

# TOWN OF OSWEGO

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March 18, 2024

NOTE: Information in this waiver may have been redacted or removed due to issues of proprietary business information or incompatibility with Federal accessibility requirements. To request the information redacted for purposes of accessibility requirements, please email [CWSRFWaiver@epa.gov](mailto:CWSRFWaiver@epa.gov).

Ms. Elizabeth Ricci  
New York State Environmental Facilities Corporation (NYSEFC)  
625 Broadway,  
Albany, NY 12207-2997

Re: Town of Oswego Lakeshore Commercial Sewer District  
American Iron and Steel Availability Waiver Request  
BCA Project No. 2018-130

Dear Ms. Ricci,

For the above-mentioned project the Pipeline Contractor - [REDACTED] has advised that there is an issue acquiring AIS compliant plug valves. The project specified eight (8) 4" Diameter [REDACTED] plug valves or equal, Specification Section 33-3113. It is our understanding that manufacturers of similar products that meet the specifications have the same issue. These plug valves are to be installed along the force main at the four (4) air/vacuum release structures as depicted on the project plans.

Based on the information set forth from the Contractor it is our understanding that there is a supply chain issue stemming from the domestic foundries specific to their molds for creating the raw castings for the AIS compliant valves. These molds are used by several different manufacturers for these AIS approved plug valves and as a result, this has induced supply chain issues. After conversations with suppliers and the manufacturer's representatives this appears to be an issue across the board for all manufacturers. The original schedule for delivery of these valves was September 2023 with an installation date in November 2023. The supplier for this project continues to provide notices of delay for delivery of these valves. As of February 1<sup>st</sup>, the current delivery date was March 22<sup>nd</sup>, 2024. Given the 6-month slip in delivery schedule it is not expected that this delivery date will hold true and may continue to be delayed until after the project is expected to be commissioned in April 2024.

It is critical that we maintain the schedule in order to relieve problems that property owners are experiencing with their failing onsite septic systems due to high lake levels and inadequate soil conditions. This project was funded in part by the NYS Resiliency and Economic Development Initiative program to resolve issues with failing onsite septic systems due to high lake-levels for homes and businesses in the project area. This project was originally supposed to be completed in the fall of 2023. It is a priority to connect the remaining homes to relieve these issues, many properties have incurred great expense with their current failing systems, and a few are required to store and haul their wastewater. The Town has had the ability to connect seven (7) homes by gravity to the new system and has alleviated these issues for those specific residents. The Town has put forth great precedence to have the entire system commissioned by May 1, 2024. Come summer, many businesses will continue to incur great expense if they are not connected to the municipal system prior to the tourist season.

Temporary valves were installed at these locations such that the rest of the project could advance, with the intent to install AIS-compliant valves if the waiver is not approved. The installed valves are [REDACTED] [REDACTED] plug valves (product information sheet attached), which were readily available and met

the project specifications. This allowed the contractor to complete the installation of the collection system piping and prepare for commissioning of the system once pump stations arrive. A cost comparison between the two different products is shown in the attached invoices.

We would like to formally request a project specific waiver for these specific plug valves based on the justification as outlined above. District users are currently being charged for municipal sewers with the intent that they will all be hooked up on schedule in May 2024 and as such the Town respectfully requests that this matter is reviewed promptly. If you have any questions or need further information, please don't hesitate to contact us or our Project Engineer, Mr. Timothy Barber, PE at (315) 782-8321 Ext. 278.

Thank you in advance,

A faint signature is visible, followed by a black rectangular redaction box.

CC: Tim Barber, PE - [Redacted]

- Enclosures:
- Project Specification 33-3113
  - Relevant Correspondence
  - Valve Cost Data
  - Alternative Valve Information

### 2.03 BEDDING AND COVER MATERIALS

- A. Pipe Bedding Material: As specified in Section 31 2316.13.
- B. Pipe Cover Material: As specified in Section 31 2316.13.

