



City of Dover, New Hampshire

Community Service Department

Wastewater Treatment Facility

Raymond A. Vermette Jr. FACILITY SUPERVISOR

April 7, 2021
13447C

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Wastewater Engineering Bureau
Department of Environmental Services
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NOTE:

This waiver submission may include references to proprietary items and brand name products. These references have been retained in order 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 CWSRFWaiver@epa.gov for more information if necessary.

Subject: Dover, NH Catch Basin and Wet Well Cleanings Treatment Facility
AIS Availability Waiver Request for 4" Stainless Steel Swing Check Valve

To Whom it May Concern:

The City of Dover, NH would like to request a waiver from the AIS requirements for the CWSRF funded Catch Basin and Wet Well Cleanings Treatment project. The waiver is requested for a single 4" stainless steel swing check valve on the basis that a product is not produced in the US in sufficient and reasonably available quantities and of satisfactory quality to satisfy the project design specifications for which the EPA has the authority to issue waivers in accordance with section 1452(a)(4)(C)(ii) of the Safe Drinking Water Act.

The Dover, NH Catch Basin and Wet Well Cleanings Treatment Facility consists of a system designed to accept, wash, and classify catch basin and wet well cleanings which include corrosive materials such as road salts which necessitate corrosion resistant process equipment. The project is scheduled to be completed by January 11, 2022. The check valve referenced is to be located on the stainless steel grit pump discharge pipeline, and is required to withstand abrasive and corrosive wear.

The prime contractor and engineer have made extensive efforts to source an AIS compliant product, and has contacted the following suppliers and vendors (refer to attached contactor communications):

1. Ferguson (FNW Valve)
2. FW Webb (Numerous manufacturers)
3. Sharpe Valves
4. Discover Valve
5. W&O Supply
6. Flomatic Valves
7. Apollo Valve
8. Val-Matic Valve
9. GA Industries

This good faith effort has not returned a single domestic manufacturer capable of providing a product conforming with the product specification. Several readily available foreign manufactured products were identified performing a web search of major recognized suppliers and manufacturers. Evaluated swing check valves are summarized in the table below.

TABLE 1. SUMMARY OF MARKET AVAILABLE 4" FLANGED SWING CHECK VALVES

Manufacturer	Model	Meets Spec	Price	AIS Compliant	Lead Time
FNW Valve	471A	Yes		No - China	N/A
Sharpe	Series 25	Yes*		No – China	N/A
Discover Valve	SS Check Valve 150#	Yes*		No – China	6-8 days
W&O Supply	072507	Yes*		No - China	4-6 Weeks
Flomatic	745	No		Yes	N/A
Apollo	910F	No		Yes	1 -3 days
Val-Matic	504ABF	No		Yes	N/A
GA	Figure 220	No	Unknown	Yes	N/A

*Materials appear to meet specification requirements based on publicly available published product information. Further information required to verify product satisfies design specification.

A waiver is requested for the specification named product (FNW Valve series 471A)

TABLE 2. SUMMARY OF MATERIALS REQUESTED FOR WAIVER OF AIS REQUIREMENTS

Description	4" Stainless Steel Flanged Swing Check Valve
Unit of Measure	Each
Quantity	1
Price	
Lead Time	Immediately Available
Location of Project	Dover, NH WWTF 484 Middle Rd Dover, NH 03820
Justification	Availability. Refer to attached excerpt project drawings and specifications.

Sincerely,

Raymond A. Vermette Jr

Raymond Vermette
City of Dover, New Hampshire
WWTF Supervisor
R.Vermette@dover.nh.gov

SECTION 15110

CHECK VALVES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work Included: Furnish and install check valves of the type(s) and size(s) and in the location(s) shown on the Drawings and as specified herein.
- B. Related Work Specified Elsewhere: "Valves & Specialties - General" is specified in this Division.
- C. Requirements Specified Elsewhere: Additional requirements that affect the work of this Section are specified elsewhere including, but not limited to General Conditions, Supplementary Conditions and:
 - 1. Section 01340 - Submittals
 - 2. Section 01400 - Quality Control
 - 3. Section 01800 - Equipment Startup, Certification and Operator Training
 - 4. Section 09905 - Surface Preparation and Shop Coatings

The General Contractor is responsible for conveying the appropriate information from these sections to the supplier.
- D. Related Work:
 - 1. Field painting is specified in Section 09900.
 - 2. Section 15100 – Valves & Specialties - General

1.2 QUALITY ASSURANCE

- A. All check valves of same type and duty shall be by one manufacturer.

PART 2 - PART 2 - PRODUCTS

2.1 VALVES - 2-½ INCHES AND SMALLER

- A. Standard, stainless steel, swing check with screwed ends.
- B. Suitable for 150 psi working steam pressure.
- C. Acceptable Manufacturers:
 - 1. Watts
 - 2. Apollo
 - 3. Or Engineer approved equal.

