

July 2, 2020

ADDENDUM #1

NOTICE TO ALL BIDDERS FOR FREDERICK-WINCHESTER SERVICE AUTHORITY OPEQUON WATER RECLAMATION FACILITY

ITB #202008 –FOG FACILITY UPGRADES

This Addendum forms a part of the Contract Documents and modifies the original bidding documents for ITB #202008 dated May, 2020. *Bidders shall acknowledge receipt of the Addendum in the space provided on the Bid Form and return a signed copy with your bid.*

This Addendum must be signed and returned to the Finance Department – Purchasing Division, 1st Floor Rouss City Hall, 15 North Cameron Street, Winchester, VA 22601 by **2:00pm local time on July 14, 2020** with your BID.

Receipt of Addendum #1 to Invitation to Bid #202008 is acknowledged by my signature below:

Company Name: _____

Authorized Representative: _____

Address: _____

Telephone: _____ FAX: _____



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This Addendum consists of 22 total pages. The following information shall modify and clarify the Contract Documents:

CHANGES TO TABLE OF CONTENTS

1. **Add** Appendix B – Sherwood Logan Quote and Scope of Programming Services.

CHANGES TO BID FORM

1. **Add** Appendix B – Sherwood Logan Quote and Scope of Programming Services to the Table of Contents.
2. Bid Table, Item 4, **Add** \$27,800.00 to the Unit Cost and Total Cost boxes.

CHANGES TO THE CONTRACT

3. **Add** Appendix B – Sherwood Logan Quote and Scope of Programming Services to the Table of Contents.

CHANGES TO THE SPECIFICATIONS

1. Section 40 05 00 Basic Mechanical Requirements Part 2 – Products **Add**

2.10 STAINLESS STEEL HOSE REEL (HR-1):

- A. Manual crank rewind with cam-lock brake and spring actuated pin lock
- B. inlet with stainless steel ball bearing swivel joint and 1-inch female NPT threads
- C. Heavy duty stainless steel angle mounting bracket
- D. Storage for up to 75 feet of 3/4" I.D. hose
- E. Unit shall be by Steel Eagle, Hannay Reels, Inc., or Reelcraft,
- F. Provide 75- feet 3/4" I.D. hose

2.11 FLOOR DRAINS

- A. Floor drains shall be located as shown on the drawings.
- B. Manufacturer: Model 2230 or 2240 by J.R. Smith, or equal products by Zurn or Wade

2. **Delete** Section 40 61 93 Process Control System Input / Output List in its entirety and **Add** Section 40 61 93 Process Control System Input / Output List attached and made part of this Addendum.

CHANGES TO THE APPENDICIES

1. **Add** Appendix B – Sherwood Logan Quote and Scope of Programming Services attached and made part of this Addendum.

CHANGES TO THE DRAWINGS

1. **Revise** Drawing M103 as shown in the attachments herein.
2. **Revise** Drawing M107 as shown in the attachments herein.
3. Drawing E7, **Delete** Note 1 in its entirety and **Add** Note "1 REMOVE EXISTING 225A BREAKER AND PROVIDE NEW 600A BREAKER TO POWER PP-FOG2.
4. Drawing E6, **Revise** MPZ-FOG2 and PP-FOG2 Panel Schedules to Indicate NEMA 4X rating
5. **Revise** Drawing E7 as shown in the attachments herein.

ATTACHMENTS

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SECTION 40 61 93
PROCESS CONTROL SYSTEM INPUT / OUTPUT LIST

PART 1 – GENERAL

1.01 THE REQUIREMENT

- A. The Contractor shall furnish, test, install and place in satisfactory operation all control system inputs and outputs as herein specified and as shown on the Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 40 61 90 – Schedules and Control Descriptions, General
 B. Section 40 61 91 – Process Control System Instrument List
 C. Section 40 61 96 – Process Control Descriptions

