MSA

ADDENDUM #1
PRV AND BOOSTER STATION
CITY OF NEW RICHMOND
ST. CROIX COUNTY, WI
Project No. 07985049.2
December 4, 2025

NOTICE

This Addendum is issued to modify, explain or correct the original drawings, specifications and/or previous addendums and is hereby made a part of the Contract Documents. Please attach this Addendum to the specifications in your possession and note receipt of this Addendum on page 00 41 00-5. The bid date remains unchanged.

PROJECT MANUAL

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

Section 00 41 00 – Bid

REPLACE Section 00 41 00 with attached marked "Addendum No. 1".
Note revision to: Schedule of Equipment Suppliers.

Section 00 52 00 – Agreement, Article 4 – Contract Times, Paragraph 4.02, A. Contract Times: Dates

REVISE paragraph 4.02, A. – Contract Times: Dates as follows:

"A. The Work will be substantially completed on or before September 1, 2027, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before December 31, 2027."

DIVISION 26 – ELECTRICAL

SECTION 26 90 00 – PROCESS INSTRUMENTATION & CONTROL

REPLACE the entire paragraph Part 2.01 System Integrator, D., as follows:

"D. Acceptable system integrators include:

1. Base Bid: Telemetry & Process Controls, telephone number (651) 430-0435.
2. Energenecs, Contact Keith Kohn, telephone number (262) 685-6506.
3. In Control, Contact Bob Dietrich, telephone number (715) 690-3338.
4. Integrated Process Solutions, contact Eric Fisher, telephone number (608) 849-4375
5. Quality Flow, telephone number (800) 227-5432
6. No Exceptions"

DIVISION 33 – UTILITIES

Section 44 42 00.01 – PRE-PACKAGED ABOVE GROUND PRESSURE REDUCING STATION

REMOVE Part 2.10, Paragraph A in its entirety

DIVISION 44 – POLLUTION CONTROL EQUIPMENT

Section 44 42 00.10 – PRE-FABRICATED BOOSTER PUMP SYSTEM

REMOVE Part 2.02, Paragraph Q, Line 1 in its entirety

Section 44 42 00.10 – PRE-FABRICATED BOOSTER PUMP SYSTEM

REPLACE Part 2.02, Paragraph P. with the following:

"P. Check Valves
1. Check valves shall be flanged, globe style, silent check valves.
2. Materials:
a. Valve bodies shall be constructed of ASTM ductile iron for Class 125 and Class 250 valves and ASTM A351 Grade CF8M for Class 150 stainless steel valves.
b. Seat and disc shall be ASTM B584 Alloy C87600 lead-free bronze or ASTM B148 Alloy C95200 aluminum bronze.
c. Compression spring shall be ASTM A313 Type 316 stainless steel with ground ends.
3. Features:
a. Silent operation - fast closure to prevent slam of water hammer.
b. Precision EDPM seating
c. Expanded Body to provide full flow area.
d. Double guided disc with resilient seat
e. Heavy duty spring tested for over 100,000 cycles.
f. Available to be installed in all flow direction.
g. Valve interiors and exteriors shall be coated with an NSF/ANSI 61 certified fusion bonded epoxy in accordance with AWWA C550.
4. Acceptable Manufacturers: Apco-DeZurick, Val-matic, or Equal"

DRAWINGS

REPLACE Sheets 20-M101, 20-M501, 30-M102, 30-M301, 30-M302 and 30-M901 with attached marked "Addendum No. 1":

END OF ADDENDUM

BID
PRV AND BOOSTER STATION
CITY OF NEW RICHMOND
ST. CROIX COUNTY, WI
Project #07985049.2

TABLE OF ARTICLES

ADDENDUM #1

BID FORM PROVIDED ON QUESTvBID

ONLINE BIDDING ONLY

ARTICLE 1 - OWNER AND BIDDER

1.01 This Bid is submitted to:

QuestCDN/vBID (www.QuestCDN.com)

Access the electronic bid form by downloading the project documents, and select the online bidding button at the top of the advertisement. Contact Quest at (952) 233-1632 if you have questions on how to upload your bid.

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

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ARTICLE 2 - ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

A. Required Bid security _____

B. List of Proposed Subcontractors

_____

_____

_____

C. List of Proposed Suppliers

_____

_____

_____

D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids; #1

E. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;

F. Required Bidder Qualifications Statement with Supporting Data;

ARTICLE 3 - BASIS OF BID – LUMP SUM AND UNIT PRICES

3.01 Unit Price Bids

A. Bidder will perform the following Work at the indicated unit prices:

ITEM NO.	ITEM DESCRIPTION	EST. QTY	UNITS	UNIT PRICE	TOTAL PRICE
BASE BID					
1	Fixed Costs (mobilization, bonds, insurance, etc.)	1	L.S.	$_____	$_____
2	Booster Station, Complete	1	L.S.	$_____	$_____
3	PRV Station, Complete	1	L.S.	$_____	$_____
ALLOWANCES					
4	Electric Utility Allowance - Booster Station	1	L.S.	$50,0000.00	$50,0000.00
5	Natural Gas Utility Allowance - Booster Station	1	L.S.	$5,000.00	$5,000.00
6	Electric Utility Allowance - PRV Station	1	L.S.	$5,000.00	$5,000.00
	TOTAL: Items #1-#6				$_____

B. Bidder acknowledges that:

1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and

2. estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

BID ALTERNATES

Required Alternate Bid Items are listed below. Owner shall have the right to accept either the Base Bid Items or the corresponding alternate. Failure to supply Alternate Bids may invalidate Bid.

Equipment Listing and Alternate Bid Schedule

A. BID EVALUATION

Bids are to be evaluated on the basis of the base bid manufacturers.

B. BASE BID MANUFACTURERS

It is understood that the total lump sum price above includes only products and equipment of manufacturers specifically named under Column A, Base Bid Manufacturer, within the "Schedule of Equipment Suppliers" shown on Page 00 41 00-X.

The base bid equipment cost shall be listed in Column B for each piece of equipment listed in Column A. This cost shall be for the equipment only and shall include any contractor markup. Where more than one manufacturer is listed under Column A, the Bidder must circle the name of the manufacturer for which a cost is supplied.

C. ALTERNATE MANUFACTURERS

1. Engineer Designated Alternates

ADDENDUM #1

Where one or more ENGINEER Designated Alternates are listed in Column C for an equipment item, the Bidder must fill in Column D indicating the add or deduct from the base bid for each piece of equipment listed in Column C. The add or deduct cost for the equipment shall account for differences in the equipment cost, contractor markup and any additional work to be performed which is not shown on the contract drawings, but which is required as a result of selection of the alternate equipment. If no bid is offered by the Engineer designated equipment manufacturer listed in Column C, the bidder should enter 'no bid' in Column D.

2. Contractor Designated Alternates

Bidders desiring to quote on alternate products; i.e., pieces of equipment not listed under Columns A or C may, at their option, write in a manufacturer's name in Column C and an add or deduct to the base bid in Column D. The add or deduct for the equipment shall account for differences in the equipment cost, contractor markup and any additional work to be performed which is not shown on the drawings, but which is required as a result of selection of the alternate equipment.

ADDENDUM #1

SCHEDULE OF EQUIPMENT SUPPLIERS

Document Location	Products and Materials	COLUMN A	COLUMN B	COLUMN C	COLUMN D
Specification Section	Equipment Item	Base Bid Manufacturer	Base Bid Equipment Cost	Alternate Manufacturer	Add or Deduct $ from Base Bid
13 34 30	Fabricated Engineered Structure- Booster Station	USEMCO			
26 90 00	Process Instrumentation and Controls	Telemetry & Process Controls (TPC)		Energenecs	
				IPS	
				In Control	
				Quality Flow	
33 12 33	Prepackaged Above Grade Pressure Reducing Valve	USEMCO			
44 42 00.10	Prefabricated Booster Pump System	USEMCO			

Bidder accepts that Adjustment prices are subject to acceptance by Owner, and rejection of one or more Adjustment prices shall not relinquish acceptance of the Bid.

ARTICLE 4 - TIME OF COMPLETION

4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

4.02 Bidder agrees that the Work will be substantially complete on or before September 1, 2027, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before December 31, 2027.