2.2 SWING TYPE CHECK VALVES

- A. The check valve shall conform to the materials of construction, pressure rating and test requirements of AWWA C508 and be suitable for installation in a horizontal or vertical flow up pipe.
- B. The body shall be made of 304 or 316 stainless steel conforming to ASTM A351 with a bolted stainless steel cover allowing complete access to and removal of all internal components while the valve is in the line.
- C. The valve body shall have integral flanges, flat faced and drilled per ANSI B16.1 Class 125 or Class 250, as required.
- D. The valve body shall have a removable Type 316 stainless steel body seat held in

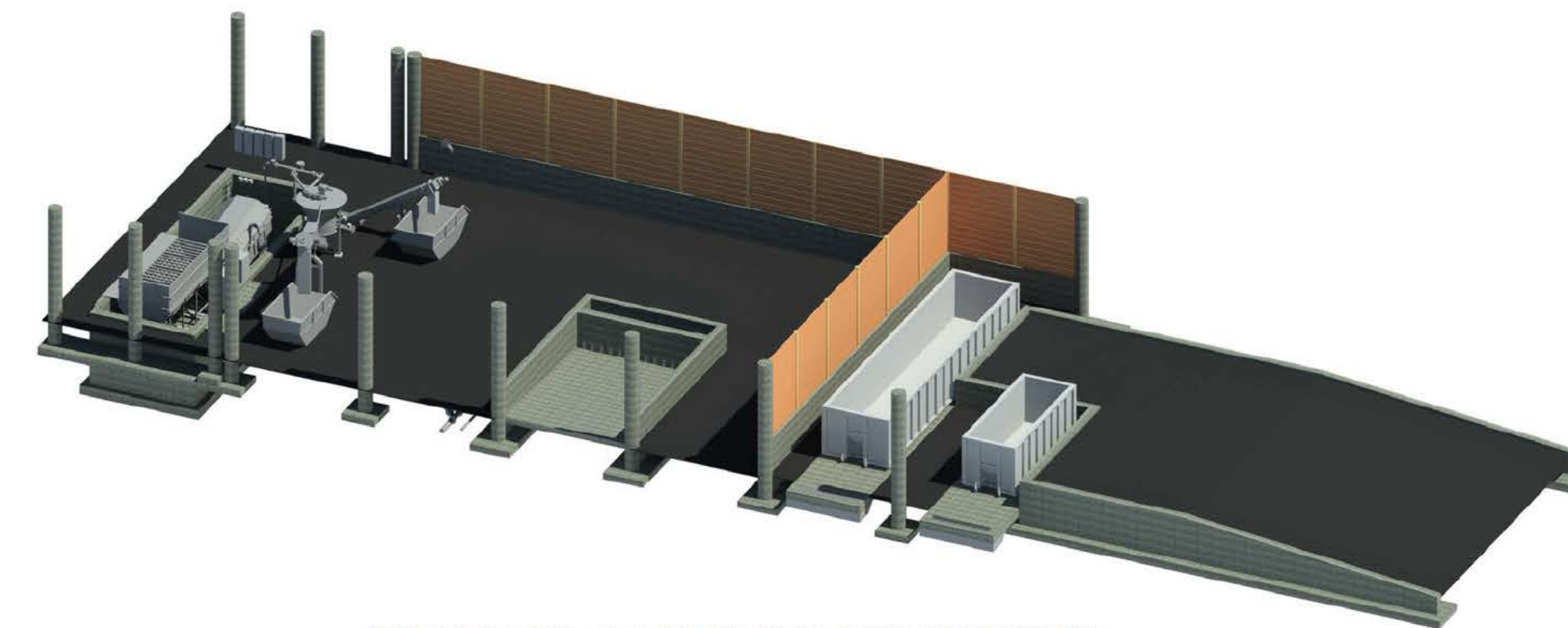
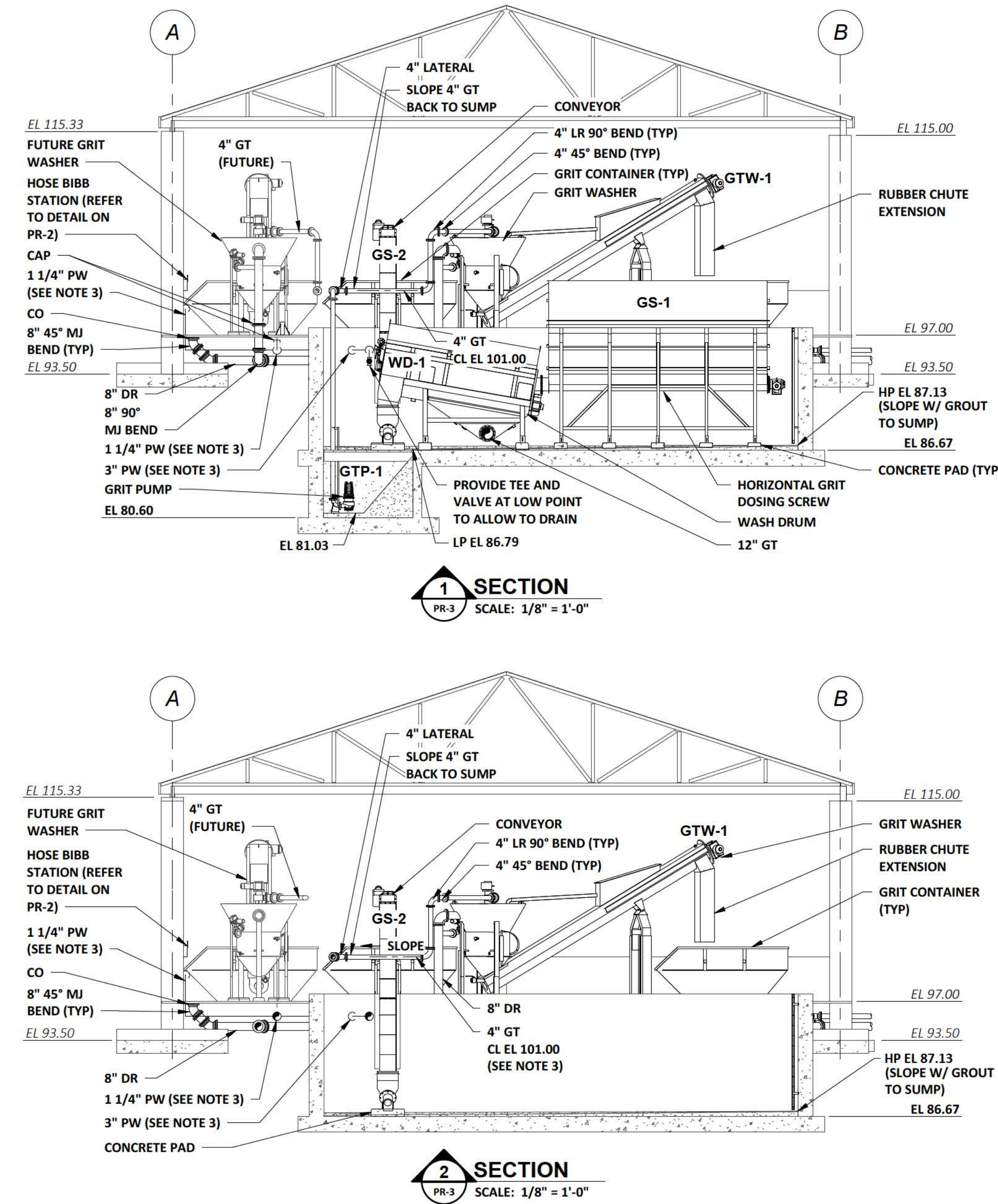
- place with stainless steel pins.
- E. The disc arm and disc shall be stainless steel with a replaceable Buna-N (or other suitable material) disc seat held in place by a type 316 stainless steel follower ring and stainless steel screws. The disc shall be attached to the disc arm by means of a center pin, disc nut and washer providing 360 degree angular articulation but not rotate.
 - F. The disc arm shall be suspended from and keyed to a stainless steel shaft that is supported at each end by stainless steel bushings. The shaft shall rotate freely without the need for external lubrication. The shaft shall be sealed where it passes through the body by means of a stuffing box and adjustable packing.