PART 2 – CONTROL SYSTEM INPUT / OUTPUT SCHEDULE

Tag Number	Service Description	State/Span	Type	Remarks
HS-002	VALVE/PUMP SELECTION		DI	NEW
PAH-103	ENVIRO-CARE BEAST INFLUENT PUMP DOWNSTREAM PRESSURE PRESSURE HI		DI	NEW
PAHH-103	ENVIRO-CARE BEAST INFLUENT PUMP DOWNSTREAM PRESSURE PRESSURE HIHI		DI	NEW
HS-103	ENVIRO-CARE BEAST INFLUENT PUMP START/STOP		DO	NEW
PAL-104	ENVIRO-CARE BEAST INFLUENT PUMP UPSTREAM PRESSURE LOW		DI	NEW
PAH-104	ENVIRO-CARE BEAST INFLUENT PUMP UPSTREAM PRESSURE HI		DI	NEW
HS-104	ENVIRO-CARE BEAST EFFLUENT PUMP START/STOP		DO	NEW
YN-201A	ENVIRO-CARE BEAST DRUM IN REMOTE		DI	NEW
YL-201	ENVIRO-CARE BEAST DRUM RUN		DI	NEW
YA-201	ENVIRO-CARE BEAST DRUM FAIL		DI	NEW
YN-202A	ENVIRO-CARE BEAST SCREW SCREEN IN REMOTE		DI	NEW
YL-202	ENVIRO-CARE BEAST SCREW SCREEN RUN		DI	NEW
YA-202	ENVIRO-CARE BEAST SCREW SCREEN FAIL		DI	NEW
YN-203	BASLET VALVE IN REMOTE		DI	NEW
YN-204	COMPACT VALVE IN REMOTE		DI	NEW

Tag Number	Service Description	State/Span	Type	Remarks
YN-205	SCREEN VALVE IN REMOTE		DI	NEW
YN-206	HOT WATER VALVE IN REMOTE		DI	NEW
ZLO-201A	ENVIRO-CARE BEAST INLET KNIFE GATE OPEN		DI	NEW
ZLC-201	ENVIRO-CARE BEAST INLET KNIFE GATE CLOSED		DI	NEW
YN-201	ENVIRO-CARE BEAST INLET KNIFE GATE IN REMOTE		DI	NEW
YN-211A	ENVIRO-CARE BEAST BOOSTER PUMP IN REMOTE		DI	NEW
YL-211	ENVIRO-CARE BEAST BOOSTER PUMP RUN		DI	NEW
YA-211	ENVIRO-CARE BEAST BOOSTER PUMP FAIL		DI	NEW
YL-201	ENVIRO-CARE BEAST SYSTEM RUN		DI	NEW
HMS-201B	ENVIRO-CARE BEAST SYSTEM READY		DI	NEW
LAHH-201	ENVIRO-CARE BEAST SYSTEM LEVEL HIHI		DI	NEW
YN-001A	HSW DELIVERY		DI	EXISTING
YN-001B	UNLOAD		DO	EXISTING
ZLC-001B	HSW RECEIVING TO HSW/TWAS HOLDING TANKS VALVE VPL-001 CLOSED		DI	EXISTING
ZLO-001	HSW RECEIVING TO HSW/TWAS HOLDING TANKS VALVE VPL-001 OPEN		DI	EXISTING
YN-001A	HSW RECEIVING TO HSW/TWAS HOLDING TANKS VALVE VPL-001 IN REMOTE		DI	EXISTING
ZSC-001	HSW RECEIVING TO HSW/TWAS HOLDING TANKS VALVE VPL-001 CLOSE CMD		DO	EXISTING
ZSO-001	HSW RECEIVING TO HSW/TWAS HOLDING TANKS VALVE VPL-001 OPEN CMD		DO	EXISTING
ZLC-011B	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-011 CLOSED		RS485	NEW
ZLO-011	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-011 OPEN		RS485	NEW
YN-011A	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-011 IN REMOTE		RS485	NEW
ZSC-011	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-011 CLOSE CMD		RS485	NEW
ZSO-011	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-011 OPEN CMD		RS485	NEW
ZLC-012B	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-012 CLOSED		RS485	NEW
ZLO-012	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-012 OPEN		RS485	NEW
YN-012A	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-012 IN REMOTE		RS485	NEW
ZSC-012	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-012 CLOSE CMD		RS485	NEW