4.03 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5 - BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

ADDENDUM #1

5.01 Bid Acceptance Period

A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

5.02 Instructions to Bidders

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 Receipt of Addenda

A. Bidder hereby acknowledges receipt of the following Addenda

Addendum Number	Addendum Date

ARTICLE 6 - BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 Bidder's Representations

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.

2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.

4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.

5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.

6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.

7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.

10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ADDENDUM #1

6.02 Bidder's Certifications

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.

2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.

3. Bidder has not solicited or induced any individual or entity to refrain from bidding.

4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:

   a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.

   b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.

   c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.

   d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ADDENDUM #1

BIDDER hereby submits this Bid as set forth above:

Bidder:

_____

(typed or printed name of organization)

By: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest: _____

(individual's signature)

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Date: _____

(typed or printed)

Address for giving notices:

_____

_____

Bidder's Contact:

Name: _____

(typed or printed)

Title: _____

(typed or printed)

Phone: _____

Email: _____

Address:

_____

_____

_____

Bidder's Contractor License No.: (if applicable) _____

ADDENDUM #1

KEYNOTES:

1. PREFABRICATED INSULATED FIBERGLASS ENCLOSURE - BY STATION SUPPLIER
2. 8 INCH CLASS 52 FLANGED DUCTILE IRON PIPE
3. BI-DIRECTIONAL MAGNETIC FLOW METER - PROVIDED BY STATION SUPPLIER, SPECIFIED UNDER DIVISION 26
4. 8"X8"X8" FLANGED DUCTILE IRON TEE
5. BUTTERFLY VALVE, WAFER OR FLANGED STYLE, WITH LEVER HANDLE OPERATOR
6. PRESSURE AND FLOW CONTROL VALVE - SEE DIVISION 40 SPECIFICATIONS
7. PROVIDE 3/4-INCH NPT TAP AND COPPER PIPING TO PRESSURE MONITORING PANEL (TYP. OF 2)
8. 8" 90 DEGREE FLANGED DUCTILE IRON ELBOW
9. NOT USED.
10. PRESSURE MONITORING PANEL AND RACK. ALUMINUM RACK SHALL BE LARGE ENOUGH TO MOUNT THE FOLLOWING EQUIPMENT:
    - A. PRESSURE GAUGE (2)
    - B. SAMPLE TAP (2)
    - C. BALL VALVES (4)
    - D. ASSOCIATED COPPER PIPING
11. FLANGE ADAPTER (MEGA-FLANGE SERIES 2100 OR EQUAL)
12. PIPE SUPPORT (SADDLE TYPE)

LEGEND

PROVIDED AND INSTALLED BY SITE UTILITY CONTRACTOR (OR GENERAL)

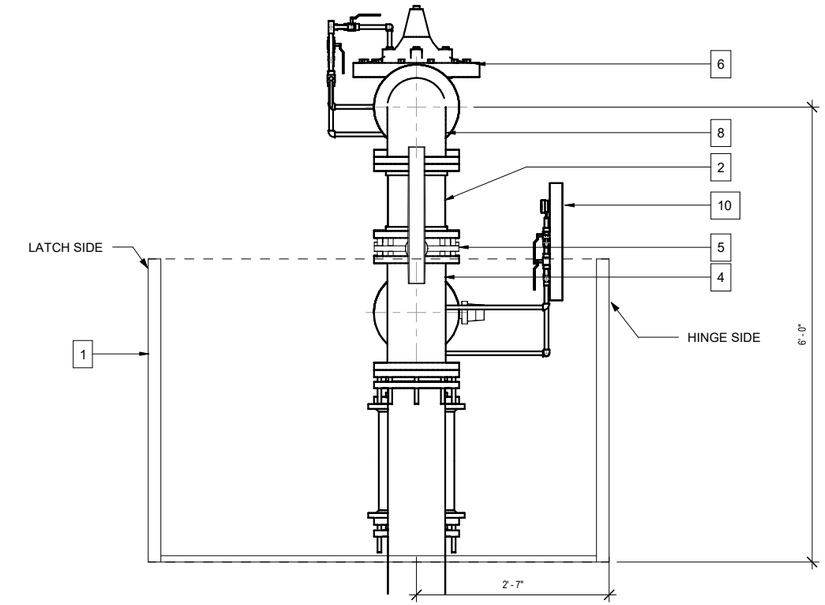
ASSEMBLED AND FURISHED BY PREFABRICATED STATION MANUFACTURER

GENERAL NOTES:

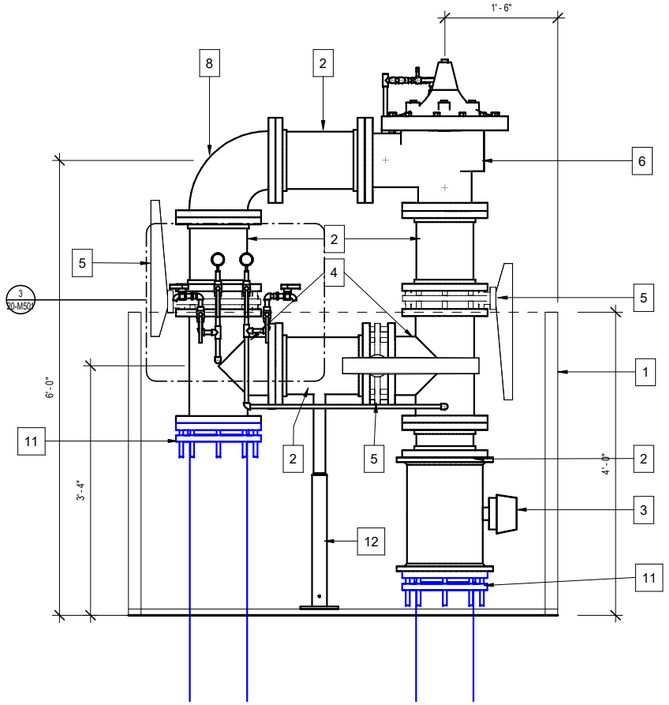
A. PIPING SHOWN AS FLANGED CLASS 52 DUCTILE IRON. MAY SUBSTITUTE STAINLESS OR SCH. 40 STEEL PIPING AS ALTERNATE.

B. FLANGED CONNECTION SHOWN ON DRAWINGS, PACKAGED PRESSURE REDUCING STATION SUPPLIER MAY SUBSTITUTE WELDED CONNECTIONS, AND FITTINGS AND BENDS IN LOCATIONS APPROVED BY ENGINEER OR OWNER.

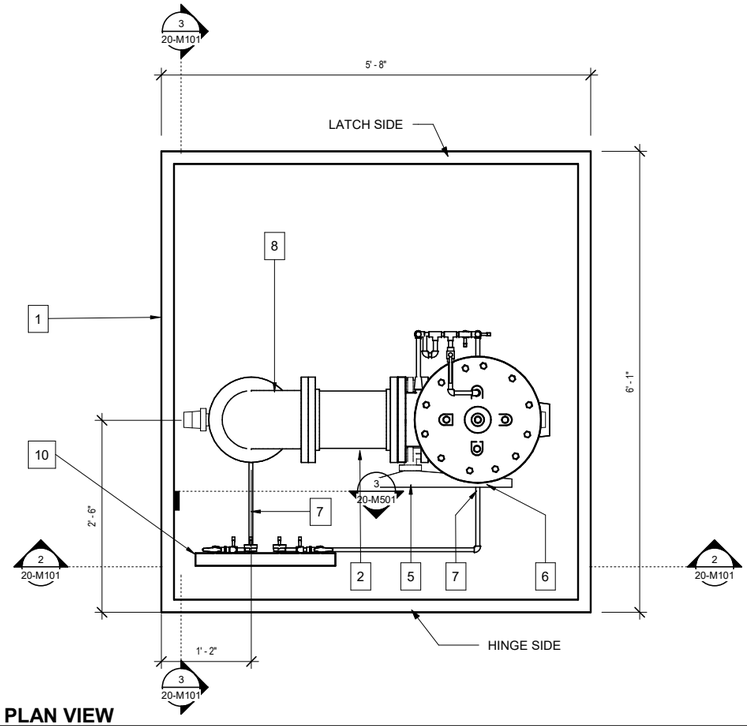
C. ALL BUTTERFLY VALVES SHALL HAVE LEVER HANDLE OPERATORS.



