

**PORTAGE COUNTY
EMERGENCY OPERATIONS CENTER**

as prepared by

HASENSTAB ARCHITECTS, INC.

190 N. Union Street, Suite 400
Akron, OH 44304

HAI Project No. 22048.001

To: All Bidders

This Addendum becomes a part of the Contract Documents and modifies the original Bidding Documents dated 4-25-2023, as noted below. The Bidder shall acknowledge receipt of this Addendum on the Form of Proposal. Failure to do so may subject the Bidder to disqualification.

Changes To Prior Addenda

1. None.

General Clarifications

1. **REVISED BID DUE DATE: May 31, 2:00 PM**
2. See attached Pre-Bid meeting minutes and attendance sheet from the.

Questions from Bidders

1. Does the project have any disadvantaged business (EDGE, MBE, SBE, DBE, WBE, etc) percentage requirements?
 - a. **NOT REQUIRED.**
2. 011000-1.5-B-1 states that the appliances are Owner Furnished, Contractor Installed but the Responsibility Matrix states that the refrigerator is provided and installed by Contractor. Can you please clarify.
 - a. **APPLIANCES ARE PROVIDED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. PLUMBING HOOKUPS FOR FRIDGE, DISHWASHER BY PLUMBING CONTRACTOR.**
3. There is no spec or model number for the industrial shelving. Can you please provide?
 - a. **SHELVING IS PROVIDED AS PART OF THE FURNITURE BID PACKAGE.**
4. Who is providing the wiring and devices for Cameras and Card Readers? There is no spec on this.
 - a. **CAMERAS, CCTV WIRING, CARD READERS AND LOW VOLTAGE CARD READER WIRING IS BY OWNER'S VENDOR. EC TO PROVIDE CONDUIT AND PATHWAYS.**
5. Rack layout on drawing E0-3 calls for a fiber patch panel. What size patch panel is needed? Is this to be left blank or are SM or MM connector panels needed? There is no fiber called out on the drawings, is this just for future use?
 - a. **THE FIBER PATCH PANELS ARE TO BE FURNISHED BY THE GC'S TECHNOLOGY CONTRACTOR. EC ALSO PROVIDES CONDUIT AND BOXES.**
 - b. **THE OWNER'S INTERNET SERVICE PROVIDER IS PULLING FIBER.**
6. Spec 270740 lists Siemens faceplates and Jacks, Dwg E0-3 calls out Legrand. What manufacturer is preferred?
 - a. **EITHER OF THE LISTED MANUFACTURERS ARE ACCEPTABLE.**

7. Spec 270740 lists Middle Atlantic Horizontal wire managers, which Dwg E0-3 calls out Hellerman Tyton. What manufacturer is preferred?
 - a. **ANY OF THE LISTED MANUFACTURERS IS ACCEPTABLE.**
8. The slide gate as it appears on drawing C-2 does not have enough room to open. There is 24ft between the gate opening post and the fence corner post. but the gate has an over-all length of 30ft +.
 - a. **THE GATE DESIGN AND LENGTH OF COUNTER-BALANCE WILL BE AS RECOMMENDED BY THE GATE MANUFACTURER. THE WIDTH OF THE GATE IN THE OPEN POSITION IS TO BE A MINIMUM OF 18 FEET.**
9. 084113 Aluminum-Framed Entrances and Storefront. Section 2.3 Storefront System line 3.d note the finish to be High Performance Organic Finish and Section 2.10 Aluminum Finishes Line 1.a note the finish to be Kawneer Permanodic Dark Bronze. Confirm if the finish is to be Painted or Anodized Dark Bronze.
 - a. **FINISH: DARK BRONZE.**
10. Detail 2/A5-5 Show the Storefront to be Front Set. Detail 3/A5-7 and 084113 specifications both note center set. Confirm if it's safe to assume the Storefront is Center Set.
 - a. **PROVIDE CENTER SET STOREFRONT.**
11. Spec 011000-2 states that TVs are Owner-Furnished, Contractor installed. Would the installation of these TVs need to be included in the tele-data bid?
 - a. **THE OWNER'S A/V VENDOR WILL INSTALL THE TVS AND TV MOUNTS. GC WILL PROVIDE BLOCKING IN WALLS.**
12. Is this project Tax Exempt?
 - a. **YES.**
13. What is the tentative start date and the duration of the project?
 - a. **START JULY 01, 13 MONTH DURATION. REFER TO PREBID MEETING NOTES.**
14. You stated that the drawings have been submitted to plan review, is the permit cost known?
 - a. **NO.**
15. Aggregate Piers- Spec section 31-33-31- part 6- states "should be" geotechnical engineer of record. Please clarify who is to pay for these tests/inspections.
 - a. **WERTZ GEOTECHNICAL HAS BEEN RETAINED BY PORTAGE COUNTY FOR CONSTRUCTION SPECIAL INSPECTIONS, TESTS & REPORTS.**