Tag Number	Service Description	State/Span	Type	Remarks
ZSO-012	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-012 OPEN CMD		RS485	NEW
ZLC-013B	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-013 CLOSED		RS485	NEW
ZLO-013	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-013 OPEN		RS485	NEW
YN-013A	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-013 IN REMOTE		RS485	NEW
ZSC-013	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-013 CLOSE CMD		RS485	NEW
ZSO-013	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-013 OPEN CMD		RS485	NEW
ZLC-014B	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-014 CLOSED		RS485	NEW
ZLO-014	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-014 OPEN		RS485	NEW
YN-014A	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-014 IN REMOTE		RS485	NEW
ZSC-014	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-014 CLOSE CMD		RS485	NEW
ZSO-014	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-014 OPEN CMD		RS485	NEW
ZLC-015B	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-015 CLOSED		RS485	NEW
ZLO-015	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-015 OPEN		RS485	NEW
YN-015A	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-015 IN REMOTE		RS485	NEW
ZSC-015	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-015 CLOSE CMD		RS485	NEW
ZSO-015	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-015 OPEN CMD		RS485	NEW
ZLC-017B	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-017 CLOSED		DI	EXISTING
ZLO-017	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-017 OPEN		DI	EXISTING
YN-017A	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-017 IN REMOTE		DI	EXISTING
ZSC-017	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-017 CLOSE CMD		DO	EXISTING
ZSO-017	HSW RCG TO HYDROPHILIC HSW TANK NO. 2 VALVE VSL-017 OPEN CMD		DO	EXISTING
ZLC-016B	HSW RCG TO HYDROPHILIC HSW TANK NO. 1 VALVE VSL-016 CLOSED		DI	EXISTING
ZLO-016	HSW RCG TO HYDROPHILIC HSW TANK NO. 1 VALVE VSL-016 OPEN		DI	EXISTING
YN-016A	HSW RCG TO HYDROPHILIC HSW TANK NO. 1 VALVE VSL-016 IN REMOTE		DI	EXISTING
ZSC-016	HSW RCG TO HYDROPHILIC HSW TANK NO. 1 VALVE VSL-016 CLOSE CMD		DO	EXISTING
ZSO-016	HSW RCG TO HYDROPHILIC HSW TANK NO. 1 VALVE VSL-016 OPEN CMD		DO	EXISTING
ZLC-0301B	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0301 CLOSED		DI	EXISTING
ZLO-0301	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0301 OPEN		DI	EXISTING

Tag Number	Service Description	State/Span	Type	Remarks
YN-0301A	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0301 IN REMOTE		DI	EXISTING
ZSC-0301	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0301 CLOSE CMD		DO	EXISTING
ZSO-0301	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0301 OPEN CMD		DO	EXISTING
ZLC-0302B	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0302 CLOSED		DI	EXISTING
ZLO-0302	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0302 OPEN		DI	EXISTING
YN-0302A	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0302 IN REMOTE		DI	EXISTING
ZSC-0302	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0302 CLOSE CMD		DO	EXISTING
ZSO-0302	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0302 OPEN CMD		DO	EXISTING
ZLC-0303B	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0303 CLOSED		DI	EXISTING
ZLO-0303	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0303 OPEN		DI	EXISTING
YN-0303A	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0303 IN REMOTE		DI	EXISTING
ZSC-0303	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0303 CLOSE CMD		DO	EXISTING
ZSO-0303	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0303 OPEN CMD		DO	EXISTING
ZLC-0304B	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0304 CLOSED		DI	EXISTING
ZLO-0304	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0304 OPEN		DI	EXISTING
YN-0304A	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0304 IN REMOTE		DI	EXISTING
ZSC-0304	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0304 CLOSE CMD		DO	EXISTING
ZSO-0304	FOG RCG TO TWAS / HSW TANK NO. 1 VALVE VSL-0304 OPEN CMD		DO	EXISTING

1. NOTES: Input/Output types are as follows:
 - a. DI – Discrete Input
 - b. DO – Discrete Output
 - c. AI – Analog Input
 - d. AO – Analog Output
 - e. RS485 – Serial Communications Link

2. All available information from each VFD via its RS485 port shall be provided to the PLC.

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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APPENDIX B

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SHERWOOD-LOGAN & ASSOCIATES, INC.

WASH. (301) 970-2181

2140 RENARD COURT
ANNAPOLIS, MARYLAND 21401
FAX: (410) 841-6330

BALT: (410) 841-6810

OPEQUON WATER RECLAMATION FACILITY FOG FACILITY UPGRADES

**FREDERICK-WINCHESTER SERVICE AUTHORITY
WINCHESTER, VA.**

SUBJECT: Requested Quote for Fog2 Facility Upgrades.
DATE: 07/01/2020
QUOTE NO.: FOG2
REFERENCE: Fog Facility Upgrade Contract Drawings / Specifications.