3 **PROCESS PIPING SECTION**
20-M101 1" = 1'-0" (22"x34")



2 **PROCESS PIPING SECTION**
20-M101 1" = 1'-0" (22"x24") 0 6" 1' 2'
1/2" = 1'-0" (11"x17")



PLAN VIEW
1" = 1'-0" (22"x24") 0 6" 1' 2'
1/2" = 1'-0" (11"x17")

		No	DATE	REVISIONS	BY
PROJECT DATE: NOVEMBER 18, 2025	DRAWN BY: JJY	1	12/4/2025	ADDENDUM NO. 1	JJY
	DESIGNED BY: ATR				
	CHECKED BY: EE				

MSA
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WATER TOWER #3 AND BOOSTER STATION
CITY OF NEW RICHMOND
ST. CROIX COUNTY, WISCONSIN

PRESSURE REDUCING VALVE STATION
PROCESS PLAN

PROJECT NO. 07985049.2
SHEET 20-M101

LEGEND

PROVIDED AND INSTALLED BY SITE UTILITY CONTRACTOR (OR GENERAL)

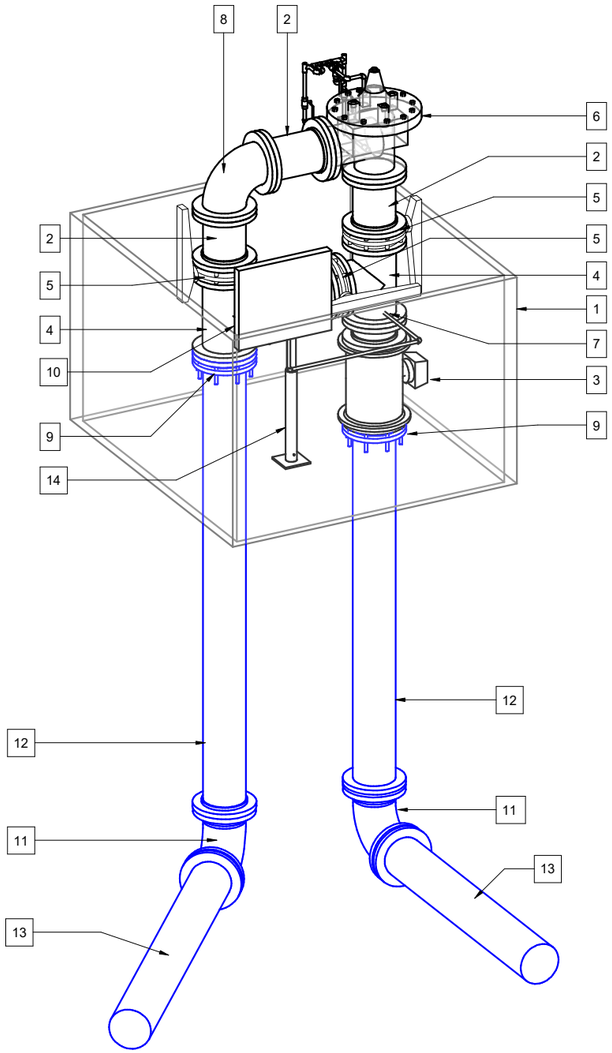
ASSEMBLED AND FURISHED BY PREFABRICATED STATION MANUFACTURER

GENERAL NOTES:

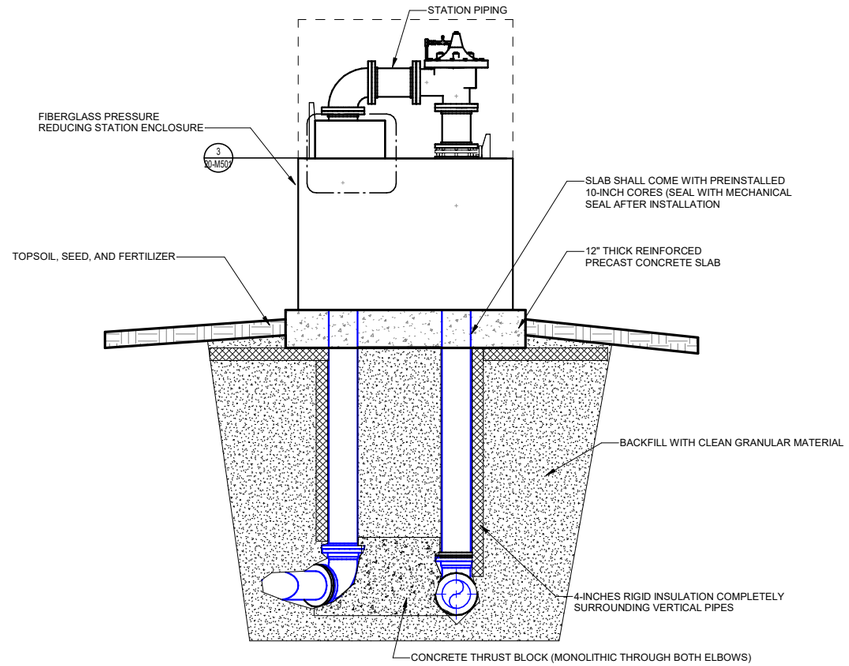
A. PIPING SHOWN AS FLANGED CLASS 52 DUCTILE IRON. MAY SUBSTITUTE STAINLESS OR SCH. 40 STEEL PIPING AS ALTERNATE.
B. FLANGED CONNECTION SHOWN ON DRAWINGS, PACKAGED PRESSURE REDUCING STATION SUPPLIER MAY SUBSTITUTE WELDED CONNECTIONS, AND FITTINGS AND BENDS IN LOCATIONS APPROVED BY ENGINEER OR OWNER.
C. ALL BUTTERFLY VALVES SHALL HAVE LEVER HANDLE OPERATORS.

KEYNOTES:

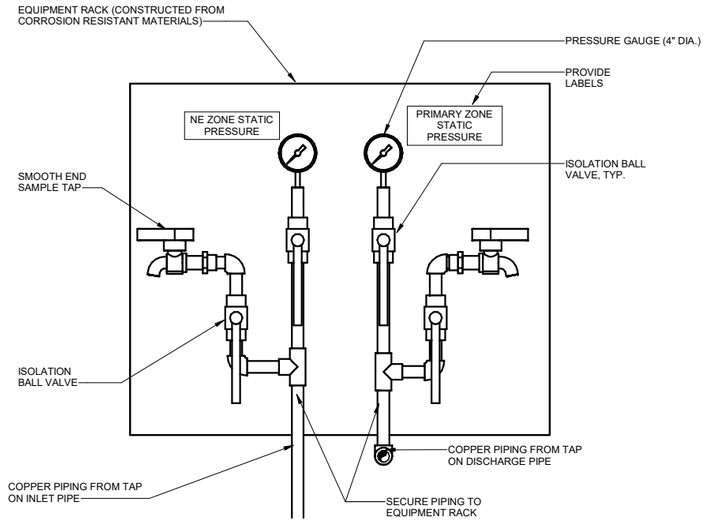
1. PREFABRICATED INSULATED FIBERGLASS ENCLOSURE - BY STATION SUPPLIER
2. 8 INCH CLASS 53 FLANGED DUCTILE IRON PIPE
3. BI-DIRECTIONAL MAGNETIC FLOW METER - PROVIDED BY STATION SUPPLIER, SPECIFIED UNDER DIVISION 26
4. 8"X8"X8" FLANGED DUCTILE IRON TEE
5. BUTTERFLY VALVE, WAFER OR FLANGED STYLE, WITH LEVER HANDLE OPERATOR
6. PRESSURE AND FLOW CONTROL VALVE - SEE DIVISION 40 SPECIFICATIONS
7. PROVIDE 3/4-INCH NPT TAP AND COPPER PIPING TO PRESSURE MONITORING PANEL (TYP. OF 2)
8. 8" 90 DEGREE FLANGED DUCTILE IRON ELBOW
9. FLANGE APAPTER (SERIES 2100 OR EQUAL MEGA-FLANGE)
10. PRESSURE MONITORING PANEL AND RACK. ALUMINUM RACK SHALL BE LARGE ENOUGH TO MOUNT THE FOLLOWING EQUIPMENT:
    A. PRESSURE GAUGE (2)
    B. SAMPLE TAP (2)
    C. BALL VALVES (4)
    D. ASSOCIATED COPPER PIPING
11. 8" 90 DEGREE MECHANICAL JOINT DUCTILE IRON ELBOW. PROVIDE MEGA-LUG JOINT RESTRAIN, SEE SITE PLAN
12. 8 INCH DUCTILE IRON PIPE (MJxPE)
13. 8 INCH DUCTILE IRON PIPE (BY SITE UTILITY CONTRACTOR)
14. PIPE SUPPORT (SADDLE TYPE)