Changes To Project Manual

1. BID FORM: (ATTACHED)
 - a. REPLACE "CONSTRUCTION DOCUMENTS" BID FORM WITH "ADDENDUM 1" BID FORM.
2. SECTION 04200, E.1 "UNIT MASONRY":
 - a. ADD DCMU GROUND FACE MANUFACTURER SUPPLIER: COUNTY MATERIALS, GROUND FACE "PREMIER ULTRA BURNISHED MASONRY UNITS"
 - b. REPRESENTED BY: SCHORY CEMENT PRODUCTS, KEN DiPANFILO.
3. SECTION 224000 PLUMBING FIXTURES
 - a. REVISED TO INCLUDE ACORN AS AN ACCEPTABLE SERVICE SINK MANUFACTURER.
 - b. REVISED TO INCLUDE MURDOCK AS AN ACCEPTABLE ELECTRIC WATER COOLER MANUFACTURER.

4. SECTION 238200 CONVECTION HEATING AND COOLING
 - a. REVISED TO INCLUDE RAYWALL AS AN ACCEPTABLE ELECTRIC WALL HEATER MANUFACTURER.

Changes To Drawings

1. REPLACE THE FOLLOWING CIVIL DRAWINGS WITH ATTACHED:

- a. C-1 EXISTING CONDITIONS AND DEMOLITION PLAN
 1. ADDED REMOVAL OF EXISTING SEWER FOR INSTALLATION OF NEW GREASE / OIL INTERCEPTOR.
- b. C-3 UTILITIES PLAN
 1. ADDED OIL / GREASE INTERCEPTOR.
 2. REVISED FORCE MAIN LENGTH AND CONNECTION TO EXISTING SEWER.
 3. REVISED SANITARY STRUCTURE AND PIPE SCHEDULES.
 4. ADDED KEYED NOTES, SANITARY SEWER NOTES.
- c. C-9 CONSTRUCTION NOTES AND DETAILS.
 1. ADDED PUMP STATION PROJECT SPECIFIC NOTES.
- d. C-11 CONSTRUCTION NOTES AND DETAILS.
 1. ADDED PORTAGE COUNTY WATER RESOURCES TYPICAL DETAILS.
 2. ADDED "ROMAC" TYPE CB SEWER SADDLE SPECIFICATIONS.

2. REPLACE THE FOLLOWING PLUMBING DRAWINGS WITH ATTACHED:

- a. P1-1 PLUMBING DEMOLITION PLAN
 1. REVISED TO CLARIFY EXISTING CONDITIONS.
- b. P2-1 PLUMBING PLAN
 1. REVISED TO INCLUDE FLOOR DRAINS IN BATHROOM (102), WOMEN (111), SHOWER (112), AND MEN (113).
 2. REVISED TO INCLUDE ADDITIONAL EQUIPMENT WATER LINES IN BREAK ROOM (116).
 3. REVISED SANITARY MAIN INTO ADDITION TO 6" DIAMETER AND INCLUDED INVERT ELEVATION.
 4. REVISED TO INCLUDE VENT LINE FROM EXTERIOR GREASE INTERCEPTOR.
- c. P3-1 ENLARGED PLUMBING PLANS AND SANITARY ISO
 1. REVISED TO INCLUDE FLOOR DRAINS IN BATHROOM (102), WOMEN (111), SHOWER (112), AND MEN (113).
 2. REVISED TO INCLUDE WATER METER AND REDUCED PRESSURE BACKFLOW PREVENTER AT WATER ENTRY.
- d. P4-1 PLUMBING SCHEDULE AND DETAILS:
 1. REVISED TO INCLUDE WATER ENTRY SCHEDULE, DETAIL AND GENERAL NOTES.
- e. P4-1 PLUMBING FIXTURE SCHEDULE ADDITIONAL MANUFACTURERS
 1. WC-1 WATER COOLER / BOTTLE FILLER MANUFACTURER: MURDOCK #A171108F-UG (GREY FINISH) WITH BOTTLE FILLER BF12-BCD AND ACCESSORY: 1500 GALLON CAPACITY FILTER #WF-1EZ .