Joel K. Petery, PE,
Senior Associate
Hazen and Sawyer
11815 Fountain Way, Suite 300, Newport News, VA 23606
757 926-5221 (office) | 757 262-9987 (cell)
jpetery@hazenandsawyer.com | hazenandsawyer.com

1. The Cost for the requested Quote for programming services \$ **27,800.00.**
2. Materials to be provided:
 - a. None.
3. Programming Services to be provided:
 - a. Interface the new Beast Liquid Waste Receiving System Control Panel FOG2-LCP-101 to PCS-7 for SCADA control and information display as per P&ID drawing I3.
 - i. Please note that the concept for this is to utilize the same programming and coordination approach as for the existing system with a Modicon based PLC system with ethernet communication interface.
 - b. Interface the new Inlet & Outlet Pump System Control Panel FOG2-LCP-102 to PCS-7 for SCADA control and information display as per P&ID drawing I3.
 - i. Please note that the above system is to be with a Modicon based PLC system with ethernet communication interface.
 - c. Interface the five (5) new valve actuators Tags: FOG-VPL-011 to 015 via the existing Modbus 485 network to PCS-7 for SCADA control and information display as per P&ID drawing I4.
 - i. Please note that this is based on the concept of the valve actuators being the same manufacture and model as per the existing valve actuators utilized for tank storage control.
 - d. Re-task the current six (6) valve actuators Tags: FOG-VPL-016 , 017, FOG-VPL-301 to 304 on the existing Modbus 485 network connected to PCS-7 for SCADA control and information display as per P&ID drawing I4.
 - e. Re-task the current Apple Valley kiosk to be re-located for the FOG2 truck off load for interface by PCS-7 for SCADA control and information display.
 - i. Please note the existing hard wired interface is to be utilized with no new or additional hardwire interface I/O points to PCS-7.
 - ii. Please note that the current hardwire delivery handshaking starting at the Apple Valley Scale will be utilized.
4. Startup services:
 - a. Five (5) days of on-site programming / startup services are to be provided.

**MANUFACTURER'S REPRESENTATIVE FOR ENGINEERED INSTRUMENTATION,
PROCESS EQUIPMENT AND PUMPING SYSTEMS**

Branch Offices: RICHMOND, VA and LANGHORNE, PA

SHERWOOD-LOGAN & ASSOCIATES, INC.

WASH. (301) 970-2181

2140 RENARD COURT
ANNAPOLIS, MARYLAND 21401
FAX: (410) 841-6330

BALT: (410) 841-6810

- i. Please note that the above on-site days can be non-consecutive.
- 5. System interfaces:
 - a. Please note that the programming services are based on the concept of the systems provided by others are Modicon based systems with ethernet communication interfaces.
 - i. Please note that if any of the systems provided by others are not Modicon based systems with ethernet communication interfaces, proven compatible interfaces will need to be provided by others.

Please feel free to contact me for any additional information you may require.

William J. Phillips
Project Engineer
Sherwood Logan and Associates
2140 Renard Court
Annapolis, MD 21401
Phone: 410.841.6810
Fax: 410.841.6330
phillips.w@sherwoodlogan.com

(Attachment: Sherwood-Logan General Terms and Conditions)

*MANUFACTURER'S REPRESENTATIVE FOR ENGINEERED INSTRUMENTATION,
PROCESS EQUIPMENT AND PUMPING SYSTEMS*

Branch Offices: RICHMOND, VA and LANGHORNE, PA

SHERWOOD-LOGAN & ASSOCIATES, INC.

WASH. (301) 970-2181

2140 RENARD COURT
ANNAPOLIS, MARYLAND 21401
FAX: (410) 841-6330

BALT: (410) 841-6810

GENERAL TERMS AND CONDITIONS OF SALE

Proposal # _____

PAYMENT TERMS: Unless otherwise agreed, terms are net 30 days from the date of invoice, subject to approved credit, continuously reviewed. BUYER agrees to pay SELLER without reference to BUYER'S contract with Owner or others.

PRICES: All quoted prices are honored for 60 days. Clerical errors are subject to correction. SELLER reserves right to amend Quotation at any time prior to acceptance.

TAXES: Prices do not includes sales, use, excise, or other taxes. When required by law, taxes will be billed and collected at time of shipment unless a valid exemption is provided to the SELLER.

EXECUTION: SELLER does not begin work until purchase order is received and all terms and conditions of BUYERS purchase order are accepted by SELLER.

DELIVERY: SELLER will use reasonable diligence in executing BUYER's requested delivery schedules and to obtain corresponding commitments from SELLERS' suppliers.

FREIGHT: All equipment and supplies are sold FOB origin, freight allowed to first destination, prepaid. SELLER reserves the right to select the method of shipment, routing, and carrier. Any additional transportation costs are accepted by the BUYER. Any necessary claims against the carrier for damaged or lost goods will be filed by the BUYER.