1 PROCESS PIPING ISOMETRIC
20-M501 NOT TO SCALE



2 INSTALLATION DETAIL
20-M501 NOT TO SCALE



GENERAL NOTES:
A. EQUIPMENT RACK SHALL BE CONSTRUCTED FROM CORROSION RESISTANT MATERIALS (STAINLESS STEEL, GALVANIZED STEEL, OR ALUMINUM).
B. THE CONTRACTOR OR SUPPLIER MAY SUBSTITUTE STAINLESS STEEL PIPING.
C. BALL VALVES SHALL BE STAINLESS STEEL OR LEAD FREE BRONZE.
D. PRESSURE GAUGES SHALL HAVE A MINIMUM DIAMETER OF 4 INCHES.
E. SAMPLE TAP SHALL HAVE A SMOOTH BORE AND A MINIMUM DIAMTER OF 3/4 INCHES.
F. RACK SHALL BE MOUNTED TO PRV ENCLOSURE FRAMING OR UNISTRUT STRUCTURE SECURED TO FLOOR.

3 PRESSURE MONITORING RACK DETAIL
20-M501 NOT TO SCALE

		No	DATE	REVISIONS	BY
PROJECT DATE: NOVEMBER 18, 2025	DRAWN BY: JJY	1	12/4/2025	ADDENDUM NO. 1	JJY
	DESIGNED BY: ATR				
	CHECKED BY: EE				

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WATER TOWER #3 AND BOOSTER STATION
CITY OF NEW RICHMOND
ST. CROIX COUNTY, WISCONSIN

PRESSURE REDUCING VALVE STATION PROCESS DETAILS

PROJECT NO. 07985049.2
SHEET 20-M501

PLOT DATE: 12/4/2025 9:09:03 AM Autodesk Docs://07985049 - New Richmond Water Tower #3 and Booster Station Design/07985049 New Richmond Pressure Reducing Station_MECH.rvt

KEYNOTES:

1. PREFABRICATED BOOSTER STATION
2. HVAC UNIT BY BUILDING MANUFACTURER
3. FLOOR MOUNTED HIGH EFFECIENCY DEHUMIDIFIER BY STATION MANUFACTURER.
4. LOUVED BLOWER BY STATION MANUFACTURER
5. FUTURE SODIUM HYPOCHLORITE PUMP AND PUMP SHELF
6. FUTURE CHEMICAL STORAGE TANK AND SECONDARY CONTAINMENT
7. HUB DRAIN FOR PROCESS PIPING DISCHARGE. SEE DETAIL.
8. COPPER DISCHARGE PIPING FOR AIR RELEASE VALVE. PLUMB TO HUB DRAIN SEE DETAIL.
9. FLOOR DRAIN, INSTALL FLUSH WITH FINISHED FLOOR. REFER TO 30-M101
10. INTERIOR CLEANOUT, INSTALL FLUSH WITH FINISHED FLOOR - REFER TO 30-M101
11. DRAIN VENT TO ROOF - SECURE TO VERTICAL WALL. PROVIDE ROOFING BOOT AND SEALANT AT ROOF PENETRATION.
12. INSTRUMENT PANEL - SEE DETAIL. MOUNTED ALUMINUM RACK TO STATION WALL. PROVIDE ENGRAVED LABELS.
13. 8-INCH RESTRAINED EXPANSION JOINT FITTING
14. SMOOTH BORE SAMPLE TAP (1/2"). PROVIDE TAP AND BALL VALVE FOR ISOLATION.
15. PROVIDE BENDS AS NEEDED TO CLEAR PROCESS PIPING
16. FLOW TRANSMITTER - MOUNTED TO INSTRUMENT PANEL
17. 3/4" NPT TAP WITH BALL VALVE AND PRESSURE GAUGE FOR BOOSTER PUMP DISCHARGE - TYP. OF ALL PROPOSED PUMPS

GENERAL NOTES:

A. BOOSTER STATION PROCESS PIPING 3"+ IS SHOWN AS FLANGED CLASS 53 DUCTILE IRON. REFER TO SPECIFICATOINS FOR ALTERNATE PIPING MATERIAL.
B. FLANGED CONNECTION ARE SHOWN ON DRAWINGS, PACKAGED BOOSTER SKID SUPPLIER MAY SUBSTITUTE WELDED CONNECTIONS, AND FITTINGS AND BENDS IN LOCATIONS APPROVED BY ENGINEER AND OWNER.
C. FUTURE EQUIPMENT AND PIPING SHOWN AS DASHED LINEWORK IN VIEW.
D. PROVIDE ALL PIPE WITH STICKER OR PAINTED LABELS WITH FLOW DIRECTION ARROWS. REFER TO DIVISIN 40.
E. SUCTION SIDE PROCESS PIPING SHALL BE PAINTED SHERWIN WILLIAMS 4063 ROBOTIC BLUE, OR EQUAL. DISCHARGE (BOOSTED) PROCESS PIPING SHALL BE PAINTED SHERWIN WILLIAMS 4086 SAFETY BLUE, OR EQUAL. 1

PUMP/INSTRUMENT SCHEDULE - PROPOSED

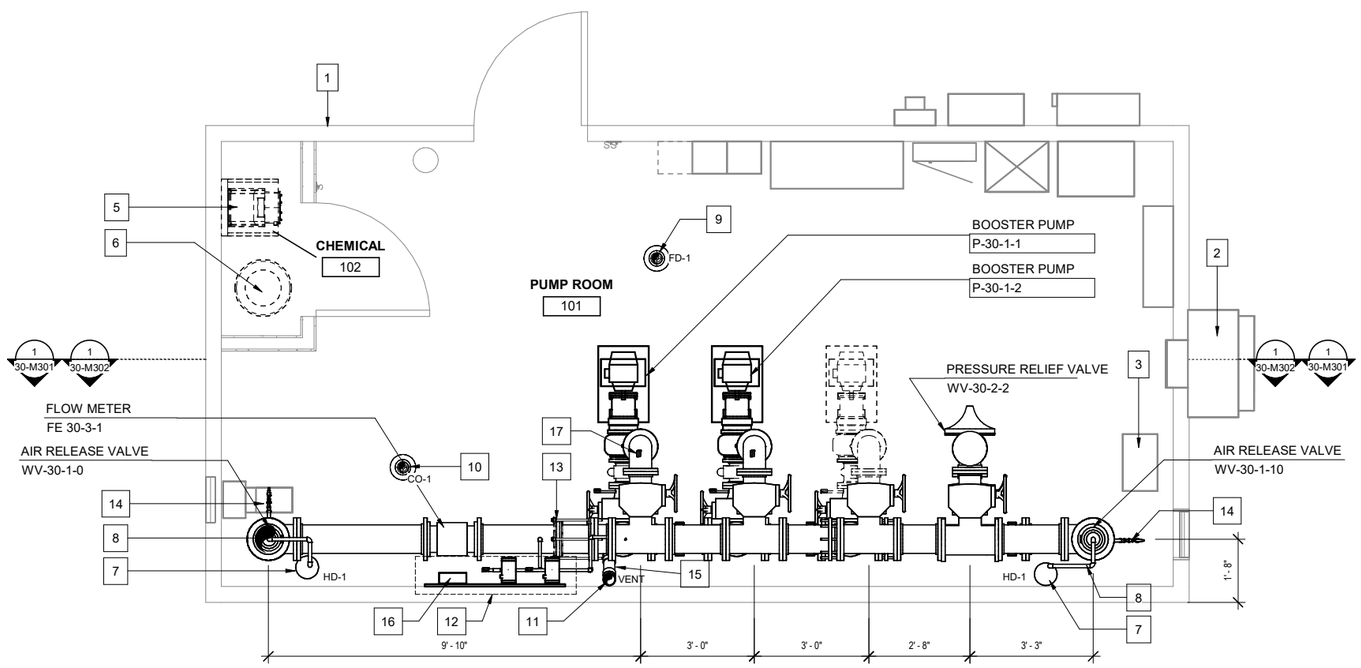
NOTE: PUMPSCHEDULE IS PROVIDED AS A GENERAL REFERENCE. CONTRACTOR SHALL VERIFY ANY INFORMATION LISTED AND NOTIFY ENGINEER OF ANY CONFLICTS, DISCREPANCIES, OR MISSING INFORMATION.