2. MB-1 MOP BASIN ACCEPTABLE MANUFACTURER: TERRAZZO-WARE MODEL #TDF-24 24-INCH SQUARE DROP FRONT MOP SINK WITH #KD-G3 3" RUBBER DRAIN GASKET ACCESSORY.

END OF ADDENDUM

Pre-Bid Meeting Notes

Portage County Emergency Operations Center Building Addition and Renovation

Date / Time: May 09, 2023, at 2:00-3:00 PM

Location: 2978 State Route 59
Ravenna, OH 44266

Note: Clarifications, additions or corrections to these notes are in bold text.

- I. Introductions & Sign-in: All attendees shall sign in listing their name, company name, phone number, fax number & e-mail address.
 - a. **Ryan Shackelford explained the use of the buildings.**
- II. General Project Description:
 - a. THIS PROJECT IS BEING BID AS A SINGLE PRIME CONTRACT (GC)
 - b. The Work includes building addition to and renovations to the existing Station 30 building. Scope includes but is not limited to the following:
 - i. Site work includes, utilities, paving and storm drainage. Subsurface work includes rammed aggregate pier (RAP) design and installation.
 - ii. **A septic field may be located under the addition. IF found that is an addition service to remove. Bid only what is no the drawings, and what can be anticipated from the existing conditions drawings including survey and soil borings.**
 - iii. **RAP is a delegated design provided by the GC.**
 - iv. Selective demolition of existing building areas. **An existing metal sided pole barn at the south-east comer is to be removed.**
 - v. Concrete foundations, precast concrete roof deck.
 - vi. Masonry bearing walls and brick veneer cavity walls.
 - vii. Structural steel framing supporting roof deck and steel roof ladders.
 - viii. Wood framing including engineered wood trusses and sheathing for additions to Station 30, and interior millwork cabinets.
 - ix. Thermal and moisture protection includes prefinished metal siding, soffits, gutters and downspouts. EPDM roofing system, asphalt shingle roofing, expansion joint between buildings.
 - x. Doors and windows include: Steel doors, frames and hardware. Tornado shelter doors, aluminum storefront, and interior aluminum framing system.
 - xi. **Existing overhead doors are to be painted both sides, except where there is a plastic panel on the interior side of the center door.**
 - xii. **Two Existing windows are to be replaced as noted on the drawings.**
 - xiii. Finishes include ceramic tile, carpet, rubber flooring, acoustical ceilings, and paint. **The new precast concrete ceiling is not painted,**

therefore all conduit on this new ceiling is not painted. Conduit on the repaired drywall ceiling of the Apparatus is painted.

- xiv. Specialties include items listed in Division 10 specification.
- xv. Furnishings include roller window shades. A separate bid package for furniture and **industrial shelving** is by others.
- xvi. Plumbing fixtures and piping systems.
- xvii. HVAC units and systems.
- xviii. Electrical devices and systems
- xix. Communication cabling.

c. Scope by Owner:

- i. Security cameras and card readers
- ii. AV systems
- iii. Head End equipment
- iv. Internet Service (ISP)
- v. Exterior digital sign.
- vi. Water system upgrades **to existing well water system.**
- vii. **Appliances. Furnished by owner, installed by Contractor.**

- d. Station 30 building will remain in operation throughout construction. Coordination with County will need to be coordinated to limit disturbances.

III. Miscellaneous Project Requirements (refer to documents for all project requirements):

- a. **Hazardous Materials may be present in the building. Refer to cover sheet. If material is suspected to be hazardous during construction, the owner will test and if required, remove it.**

- b. Work hours within the project area: 7:00 AM to 6:00 PM (Monday – Saturday), unless noted otherwise.

- i. Off-hours or off shift work is not anticipated.

- c. Any system shut-downs (utilities) must be coordinated with the Owner.

