be furnished with a 2" operating nut. The actuator shall be placed in a vault as indicated on the plans and have extension to the top of the vault.
   5. Actuator shall be worm-gear type, as follows:
      a) Worm gear drive sleeve and worm shaft shall be of solid, one-piece design; bolted segments or pinned worms will not be acceptable. Drive sleeve shall include an integral spline to accept a removable bottom-entry spline bushing for valve shaft connection.
      b) If required for torque purposes, spur gear reducers may be provided for increased torque outputs and to reduce handwheel diameter.
      c) Worm gear operator shall include handwheel with maximum 80# rim pull.
   6. Manual gears shall be capable of being field retrofit with an electric motor operator in the future without major modifications. With spur gear removed, splined worm gear input shaft and motor adapter flange shall be easily added to accept a multi-turn "torque-only" electric valve actuator.
   7. Supplier shall include the number of turns required to complete on Open-to-Close stroke in the Equipment Submittal.

C. Materials
   1. Housing
      a) Ductile iron
   2. Drive Sleeve
      a) Ductile iron
   3. Worm
      a) Ductile iron with splined input drive connection
   4. Bearings
      a) Heavy duty tapered roller bearings
   5. Fasteners
      a) Stainless Steel

D. Finishes
   1. Finish Materials
      a) Thermostatically applied polyester powdercoat

## PART 3 - EXECUTION

### 3.01 GENERAL:

A. All work shall be performed by skilled craftsmen qualified to perform the required work in a manner comparable with the best standards of practice.

B. The Contractor and all workmen employed by him shall conduct all operations in a clean and sanitary manner and in conformance with all aspects of the contract documents.

## 3.02 INSTALLATION:

A. Installation of plug valves shall be as recommended by manufacturer. Valves shall be positioned as shown on drawings.

B. For valves installed in a vertical pipeline, or where the possibility of overhead drain-back exists, install the valve with the seat at the top to prevent drain-back solids from settling into the valve body.

C. For valves installed in a horizontal pipeline, install the valve so the plug rotates up when opened.
   1. Where drain-back does not exist, install the valve with the higher pressure, when closed, against the end opposite the seat.

D. Each valve which is installed in direct contact with earth backfill shall be provided with a valve box of such type and design that surface loads, impact and shock will not be transmitted through the box to the valve.

E. Valves and valve boxes shall be set plumb. Each valve box shall be placed directly over the valve it serves, with the top of the box brought flush with the finished grade. After being placed in proper position, earth shall be filled in around each valve box and thoroughly tamped for a distance on each side of the box of 4 feet at the top of the pipe and 2 feet measured at the top of the trench.

F. Each valve shall be inspected before installation to ensure that all foreign substances have been removed from within the valve body and shall be opened and closed to see that all parts are in first-class working condition. Geared valves shall be inspected to see that the gears are properly lubricated.

G. Extension stems for buried valves shall extend to within 6 inches of the surface of the ground. Each extension stem shall be connected to the valve operator with a suitable universal joint type coupling. All connections shall be pinned. Each extension stem shall be provided with spacers which will center the stem in a valve box having an inside diameter of 5-1/2 inches and shall be equipped with a standard AWWA wrench nut as described in Section 20 of AWWA C500.

H. Valve Box, Casing and Cover: Stems of all buried valves shall be protected by valve box assemblies. Valve box castings shall conform to ASTM A 48, Class 30B. Testing shall be verified by the manufacturer at the time of shipment. Each casting shall have cast upon it a distinct mark identifying the manufacturer and the country of origin. Valve boxes and covers shall be round.

## 3.02 FIELD QUALITY CONTROL:

A. The Contractor shall provide a supervisor at the work site during all construction operations. The supervisor shall have the authority to sign change orders, coordinate work and make decisions pertaining to the fulfillment of the contract.

B. Field Inspections

1. Before acceptance of the installed valve, the Owner or Inspector shall have the opportunity to operate the valve.

2. The Owner/Engineer shall be given the opportunity to inspect all buried flanges before they are covered.

3. The Operator/Inspector will be assessing the ease of access to the operating nut within the valve box and ease of operating the valve from a fully closed to fully opened position.

C. Non-Conforming Work

1. If access and operation of the valve or its appurtenances does not meet the Owner's/Engineer's criteria, the Contractor will remedy the situation until it meets the established criteria, at the Contractor's expense.

## PART 4 – MEASUREMENT AND PAYMENT

### 4.01 MEASUREMENT:

A. Plug valves will be measured per each.

### 4.02 PAYMENT:

A. Payment shall include full compensation, in accordance with the pay item established in the bid, for excavation, furnishing, hauling and placing valves, including anchorage and all incidental materials and work; preparing, shaping, dewatering, bedding, placing and compacting backfill materials and for all other incidentals necessary to complete the installation, as indicated in the Drawings, complete in place.

B. Valves will be paid for at the unit bid price for the size and type valve installed, including valve stem casing and cover, excavation and backfill, setting, adjusting to grade, anchoring in place, and other appurtenances necessary for proper operation.

C. Payment, when included as a contract pay item, will be made under the following:

| | | |
|---|---|---|
| **Pay Item No. 40 05 62:** | Valves, Plug, _____ Diameter | Per Each. |

**END OF SECTION**