TAG ID	PHASE/VOLTAGE	MODEL	COMMENTS
P-30-1-1	3 PH/ 480V	GOULDS MODEL 16BF	SEE DETAIL FOR TYPICAL PUMP INSTALLATION
P-30-1-2	3 PH/ 480V	GOULDS MODEL 16BF	SEE DETAIL FOR TYPICAL PUMP INSTALLATION
PIT 30-4-1	1 PH/ 120V	SEE DIV 26	REFER TO DIVISION 26 SPECIFICATIONS AND DETAILS
PIT 30-4-2	1 PH/ 120V	SEE DIV 26	REFER TO DIVISION 26 SPECIFICATIONS AND DETAILS

APPURTENANCES SCHEDULE - PROPOSED

NOTE: APPURTENANCE SCHEDULE IS PROVIDED AS A GENERAL REFERENCE. APPURTENANCES (NOT SHOWN) MAY BE REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR IS REQUIRED TO PROVIDE A COMPLETE AND OPERABLE SYSTEM. CONTRACTOR SHALL VERIFY ANY INFORMATION LISTED AND NOTIFY ENGINEER OF ANY CONFLICTS, DISCREPANCIES, OR MISSING INFORMATION.

TAG ID	APPURTENANCE	ABBREVIATION	SIZE	COMMENTS
30-WV-2-3	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
FE 30-3-1	FLOW METER	FE	16"ø-16"ø	MOUNT TRANSMITTER TO INSTRUMENT PANEL
WV-30-1-0	AIR RELEASE VALVE	ARV	2"ø-2"ø	PROVIDE ISOLATION BALL VALVE UPSTREAM OF ARV. ROUTE DISCHARGE PIPING TO HUB DRAIN
WV-30-1-1	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
WV-30-1-2	CHECK VALVE	CV	6"ø-6"ø	FLANGED, SILENT TYPE
WV-30-1-3	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
WV-30-1-4	BUTTERFLY VALVE	BFV	6"ø-6"ø	WATER STYLE W/ HANDWHEEL OPERATOR
WV-30-1-5	CHECK VALVE	CV	6"ø-6"ø	FLANGED, SILENT TYPE
WV-30-1-6	BUTTERFLY VALVE	BFV	6"ø-6"ø	LUGGED STYLE W/ HANDWHEEL OPERATOR
WV-30-1-7	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE, PROVIDE BLIND FLANGE
WV-30-1-9	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE, PROVIDE BLIND FLANGE
WV-30-1-10	AIR RELEASE VALVE	ARV	2"ø-2"ø	PROVIDE ISOLATION BALL VALVE UPSTREAM OF ARV. ROUTE DISCHARGE PIPING TO HUB DRAIN
WV-30-2-1	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
WV-30-2-2	PRESSURE RELIEF VALVE	PRV	6"ø-6"ø	REFER TO SECTION 44 42 00.10



PROCESS FLOOR PLAN

1/2" = 1'-0" (22"x24")
1/4" = 1'-0" (11"x17")
0 1 2 4

PROJECT DATE: NOVEMBER 18, 2025	DRAWN BY: JJY	DESIGNED BY: JJY	CHECKED BY: ATR

No	DATE	REVISIONS	BY
1	12/4/2025	ADDENDUM NO. 1	JJY

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WATER TOWER NO. 3 AND BOOSTER STATION
CITY OF NEW RICHMOND
ST. CROIX COUNTY, WISCONSIN

NORTH BOOSTER STATION
PROCESS FLOOR PLAN

PROJECT NO. 07985049.2
SHEET 30-M102

PLOT DATE: 12/4/2025 9:02:25 AM, Autodesk Docs://07985049 - New Richmond Water Tower #3 and Booster Station Design/07985049 New Richmond Booster_MECH.rvt

KEYNOTES:

1. PREFABRICATED BOOSTER STATION
2. HVAC UNIT BY BUILDING MANUFACTURER
3. FLOOR MOUNTED HIGH EFFECIENCY DEHUMIDIFIER BY STATION MANUFACTURER.
4. PROVIDE ALUMINUM RACK FOR MOUNTING OF PRESSURE MONITORING EQUIPMENT. MOUNT TO STATION WALL.
5. SMOOTH BORE SAMPLING TAP WITH ISOLATION BALL VALVE, SEE DETAIL
6. PRESSURE TRANSMITTER (PROVIDED BY DIVISION 26) AND GAUGE. MOUNT TO PRESSURE MONITORING PANEL. SECURE PIPING TO WALL AND RACK.
7. SUCTION PRESSURE GAUGE WITH ISOLATION BALL VALVE. TYPICAL OF EACH PUMP LOOP.
8. DISCHARGE PRESSURE GAUGE WITH ISOLATION BALL VALVE. TYPICAL OF EACH PUMP LOOP.
9. FLOW TRANSMITTER - MOUNTED TO INSTRUMENT PANEL

GENERAL NOTES:

A. BOOSTER STATION PROCESS PIPING 3"+ IS SHOWN AS FLANGED CLASS 53 DUCTILE IRON. REFER TO SPECIFICATOINS FOR ALTERNATE PIPING MATERIAL.
B. FLANGED CONNECTION ARE SHOWN ON DRAWINGS, PACKAGED BOOSTER SKID SUPPLIER MAY SUBSTITUTE WELDED CONNECTIONS, AND FITTINGS AND BENDS IN LOCATIONS APPROVED BY ENGINEER AND OWNER.
C. FUTURE EQUIPMENT AND PIPING SHOWN AS DASHED LINEWORK IN VIEW.
D. PROVIDE ALL PIPE WITH STICKER OR PAINTED LABELS WITH FLOW DIRECTION ARROWS. REFER TO DIVISIN 40.
E. SUCTION SIDE PROCESS PIPING SHALL BE PAINTED SHERWIN WILLIAMS 4063 ROBOTIC BLUE, OR EQUAL. DISCHARGE (BOOSTED) PROCESS PIPING SHALL BE PAINTED SHERWIN WILLIAMS 4086 SAFETY BLUE, OR EQUAL.