- d. Allowances are listed on the Bid Form and shall be included in the Base Bid Total. Allowance amounts have been pre-populated in the Bid form for your convenience:

- i. The Amount of \$25,000.00 for ODOT Bond.

- e. Material Delivery / Refuse Removal:

- i. Material deliveries must be received by Contractor personnel.
- ii. Keep driveways, loading areas, and entrances service premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
- iii. Site Logistics – dumpsters / storage containers / temporary side walk closures / temporary road or lane closures / delivery routes / etc. all must be coordinated with the Owner.



1. Sidewalk, road, and / or lane closures must be coordinated with the **Ravenna Township and ODOT**. The Contractor shall procure and provide a necessary permits and fees associated with sidewalk, road, and / or lane closures.

f. General Work Restrictions for Contractors:

- i. Toilet Facilities – Contractor must provide their own portable facilities. Use of the buildings existing toilet facilities will not be permitted.
- ii. No Smoking – Entire Property
- iii. Parking – Will be coordinated with the Owner.
- iv. **Contractor will provide a trailer per the Temporary Facilities specification. Each contractor should anticipate providing storage trailers for their materials and equipment during construction.**
- v. **The existing fence w/ razor wire provides limited security for lay down of materials, until it is removed.**
- vi. **Existing Apparatus equipment is to remain during the project. It will be moved as required to accommodate Contractor work.**

g. Project On-Site Supervision

- i. The GENERAL CONTRACTOR shall have a designated superintendent on site when their company is self-performing any work or when any subcontracted work is being performed. No Exceptions.
- ii. Provide Trailer for GC offices and meetings. Refer to Temporary Facilities.

h. Miscellaneous

- i. **Contact Eric Beach via phone or email if a contractor needs access to Station 30 before the bid due date.**

IV. Bid Procedures:

- a. Interpretations or Correction of Bidding Documents (Questions): All questions shall be submitted in writing. The Addendum Number 1 will be issued no later than 72 hours before working:
Friday, May 26, 2023, at 2:00 PM Local Time.
 - i. Interpretation Requests (Questions) shall be submitted in writing by **e-mail only** to Eric Beach (Hasenstab Architects) at ericb@hasenstabinc.com
 - ii. Responses (including the Pre-Bid Meeting Minutes) to Interpretation Requests will be made by Addendum.



- b. It is the Contractor's responsibility to check for issued addendum and to verify that their correct mailing address is listed on the SE Blue Website.
- c. List of plan holders can be found on SE Blueprint web site (<https://www.seblueprint.com>) on the Plan Room Tab
- d. **Sealed Bids due Wednesday, May 31, 2023, prior to 2:00 PM Local Time**
 - i. Bids are to be addressed to: **Portage County Supervisors
449 South Meridian Street
Ravenna, OH 44266**

V. Bid Form and Submittals with Bid Form

- a. Complete all blank lines on the Bid Form. Blank lines not applicable to a bidder's specific contract shall be completed as "N/A".
- b. Acknowledge receipt of Addendum #1 and Date).
- c. Bid Form - Breakdown
 - i. Total Cost for Work
 - ii. Cost for Performance Bond
 - iii. **Fill in unit prices for various RAP work, and for replacing existing deteriorated plywood sheathing.**
- d. Time of Completion
 - i. Indicate the Number of Calendar Days needed to complete the work.
 - ii. **The anticipated start date is July 01, 2023.**
 - iii. **Substantial completion date is 13 months, or August 01, 2023.**
 - iv. **Liquidated Damages shall be \$100 per day. Long lead time items (Generator, Switch Gear, HVAC RTU) are exempt from the Liquidated Damage requirement.**
 - v. **Ohio Prevailing Wage Rates, (NOT federal "Davis Bacon" wage rates) applies to this project.**
- e. Review attachments required per Item #5 in the Bid Form:
 - i. Complete and Submit Bid Bond (AIA-A310) and associated supporting attachments.
 - ii. Complete and Submit Contractor's Qualification Statement (AIA-A305)
 - iii. Complete and Submit Compliance with Equal Employment Opportunity Form
 - iv. Complete and Submit Bidder's Affidavit (compliance with ORC 5719.042)
 - v. Complete and Submit Bidder's Affidavit (compliance with ORC 3517.13)
 - vi. Complete and Submit Non-Collusion Affidavit