### 2.04 VALVES

- A. Air Valve
  - 1. Scope
    - a. This section is intended to cover the design, manufacture, and testing of 1 in. through 8 in. air/vacuum valves suitable for pressures up to 150 psig clean or raw water service.
    - b. Wastewater valves shall be fully automatic float operated valves designed to exhaust large quantities of air during the filling of a piping system and close upon liquid entry. The valve shall re-open during draining or if a negative pressure occurs. The valve shall also release accumulated air from a piping system while the system is in operation and under pressure. The valve shall perform the functions of both Wastewater Air Release and Wastewater Air/Vacuum Valves and furnished as a single body or dual body type as indicated on the plans.
  - 2. Standards, Approvals and Verification
    - a. Valves shall be manufactured and tested in accordance with American Water Works Association (AWWA) Standard C512.
    - b. Manufacturer shall have a quality management system that is certified to ISO 9001 by an accredited, certifying body.
  - 3. Connections
    - a. Single body valves sizes 4 in. (100 mm) and smaller shall have full size NPT inlets and outlets equal to the nominal valve size with a 2 in. (50 mm) inlet on 1 in. (25 mm) valves. The body inlet connections shall be hexagonal for a wrench connection. The body shall have 2" NPT cleanout and 1" NPT drain connection on the side of the casting.
    - b. The valve shall have two additional NPT connections for the addition of Air Release Valves, gauges, testing, and draining.
  - 4. Design
    - a. Both single and dual body valves shall provide an extended body with a through flow area equal to the nominal size. Floats shall be unconditionally guaranteed against failure including pressure surges. A resilient bumper shall be provided on 4 in. (100 mm) and larger sizes to cushion the float during sudden opening conditions. The seat shall provide drop tight shut off to the full valve pressure rating.
    - b. Dual body valves shall consist of a Wastewater Air Release Valve piped to a Wastewater Air/Vacuum Valve with a full-ported brass ball valve.
    - c. The Wastewater Air Release Valve shall have an extended leverage mechanism with sufficient mechanical advantage so that the valve will open under full operating pressure. An adjustable threaded resilient orifice button shall be used to seal the precision discharge orifice in the cover.
    - d. The Wastewater Air/Vacuum Valve sizes 4 in. (100 mm) and larger shall have a cover fitted to the valve body by means of a machined register to maintain concentricity between the top and bottom guide bushings at all times. The tandem float assembly shall have a hexagonal guide shaft supported in the body by circular bushings to prevent binding from debris. The upper float shall be protected against direct water impact by an internal baffle. The seat shall be a minimum of .5 in. (12 mm) thick on 2 in. (50 mm) and larger valves and secured in such a manner as to prevent distortion.
    - e. Single body valves shall have a full port orifice, a double guided plug, and an adjustable threaded orifice button. The 1 in. (25 mm) body shall be globe style to increase float clearance and reduce clogging. The plug shall be protected against direct water impact by an internal baffle and an extended float stem. The plug shall have a precision orifice drilled through the center stem. The float shall include a sensitivity skirt to minimize spillage.
  - 5. Materials
    - a. The valve body, cover, and baffle shall be constructed of ASTM A126 Class B cast iron for Class 125 and Class 250 valves. Class 300 ductile iron valves shall

- be constructed of ASTM A536 Grade 65-45-12 ductile iron. Class 300 steel valves shall be constructed of ASTM A216 Grade WCB cast steel.
- b. The float, guide shafts, and bushings shall be constructed of Type 316 stainless steel. Non-metallic guides and bushings are not acceptable. Resilient seats shall be Buna-N. Class 300 steel valves shall have a 316 stainless steel Seat with Buna-N seal to provide an initial contact to Buna-N with final metal to metal contact to prevent over compression of the resilient seal.
6. Options
    - a. Backwash accessories shall be furnished when specified and shall consist of an inlet shut-off valve, a blow-off valve, a clean water inlet valve, rubber supply hose, and quick disconnect couplings. Accessory valves shall be quarter-turn, full ported bronze ball valves.
    - b. An optional Regulated Exhaust Device shall be provided when specified to reduce pressure surges due to column separation or rapid changes in velocity and pressure in the pipeline.
      - 1) The Regulated Exhaust Device shall be mounted on the outlet of the Wastewater Combination Air Valve, allow free air flow in and out of the valve, close upon rapid air exhaust, and control the air exhaust rate to reduce pressure surges.
      - 2) The device shall have a threaded or flanged globe-style body with a center guided disc and seat assembly. The disc shall have threaded holes to provide adjustment of the air exhaust rate through the valve. The holes shall provide for a flow area of 5% of the nominal valve size.
      - 3) The material of the body shall be consistent with the Wastewater Combination Air Valve. The seat and disc shall be ASTM A351 Grade CF8M stainless steel.
    - c. Optional body materials include ASTM A536 Grade 65-45-12 ductile iron, ASTM A351 Grade CF8M stainless steel, and ASTM B584 Alloy 836 cast bronze.
    - d. Valve interiors and exteriors shall be coated with an NSF/ANSI 61 certified fusion bonded epoxy in accordance with AWWA C550 when specified.
    - e. Low Durometer seat and orifice button shall be furnished for low pressure applications.
  7. Manufacture
    - a. The manufacturer shall demonstrate a minimum of five (5) years experience in the manufacture of air valves. When requested, the manufacturer shall provide test certificates, dimensional drawings, parts list drawings, and operation and maintenance manuals.
    - b. The exterior of the valve shall be coated with a universal alkyd primer.
    - c. Wastewater Combination Air Valves shall be [REDACTED]
- B. Eccentric Plug Valve
1. Scope
    - a. This specification covers the design, manufacture, and testing of 2-1/2 in. (60 mm) through 36 in. (900 mm) cast iron eccentric plug valves suitable for water or wastewater service with pressures up to 175 psig (1200 kPa).
    - b. Plug valves shall be quarter-turn, non-lubricated, eccentric type with resilient faced plug.
  2. Standards, Approvals, and Verification
    - a. The valves shall be designed, manufactured, and tested in accordance with American Water Works Association Standards ANSI/AWWA C517.
    - b. Manufacturer shall have a quality management system that is certified to ISO 9001 by an accredited, certifying body.
  3. Connections
    - a. Flanged valves shall have flanges with drilling to ANSI B16.1, Class 125.
    - b. Mechanical joint valves shall fully comply with ANSI/AWWA C111/A21.11.
    - c. Threaded valves shall have NPT full size inlets. The connection shall be hexagonal for a wrench connection.
  4. Design