1

PUMP/INSTRUMENT SCHEDULE - PROPOSED

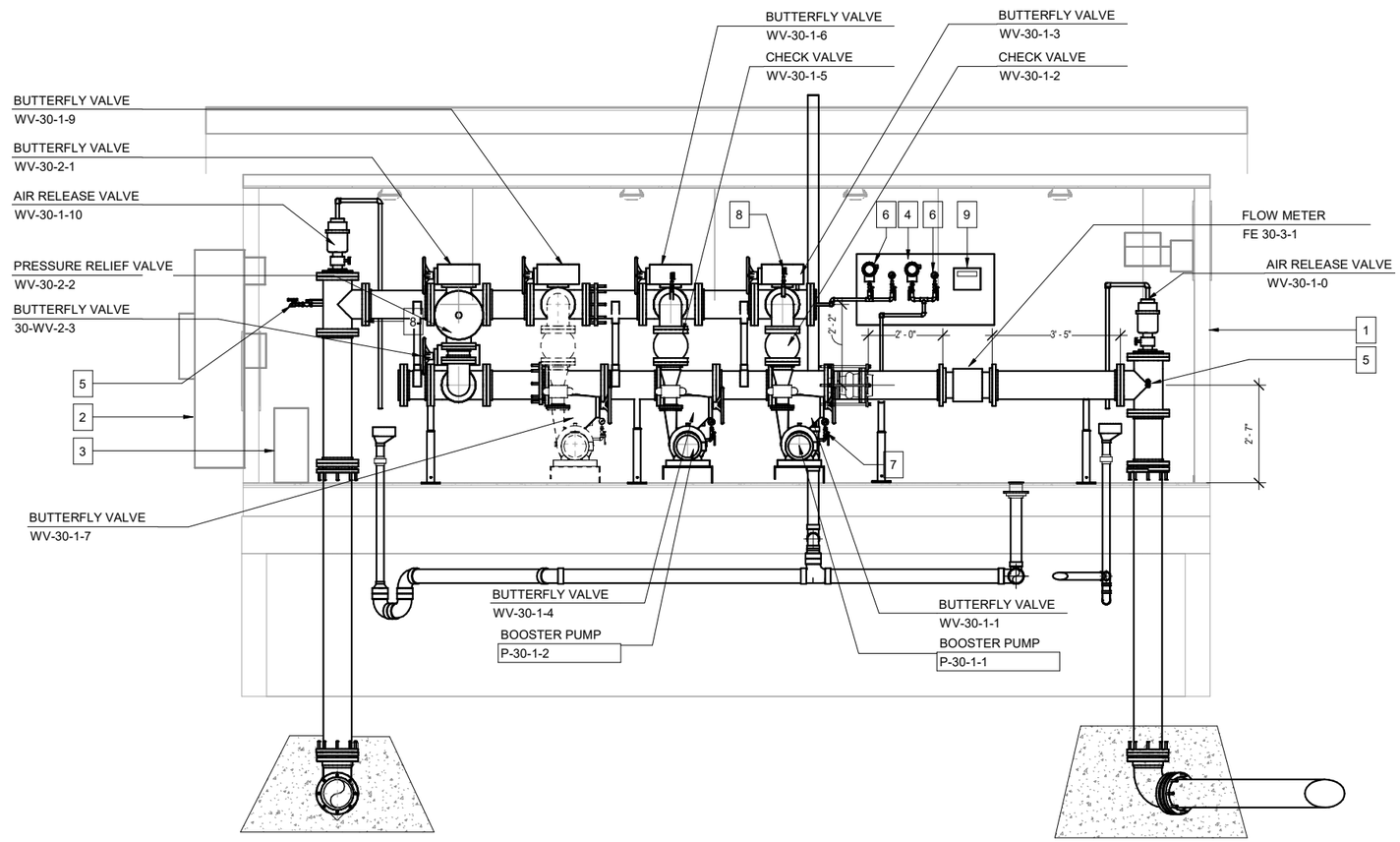
NOTE: PUMPSCHEDULE IS PROVIDED AS A GENERAL REFERENCE. CONTRACTOR SHALL VERIFY ANY INFORMATION LISTED AND NOTIFY ENGINEER OF ANY CONFLICTS, DISCREPANCIES, OR MISSING INFORMATION.

TAG ID	PHASE/VOLTAGE	MODEL	COMMENTS
P-30-1-1	3 PH/ 480V	GOULDS MODEL 16BF	SEE DETAIL FOR TYPICAL PUMP INSTALLATION
P-30-1-2	3 PH/ 480V	GOULDS MODEL 16BF	SEE DETAIL FOR TYPICAL PUMP INSTALLATION
PIT 30-4-1	1 PH/ 120V	SEE DIV 26	REFER TO DIVISION 26 SPECIFICATIONS AND DETAILS
PIT 30-4-2	1 PH/ 120V	SEE DIV 26	REFER TO DIVISION 26 SPECIFICATIONS AND DETAILS

APPURTENANCES SCHEDULE - PROPOSED

NOTE: APPURTENANCE SCHEDULE IS PROVIDED AS A GENERAL REFERENCE. APPURTENANCES (NOT SHOWN) MAY BE REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR IS REQUIRED TO PROVIDE A COMPLETE AND OPERABLE SYSTEM. CONTRACTOR SHALL VERIFY ANY INFORMATION LISTED AND NOTIFY ENGINEER OF ANY CONFLICTS, DISCREPANCIES, OR MISSING INFORMATION.

TAG ID	APPURTENANCE	ABBREVIATION	SIZE	COMMENTS
30-WV-2-3	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
FE 30-3-1	FLOW METER	FE	16"ø-16"ø	MOUNT TRANSMITTER TO INSTRUMENT PANEL
WV-30-1-0	AIR RELEASE VALVE	ARV	2"ø-2"ø	PROVIDE ISOLATION BALL VALVE UPSTREAM OF ARV. ROUTE DISCHARGE PIPING TO HUB DRAIN
WV-30-1-1	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
WV-30-1-2	CHECK VALVE	CV	6"ø-6"ø	FLANGED, SILENT TYPE
WV-30-1-3	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
WV-30-1-4	BUTTERFLY VALVE	BFV	6"ø-6"ø	WATER STYLE W/ HANDWHEEL OPERATOR
WV-30-1-5	CHECK VALVE	CV	6"ø-6"ø	FLANGED, SILENT TYPE
WV-30-1-6	BUTTERFLY VALVE	BFV	6"ø-6"ø	LUGGED STYLE W/ HANDWHEEL OPERATOR
WV-30-1-7	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE, PROVIDE BLIND FLANGE
WV-30-1-9	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE, PROVIDE BLIND FLANGE
WV-30-1-10	AIR RELEASE VALVE	ARV	2"ø-2"ø	PROVIDE ISOLATION BALL VALVE UPSTREAM OF ARV. ROUTE DISCHARGE PIPING TO HUB DRAIN
WV-30-2-1	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
WV-30-2-2	PRESSURE RELIEF VALVE	PRV	6"ø-6"ø	REFER TO SECTION 44 42 00.10



1 PREFABRICATED BUILDING SECTION - PROPOSED EQUIPMENT
30-M301 1/2" = 1'-0" (22"x24") 1/4" = 1'-0" (11"x17") 0 1 2 4

No	DATE	REVISIONS	BY
1	12/4/2025	ADDENDUM NO. 1	JJY

PROJECT DATE: NOVEMBER 18, 2025 DRAWN BY: JJY DESIGNED BY: JJY CHECKED BY: ATR

PLOT DATE: 12/4/2025 9:02:57 AM _ Autodesk Docs://07985049 - New Richmond Water Tower #3 and Booster Station Design/07985049 New Richmond Booster_M(SH).rvt

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WATER TOWER NO. 3 AND BOOSTER STATION
CITY OF NEW RICHMOND
ST. CROIX COUNTY, WISCONSIN