- vii. Complete and Submit Vendor, Contractor, Service Provider Information Sheet
- viii. Submit List of Major Suppliers and Subcontractors.
- ix. **Submit Bids as follows: One (1) Original and Two (2) Copies**

VI. Addendum Items

- a. Pre-Bid meeting minutes and Pre-Bid Sign-In Sheet will be attached to the Addendum.
- b. Two RFI's have been received and are responded to in Addendum #1.**
- c. Plumbing Addendum sketches / drawings.**

VII. Walk through and conclude Pre-Bid Meeting

- a. Owner and Architect **provided** a guided walk-thru of the construction area.

VIII. Questions:

- a. Who is responsible for technology pathways and data wiring?
 - i. **Response: The GC.**
- b. Are existing floor drains to remain in the Apparatus Storage area?
 - i. **Response: Yes, except for the two existing "T" shaped x 3'-0" trench drains that are filled and capped with concrete. Refer to demolition plans.**
- c. Has an electrical upgrade application been applied for with the Electric Utility?
 - i. **Response: NO**
- d. Is there a building Permit?
 - i. **Response: The project is currently in review. Addendum 1 includes revised Civil and Plumbing drawings based on comments from Portage Co Water Resources.**
- e. Is the existing Apparatus floor epoxy painted?
 - i. **Response: No., it will be cleaned and sealed with a "shark grip" slip resistant texture. Refer to the A-9 Finish Plan.**
- f. Is pointing required on the existing building?
 - i. **Response: Yes, the exterior stair step clacks need pointed and or sealed. Minor tuck pointing is required. At the north center overhead door, the masonry wall needs to be repaired:**





g. Is existing 12x12 VCT tile to be removed as part of demolition?

- i. Response: Yes, remove tile pictured below. The tile / glue will be tested by the owner prior to demo. It will be removed by others only IF found to be hazardous materials.**



Bid Drop Off Location:






Date: May 9, 2023 @ 2:00 PM

Re: PreBid meeting for Portage County Emergency Operations Center
2978 State Route 59
Ravenna, OH 44266

Sign-in Sheet

	Company	Name	Telephone	Fax	Cell	Email
1	Portage County Internal Services Interim Director	Shannon Kautzman	330-297-3611	330-297-3522	-	SKautzman@portageco.com
2	Director, Portage County Office of Homeland Security & Emergency Mgmt	Ryan T. Shackelford	330-297-3607	330-297-4569		rshackelford@portageco.com
3	Hasenstab Architects, Inc.	Eric Beach	330-434-4464	330-434-8546	330-396-1602	ericb@hasenstabinc.com
4						
5						
6						
7						
8						
9						
10						



Summit Construction

AKRON 1095 Home Ave. Akron, Ohio 44310 P: (330)376-1317	COLUMBUS 7715 Corporate Blvd. Plain City, OH 43064 P: (614)876-0617	CLEVELAND 20922 Brookpark Rd. Cleveland, OH 44135 P: (330)376-1317
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DERRICK DICKSON JR.
ESTIMATOR
DERRICK@VENDRICKCONSTRUCTION.COM

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CELL: 724.977.5663
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O 330-296-7316
C 330-958-6201
F 330-296-7780

127 East Main Street
Ravenna, Ohio 44266

General Contractor ■ Construction Management ■ Design Build

SUNIL M. DESAI
Project Manager

General Contractors &
Construction Managers




SONA CONSTRUCTION, LLC

7122 Harvard Avenue
Cleveland, Ohio 44105
e-mail: sunild@ameritech.net

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Fax: (216) 883-0471
Cell: (216) 374-7853

Laborers' International Union of North America, AFL-CIO


LOCAL No. 894 AFFILIATED WITH OHIO STATE BUILDING AND CONSTRUCTION
TRADES COUNCIL AFL-CIO AND OHIO STATE FEDERATION OF LABOR AFL-CIO



PHILL RALSTON
Business Agent - Portage County
Secretary-Treasurer

720 Wolf Ledges
Akron, Ohio 44311-1582

Phone: 330-535-6145
Fax: 330-535-9331
Cell: 330-571-7429
Email: phill@local894.com




RONALD STORBERG
Estimator/Project Manager

330-452-9806 Ext. 5001

330-958-0646

ron.storberg@hilscher-clarke.com

24/7 EMERGENCY
330-437-1636



THOMPSON ELECTRIC INC.