- a. Port areas of not less than 100% of pipe area shall be supplied on valves 4" (100 mm) and smaller, 85% on 16" (400 mm) and smaller, 80% on 18"-24" (150 mm - 600 mm) and 75% on 30" (800 mm) and larger.
  - b. The valve seat shall be a welded overlay of 99% pure nickel applied directly to the body on a pre-machined, cast seating surface and machined to a smooth finish.
  - c. Shaft seals shall consist of V-type packing in a fixed gland with an adjustable follower designed to prevent over compression of the packing and to meet design parameters of the packing manufacturer. Removable, slotted shims shall be provided under the follower flanges to provide for adjustment and prevent over tightening.
  - d. Permanently lubricated, radial shaft bearings shall be supplied in the upper and lower bearing journals. Thrust bearings shall be provided in the upper and lower journal areas.
  - e. Both the packing and bearings in the upper and lower journals shall be protected by a [REDACTED] "drip tight" Buna-N shaft seal located on the valve shaft to minimize the entrance of grit into the bearing journal and shaft seal areas.
5. Materials
- a. The valve body and cover shall be constructed of ASTM A126 Class B cast iron for working pressures up to 175 psig (1200 kPa). The words "SEAT END" shall be cast on the exterior of the body seat end.
  - b. The plug shall be of one-piece construction and made of ASTM A126 Class B cast iron or ASTM A536 Grade 65-45-12 ductile iron and fully encapsulated with resilient facing per ASTM D2000-BG and ANSI/AWWA C517 requirements.
  - c. Radial shaft bearings shall be constructed of self-lubricating type 316 stainless steel. The top thrust bearing shall be Teflon. The bottom thrust bearing shall be Type 316 stainless steel. Cover bolts shall be corrosion resistant with zinc plating.
6. Actuators
- a. 8 in. (200 mm) and smaller valves shall be equipped with a 2 inch square nut for direct quarter turn operation. The packing gland shall include a friction collar and an open position memory stop. The friction collar shall include a nylon sleeve to produce friction without exerting pressure on the valve packing.
  - b. When specified, 4 in. (100 mm) and larger valves shall include a totally enclosed and sealed worm gear actuator with position indicator (above ground service only) and externally adjustable open and closed stops. The worm segment gear radial bearings shall be provided for the segment gear and worm shaft. Alloy steel roller thrust bearings shall be provided for the hardened worm.
  - c. All gear actuators shall be designed to withstand, without damage, a rim pull of 200 lb. on the handwheel and an input torque of 300 ft-lbs for nuts.
  - d. Buried service actuators shall be packed with grease and sealed for temporary submergence to 20 feet of water. Exposed worm shafts shall be stainless steel.
7. Options
- a. When specified, the port area shall have not less than 100% of pipe area.
  - b. Open and closed limit switches shall be provided on the actuator when specified.
  - c. The interior and exterior of the valve shall be coated with an ANSI/NSF 61 approved fusion bonded epoxy.
  - d. The interior and exterior of the valve shall be coated with an ANSI/NSF 61 approved two-part epoxy.
8. Manufacturer
- a. The manufacturer shall demonstrate a minimum of five (5) years experience in the manufacture of plug valves.
  - b. The exterior of the valve for above ground service shall be coated with a universal alkyd primer. Valve exterior for buried service shall be coated with an epoxy coating.
  - c. Valves shall be marked with the Serial Number, Manufacturer, Size, Cold Working Pressure (CWP) and the Direct and Reverse Actuator Pressure Ratings on a corrosion resistant nameplate.
  - d. Eccentric plug valves shall be [REDACTED].