NORTH BOOSTER STATION
PREFABRICATED BUILDING SECTION

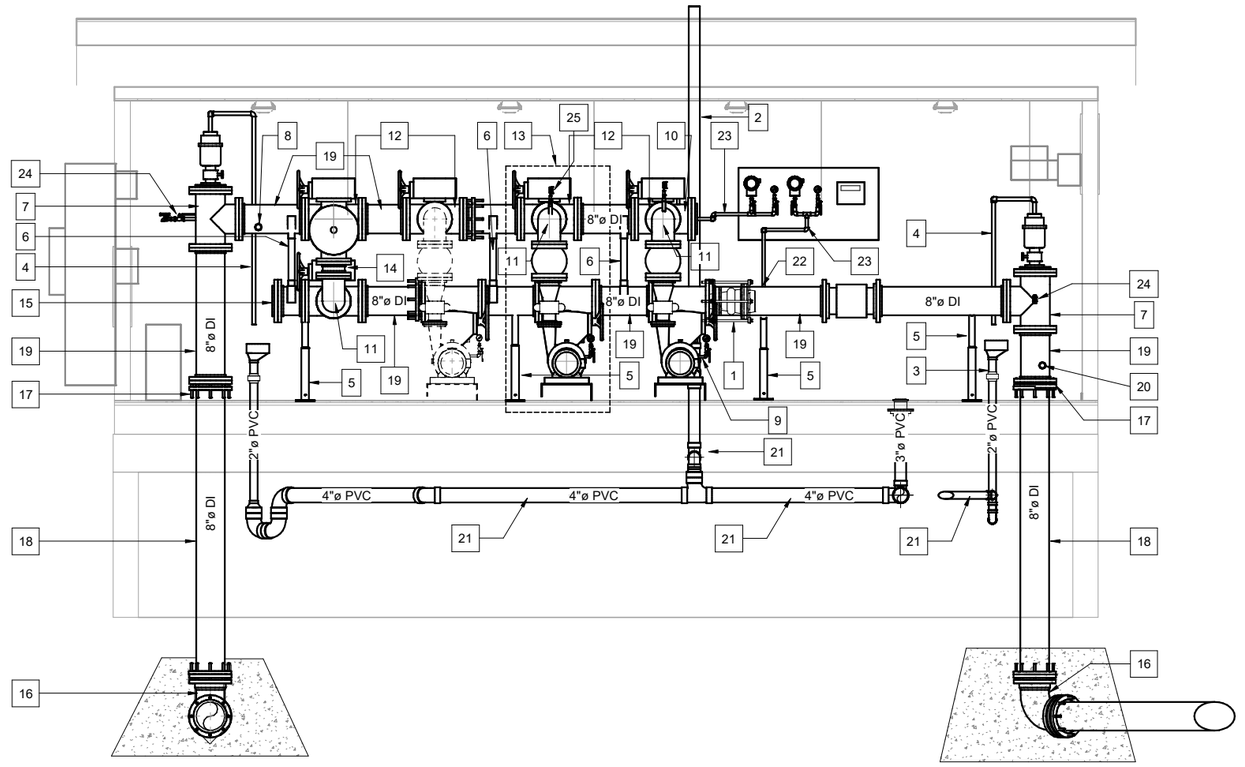
PROJECT NO. 07985049.2
SHEET 30-M301

KEYNOTES:

1. 6-INCH RESTAINED EXPANSION JOINT FITTING
2. 3-INCH PVC VENT TERMINAL. SECURE TO WALL. PROVIDE ROOF PENETRATION.
3. HUB DRAIN FOR PROCESS DISCHARGE, SEE DETAIL
4. 1" COPPER AIR RELEASE VALVE DISCHARGE PIPING - ROUTE TO HUB DRAIN
5. PIPE SUPPORT - FLOOR MOUNTED
6. PIPE SUPPORT - DOUBLE SADDLE TYPE
7. 8"X8"x8" DI TEE WITH BLIND FLANGE TAPPED FOR 2-INCH AIR RELEASE VALVE PIPING
8. 1" NPT TAP FOR FUTURE CHEMICAL INJECTION. TAP SHALL INSTALLED AT A 45 DEGREE ANGLE FROM HORIZONTAL ORIENTED UP FROM THE BOTTOM OF THE PIPE. PLUG TAP
9. 1/2" TAP AND PRESSURE GAUGE AT SUCTION AND DISCHARGE PIPING OF PUMPS. PROVIDE ISOLATION BALL VALVE UPSTREAM OF INSTRUMENT
10. 8"X8"X6" DI REDUCING TEE WITH 8-INCH BLIND FLANGE. PROVIDE 1" NPT TAP FOR PRESSURE MONTORING.
11. 6" DI 90 DEGREE ELBOW
12. 8"X8"X6" DI REDUCING TEE
13. SEE TYPICAL PUMP DETAIL FOR PIPING INFORMATION
14. 6" DI SPOOL PIPE OR FILLER FLANGE AS REQ'D FOR PRESSURE RELIEF VALVE CONNECTION.
15. 8" SPOOL AND BLIND FLANGE FOR SUCTION HEADER PIPING
16. 8" DI 90 DEGREE ELBOW (BELOW GRADE MECHANICAL JOINT). PROVIDE CONCRETE THRUST BLOCK PER CIVIL STANDARD DETAILS. RESTRAIN WITH TANDEM MEGA-LUG MECHANICAL JOINT RESTRAINT
17. RESTAINED FLANGE ADPATER (MEGA-FLANGE). CONNECTION SHALL BE PROVIDED IN THE FIELD BETWEEN CONTRACTOR'S BELOW GRADE PIPING AND SUPPLIER'S PREFABRICATED STATION PIPING.
18. 8-INCH CLASS 53, MECHANICALLY JOINTED, DUCTILE IRON PIPE FOR BELOW GRADE WATERMAIN (BY UTILITY CONTRACTOR)
19. 8-INCH CLASS 53 FLANGED DUCTILE IRON PIPE (BY STATION MANUFACTURER)
20. 1" NPT TAP FOR FUTURE CHLORINE ANALYZER FEED EQUIPMENT. PLUG TAP
21. BELOW SLAB PVC DRAIN PIPING (BY UTILITY CONTRACTOR)
22. 1" NPT TAP FOR SUCTION PRESSURE INSTRUMENTS
23. 1" COPPER PIPING AND ISOLATION BALL VALVES FOR PRESSURE MONITORING EQUIPMENT.
24. 1/2" TAP AND SMOOTH BORE SAMPLE TAP. PROVIDE ISOLATION BALL VALVE UPSTREAM OF FIXTURE. SAMPLE TAP SHALL BE STAINLESS STEEL OR CHROME.

GENERAL NOTES:

A. BOOSTER STATION PROCESS PIPING 3"+ IS SHOWN AS FLANGED CLASS 53 DUCTILE IRON. REFER TO SPECIFICATOINS FOR ALTERNATE PIPING MATERIAL.
B. FLANGED CONNECTION ARE SHOWN ON DRAWINGS, PACKAGED BOOSTER SKID SUPPLIER MAY SUBSTITUTE WELDED CONNECTIONS, AND FITTINGS AND BENDS IN LOCATIONS APPROVED BY ENGINEER AND OWNER.
C. FUTURE EQUIPMENT AND PIPING SHOWN AS DASHED LINEWORK IN VIEW.
D. PROVIDE ALL PIPE WITH STICKER OR PAINTED LABELS WITH FLOW DIRECTION ARROWS. REFER TO DIVISIN 40.
E. SUCTION SIDE PROCESS PIPING SHALL BE PAINTED SHERWIN WILLIAMS 4063 ROBOTIC BLUE, OR EQUAL. DISCHARGE (BOOSTED) PROCESS PIPING SHALL BE PAINTED SHERWIN WILLIAMS 4086 SAFETY BLUE, OR EQUAL.



1 / 30-M302 **PREFABRICATED BUILDING SECTION - PROPOSED PIPING**

1/2" = 1'-0" (22"x24") 0 1 2 4
1/4" = 1'-0" (11"x17")

PROJECT DATE: NOVEMBER 18, 2025		No	DATE	REVISIONS	BY
	DRAWN BY: JJY	1	12/4/2025	ADDENDUM NO. 1	JJY
	DESIGNED BY: JJY				
	CHECKED BY: ATR				

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WATER TOWER NO. 3 AND BOOSTER STATION
CITY OF NEW RICHMOND
ST. CROIX COUNTY, WISCONSIN

NORTH BOOSTER STATION
PREFABRICATED BUILDING SECTIONS

PROJECT NO. 07985049.2
SHEET 30-M302

PLOT DATE: 12/4/2025 9:02:09 AM, Autodesk Docs://07985049 - New Richmond Water Tower #3 and Booster Station Design/07985049 New Richmond Booster_M-ECH.rvt

GENERAL NOTES:

A. BOOSTER STATION PROCESS PIPING 3"+ IS SHOWN AS FLANGED CLASS 53 DUCTILE IRON. REFER TO SPECIFICATOINS FOR ALTERNATE PIPING MATERIAL.
B. FLANGED CONNECTION ARE SHOWN ON DRAWINGS, PACKAGED BOOSTER SKID SUPPLIER MAY SUBSTITUTE WELDED CONNECTIONS, AND FITTINGS AND BENDS IN LOCATIONS APPROVED BY ENGINEER AND OWNER.
C. FUTURE EQUIPMENT AND PIPING SHOWN AS DASHED LINEWORK IN VIEW.
D. PROVIDE ALL PIPE WITH STICKER OR PAINTED LABELS WITH FLOW DIRECTION ARROWS. REFER TO DIVISIN 40.
E. SUCTION SIDE PROCESS PIPING SHALL BE PAINTED SHERWIN WILLIAMS 4063 ROBOTIC BLUE, OR EQUAL. DISCHARGE (BOOSTED) PROCESS PIPING SHALL BE PAINTED SHERWIN WILLIAMS 4086 SAFETY BLUE, OR EQUAL.