Brian Pendergrass, CMRP
Project Manager
bpendergrass@thompsonelectric.com

49 Northmoreland Avenue - Munroe Falls, Ohio 44262
c. 330.571.8830

www.thompsonelectric.com
An Equal Opportunity Employer



Request for Information 001

Detailed, RFIs Grouped by RFI Number

Current Bid

Project # 05-675

Tel: Fax:

RFI #: 001		Date Created: 5/8/2023	
Answer Company	Answered By	Author Company	Authored By
Hasentab Architects 190 North Union St. Suite 400 Akron, Ohio 44304	Eric Beach	Hummel Construction Company 127 East Main Street Ravenna, OH 44266	Martin Snode
Co-Respondent		Author RFI Number	

Subject	Discipline	Category
Portage County EOC-Div 27 Communications	Communication	Specification Clarification
Cc: Company Name	Contact Name	Copies Notes

Question Date Required: 5/15/2023

1)Spec 011000-2 states that TVs are Owner-Furnished, Contractor installed. Would the installation of these TVs need to be included in the tele-data bid?

2)Who is providing cameras and card readers?

Are these owner provided, does the owner have its own security vendor or are those part of the tele-data package? If part of the tele-data package, please provide a spec.

3)What size fiber patch panel? SM or MM connector panels?

- Are we pulling fiber? There is none shown on the drawings. If providing, need to know strand count and type.

4)Specs and Drawings call out different manufacturers. " Spec 270740 Siemens faceplates and jacks, Drawing E0-3 calls out Legrand. Which is preferred?

" Spec 270740 Horizontal Wire Managers - Middle Atlantic, Drawing E0-3 Calls out Hellerman Tyton. Which is preferred?

Suggestion

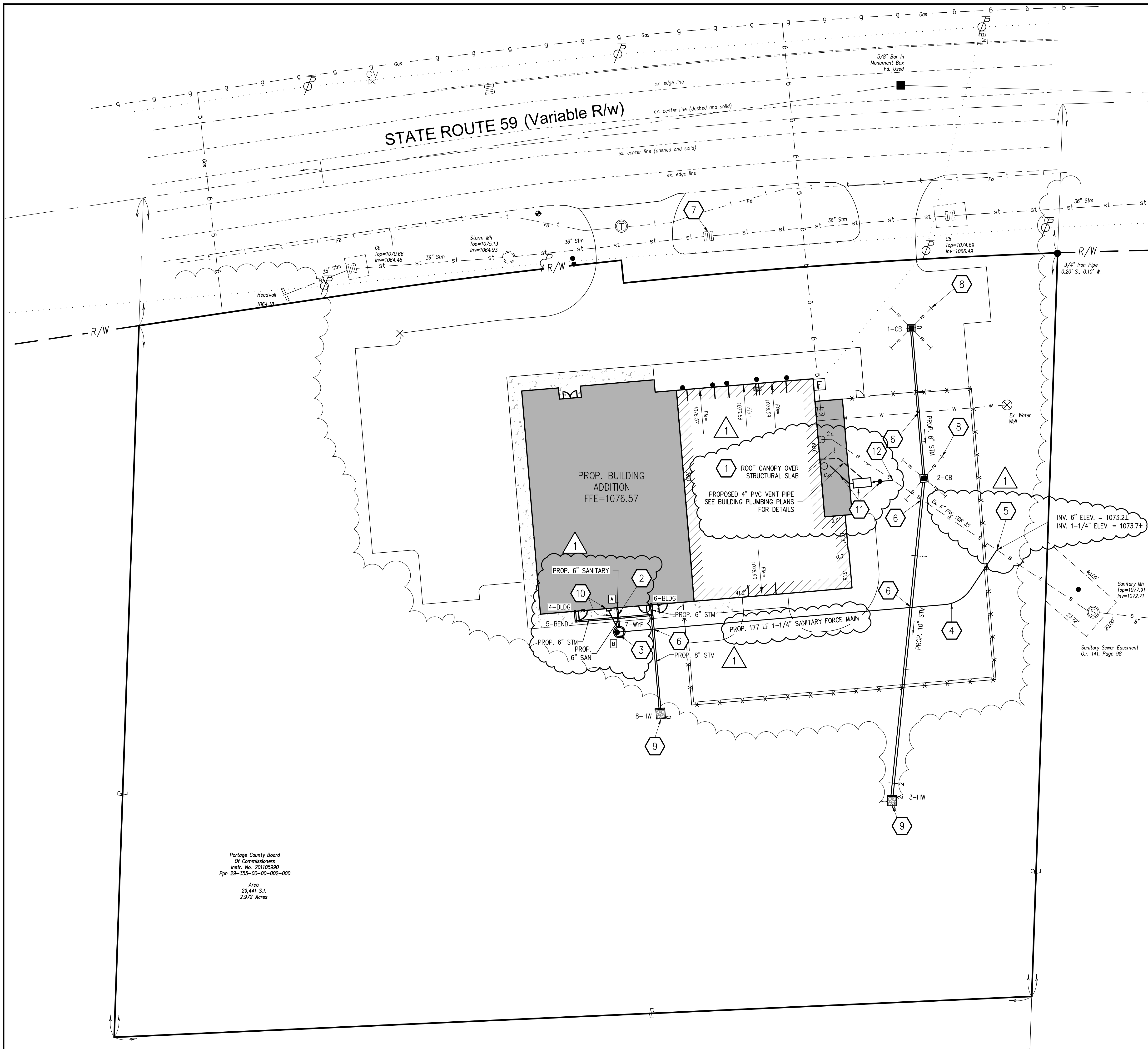
Answer Date Answered:

- 1) The Owner's A/V vendor will install the TVs and TV Mounts. GC will provide blocking in walls.
- 2) The Owner's security vendor is providing cameras and card readers.
- 3) The fiber patch panels are to be furnished by the Trechnology contractor. EC provides conduit and boxes.
- 4) Either Legrand or Siemens are acceptable mfr's for face plates and jacks.
- 5) For horizontal wire racks, all three manufacturers are acceptable: Hellerman, Tyton or Middle Atlantic.

By: Eric Beach, Hasenstab Architects, Inc.

Date: 5/9/23

C-1



Portage County Board
Of Commissioners
Instr. No. 20105990
Ppn 28-355-02-02-002-000
Area
29,441 S.F.
2.972 Acres

STORM SEWER STRUCTURE SCHEDULE				
STRUCTURE ID	TOP ELEV.	INLET PIPES	OUTLET PIPE	DESCRIPTION
1-CB	1075.84		8" (S) = 1071.47	ODOT 2-2C CATCH BASIN
2-CB	1075.75	8" (N) = 1071.14	10" (S) = 1070.97	ODOT 2-2C CATCH BASIN
3-HW		10" (N) = 1070.00		HALF-HEIGHT HW ODOT HW-2.1
4-BLDG	1076.57		6" (S) = 1073.57	BUILDING CONNECTION
5-BEND	1076.48	6" (N) = 1073.53	6" (E) = 1073.53	HORZ. BEND
6-BLDG			6" (S) = 1073.57	BUILDING CONNECTION
7-WYE	1076.48	6" (N) = 1073.19 6" (W) = 1073.19	8" (S) = 1073.02	8" x 8" WYE, W/8"x6" REDUCERS ON UPSTREAM BRANCHES
8-HW	???	8" (N) = 1072.81		HALF-HEIGHT HEADWALL ODOT HW-2.1

STORM SEWER PIPE SCHEDULE									
UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	UPSTREAM INVERT	DOWNSTREAM INVERT	SIZE	LENGTH	SLOPE	DESCRIPTION	Min. Cover	
1-CB	2-CB	1071.47	1071.14	8"	65.95	0.50%	HDPE, ODOT 707.33	3.7'	
2-CB	3-HW	1070.97	1070.00	10"	139.68	0.69%	HDPE, ODOT 707.33	2.8'	
4-BLDG	5-BEND	1073.57	1073.53	6"	4.44	1.00%	HDPE, ODOT 707.33	2.4'	
5-BEND	7-WYE	1073.53	1073.19	6"	33.46	1.00%	HDPE, ODOT 707.33	2.4'	
6-BLDG	7-WYE	1073.57	1073.19	6"	4.44	8.54%	HDPE, ODOT 707.33	2.5'	
7-WYE	8-HW	1073.02	1072.81	8"	41.28	0.51%	HDPE, ODOT 707.33	1.2'	