WARRANTY: Sherwood-Logan & Associates, Inc. for a period of twelve (12) months, warrants its products to be free from defects in material and workmanship under normal use and service when used as specified. This does not apply to products manufactured by Sherwood-Logan's principals; the manufacturers warranty would apply. No liability is assumed by the Seller for any labor, material costs associated with replacement, repair and/or removal of defective equipment unless previously approved by Sherwood-Logan and Associates.

LIMITATION OF LIABILITIES: Sherwood-Logan & Associates, Inc. will accept no liquidated or consequential damage provisions. The SELLER functions as a material supplier and will not be party to BUYERS agreement with owner or others. SELLER does not accept subcontract agreements.

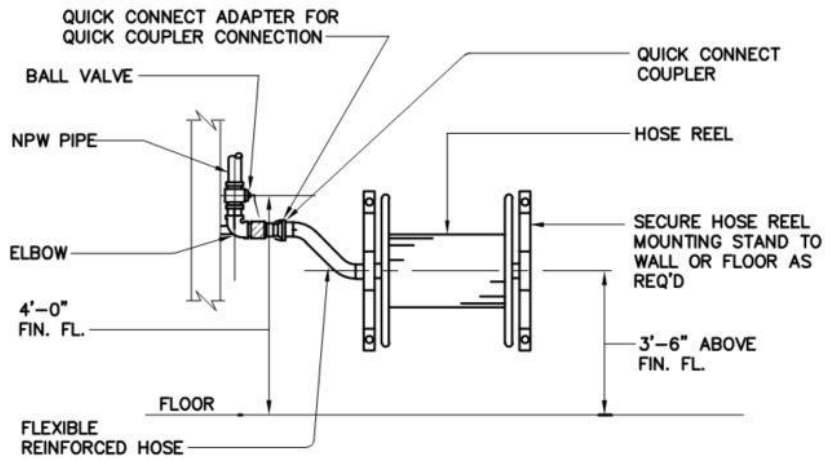
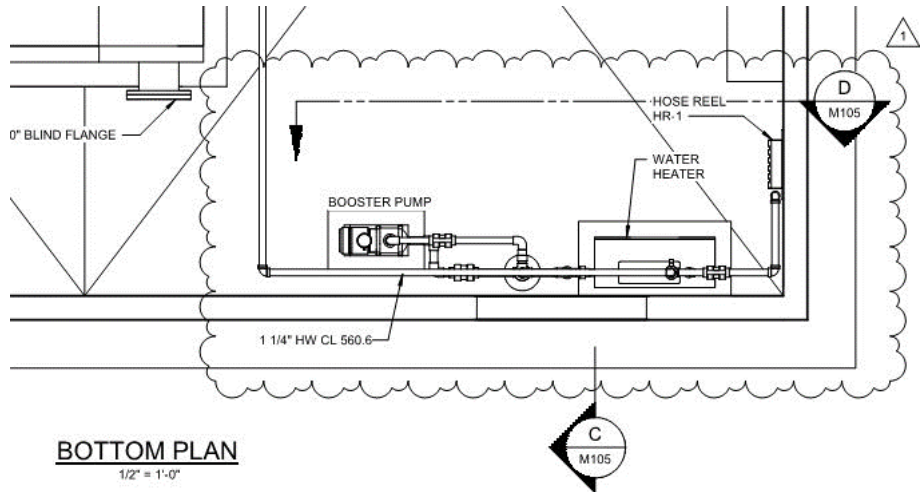
BACKCHARGES: Sherwood-Logan & Associates, Inc. shall not be liable for any charges incurred by purchaser for work, repairs, replacements, or alterations to the products without Sherwood-Logan & Associates, Inc.'s prior written authorization and any adverse consequences resulting from such unauthorized work shall be purchasers full responsibility. Sherwood-Logan & Associates, Inc. reserves the right to stop work until back charge issue is resolved.

SERVICE: System check-out and start-up is generally included, unless specifically excluded. However, these services will not be performed until ninety five percent (95%) of purchase order price is paid. Three (3) weeks advance notice is required to arrange for start-up service. BUYERS failure to provide three weeks notice of request for service may result in additional charges for emergency response. It will be the BUYERS' responsibility to insure that water and electric service are installed and available. Should a Sherwood-Logan Service Technician arrive at the job site as scheduled and be unable to perform the work due to incomplete piping, water and or electrical installation, the BUYER agrees to pay Sherwood-Logan and Associates for lost time at our prevailing rates.