 - G. Bosses shall be provided on the check valve which will be tapped for draining or used for by-pass. The inside and outside of all valves together with the working parts, except machined surfaces, shall be coated in accordance with AWWA C-550.
 - H. Marking shall be in accordance with AWWA C-508 and shall include size, working pressure, and cast arrow to indicate direction of flow, name of manufacturer, and year of manufacture.
 - I. The valve shall be supplied with an outside lever and adjustable counterweight. The lever and weight shall be on the left hand side of the valve (looking in the direction of flow) but shall be field convertible to the right hand side without additional parts. Fitted with an adjustable dashpot or snubber to control speed of valve closure.
 - J. Check valve shall be supplied with a suitable means to allow for draining of the discharge line when not in use. Provide an extension of the drain mechanism to the railing for ease of access.
 - K. Acceptable Manufacturers:
 - 1. FNW, series 471A
 - 2. Or Engineer approved equal.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. In accordance with Section 15100.
- B. Install check valves in horizontal sections of pipeline unless otherwise indicated on the Drawings.

END OF SECTION



NOTES:

- NOTES:**
1. FOR GENERAL NOTES REFER TO DRAWING PR-1.
 2. FOR LEGEND & ABBREVIATIONS REFER TO DRAWING PR-2.
 3. HEAT TRACE PIPING.
 4. PLANT WATER PIPING MUST BE SLOPED TO GRIT SUMP SUCH THAT IT CAN BE DRAINED WHEN NEEDED.