PUMP/INSTRUMENT SCHEDULE - PROPOSED

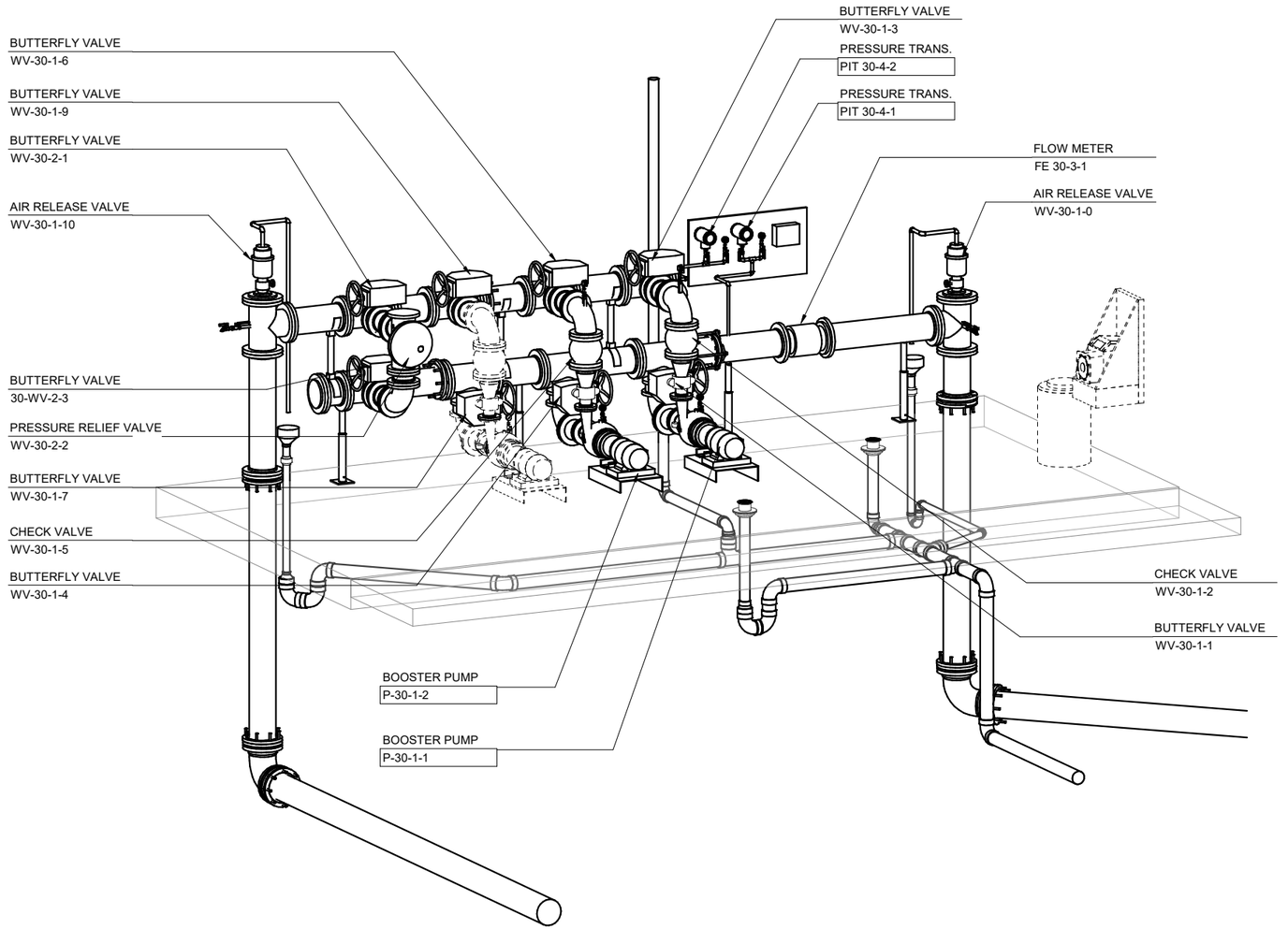
NOTE: PUMPSCHEDULE IS PROVIDED AS A GENERAL REFERENCE. CONTRACTOR SHALL VERIFY ANY INFORMATION LISTED AND NOTIFY ENGINEER OF ANY CONFLICTS, DISCREPANCIES, OR MISSING INFORMATION.

TAG ID	PHASE/VOLTAGE	MODEL	COMMENTS
P-30-1-1	3 PH/ 480V	GOULDS MODEL 16BF	SEE DETAIL FOR TYPICAL PUMP INSTALLATION
P-30-1-2	3 PH/ 480V	GOULDS MODEL 16BF	SEE DETAIL FOR TYPICAL PUMP INSTALLATION
PIT 30-4-1	1 PH/ 120V	SEE DIV 26	REFER TO DIVISION 26 SPECIFICATIONS AND DETAILS
PIT 30-4-2	1 PH/ 120V	SEE DIV 26	REFER TO DIVISION 26 SPECIFICATIONS AND DETAILS

APPURTENANCES SCHEDULE - PROPOSED

NOTE: APPURTENANCE SCHEDULE IS PROVIDED AS A GENERAL REFERENCE. APPURTENANCES (NOT SHOWN) MAY BE REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR IS REQUIRED TO PROVIDE A COMPLETE AND OPERABLE SYSTEM. CONTRACTOR SHALL VERIFY ANY INFORMATION LISTED AND NOTIFY ENGINEER OF ANY CONFLICTS, DISCREPANCIES, OR MISSING INFORMATION.

TAG ID	APPURTENANCE	ABBREVIATION	SIZE	COMMENTS
30-WV-2-3	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
FE 30-3-1	FLOW METER	FE	16"ø-16"ø	MOUNT TRANSMITTER TO INSTRUMENT PANEL
WV-30-1-0	AIR RELEASE VALVE	ARV	2"ø-2"ø	PROVIDE ISOLATION BALL VALVE UPSTREAM OF ARV. ROUTE DISCHARGE PIPING TO HUB DRAIN
WV-30-1-1	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
WV-30-1-2	CHECK VALVE	CV	6"ø-6"ø	FLANGED, SILENT TYPE
WV-30-1-3	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
WV-30-1-4	BUTTERFLY VALVE	BFV	6"ø-6"ø	WATER STYLE W/ HANDWHEEL OPERATOR
WV-30-1-5	CHECK VALVE	CV	6"ø-6"ø	FLANGED, SILENT TYPE
WV-30-1-6	BUTTERFLY VALVE	BFV	6"ø-6"ø	LUGGED STYLE W/ HANDWHEEL OPERATOR
WV-30-1-7	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE, PROVIDE BLIND FLANGE
WV-30-1-9	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE, PROVIDE BLIND FLANGE
WV-30-1-10	AIR RELEASE VALVE	ARV	2"ø-2"ø	PROVIDE ISOLATION BALL VALVE UPSTREAM OF ARV. ROUTE DISCHARGE PIPING TO HUB DRAIN
WV-30-2-1	BUTTERFLY VALVE	BFV	6"ø-6"ø	WAFER STYLE W/ HANDWHEEL OPERATOR
WV-30-2-2	PRESSURE RELIEF VALVE	PRV	6"ø-6"ø	REFER TO SECTION 44 42 00.10



1 PROCESS MECHANICAL ISOMETRIC - EQUIPMENT PLAN
30-M901 NOT TO SCALE

No	DATE	REVISIONS	BY
1	12/4/2025	ADDENDUM NO. 1	JJY

PROJECT DATE: NOVEMBER 18, 2025 | DRAWN BY: JJY | DESIGNED BY: JJY | CHECKED BY: ATR

PLOT DATE: 12/4/2025 9:02:29 AM Autodesk Docs://07985049 - New Richmond Water Tower #3 and Booster Station Design/07985049 New Richmond Booster_MECH.rvt

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NORTH BOOSTER STATION PROCESS ISOMETRICS

PROJECT NO. 07985049.2
SHEET 30-M901