NOT INCLUDED: SELLER does not perform installation of field termination to any primary or secondary devices. Interconnecting pipes, wiring or special brackets are not INCLUDED.

CANCELLATION CHARGE: Upon cancellation by BUYER of its purchase order for equipment and services described in this proposal, BUYER agrees to compensate SELLER for costs incurred in executing the contract.

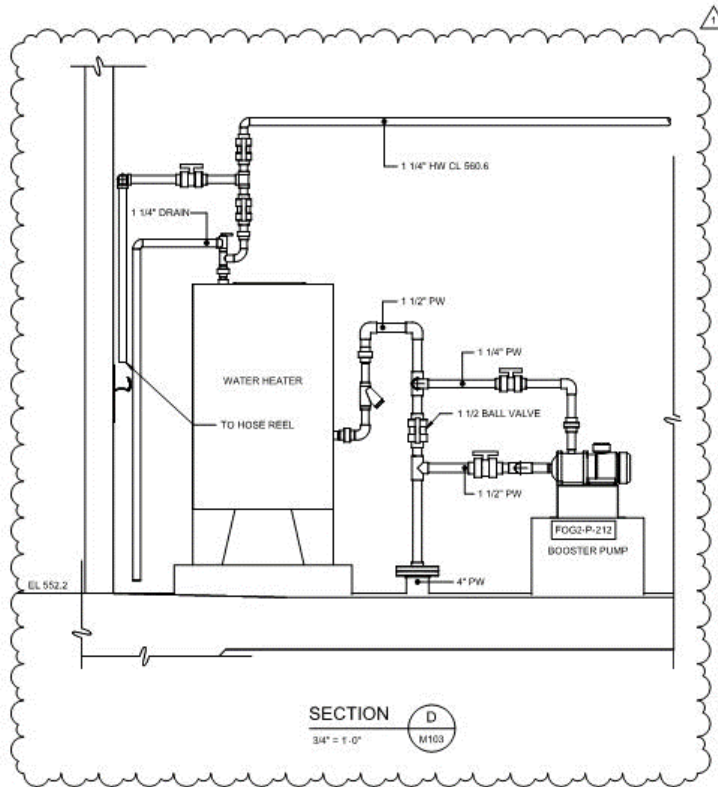
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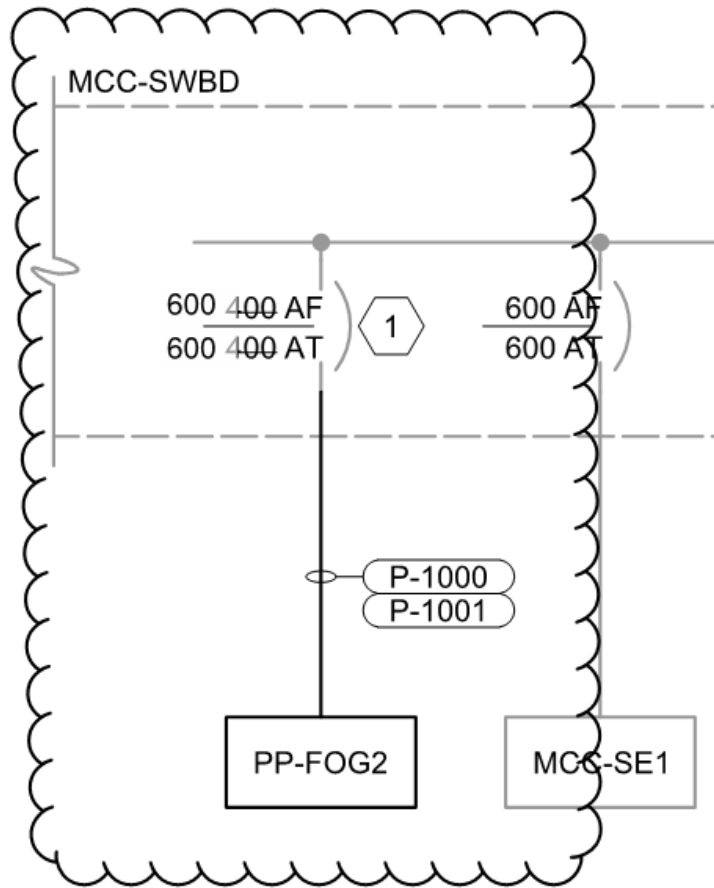
HOSE REEL H-1 DETAIL

NTS

Drawing M103 Revisions



Drawing M107 Revisions



Drawing E7 Revisions

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