SANITARY STRUCTURE SCHEDULE				
STRUCTURE ID	TOP ELEV.	INLET PIPES	OUTLET PIPE	DESCRIPTION
A	1076.56		6" (S) = 1071.17	EXTERIOR CLEANOUT SEE BUILDING PLUMBING DRAWINGS FOR DETAILS
B	1077.02	6" (N) = 1071.07	1-1/4" (E)=1071.83	PUMP STATION SEE SHEET C-9

SANITARY PIPE SCHEDULE								
UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	UPSTREAM INVERT	DOWNSTREAM INVERT	SIZE	LENGTH	SLOPE	DESCRIPTION	MIN. COVER
A	B	1071.17	1071.07	6"	101.3	1.00%	PVC PIPE	4.8

KEYED NOTES

- 1 - PROPOSED BUILDING ADDITION TO BE SERVED BY EXISTING WATER WELL.
 - 2 - PROPOSED 6" PVC SDR 35 SANITARY LATERAL @ 1.0% MIN.
 - 3 - PROPOSED WH472 EONE DUPLEX GRINDER PUMP STATION (476 GALLON CAPACITY). SEE DETAIL ON SHEET C-9.
 - 4 - PROPOSED 1-1/4" HDPE DR-9 SANITARY FORCE MAIN.
 - 5 - INSTALL ROMAC STYLE "CB" SEWER SADDLE PER DETAIL SHEET C-11. INSTALL 2 FEET OF 4" PVC SDR 35 PIPE INTO SADDLE. INSTALL 4" X 1-1/4" REDUCER AND 1-1/4" PVC PIPE FOR HDPE CONNECTION. CONNECT HDPE PIPE TO PVC PIPE USING 1-1/4" FLEXIBLE COUPLING CONNECTION (FERNCO).
 - 6 - MAINTAIN A MINIMUM 18" VERTICAL CLEARANCE BETWEEN ALL WATER LINES AND SEWERS (SANITARY AND STORM) CROSSINGS, INCLUDING BOTTOM OF STORM WATER DETENTION SYSTEM. MAINTAIN A MINIMUM 12" VERTICAL CLEARANCE AT ALL OTHER UTILITY CROSSINGS. PROVIDE VERTICAL BYPASS ON PROPOSED WATER LINES AS NECESSARY.
 - 7 - ADJUST/RECONSTRUCT EXISTING DRAINAGE INLET TO GRADE PER ODOT ITEM 611.
 - 8 - INSTALL 10 LF CATCH BASIN FINGER DRAINS. SEE DETAIL SHEET C-10.
 - 9 - INSTALL 4' WIDE X 4' LONG X 18" THICK TYPE C ROCK CHANNEL OUTLET PROTECT PER DETAIL SHEET C-7.
 - 10 - INSTALL E-ONE SENTRY DUPLEX PROTECT PLUS PACKAGE CONTROL AND ALARM PANEL ON BUILDING AND 1" PVC CONDUIT TO PUMP STATION FOR PUMP AND CONTROL WIRES. SEE BUILDING ELECTRICAL PLANS FOR 120 VAC, 30 AMP CIRCUIT CONNECTION TO CONTROL PANEL.
 - 11 - PRIOR TO INSTALLATION OF THE PROPOSED GREASE INTERCEPTOR, SAMPLING BASIN, AND ASSOCIATED PIPING, THE CONTRACTOR SHALL LOCATE THE EXISTING SANITARY LATERAL BRANCH INTENDED TO RECEIVE GREASE RELATED WASTE AND CONFIRM THAT ONLY FLOOR/TRENCH DRAINS ARE TIED INTO IT (NO BATHROOM RELATED WASTE). ONCE CONFIRMED, THE CONTRACTOR IS PERMITTED TO INSTALL THE PROPOSED STRUCTURES.
 - 12 - CONTRACTOR TO CONFIRM DEPTH OF EXISTING SANITARY SEWER LATERAL FROM EXISTING FLOOR DRAINS. INSTALL NEW 6" SANITARY LATERAL @ 1.00% MINIMUM SLOPE FROM EXISTING CLEANOUT TO PROPOSED GREASE INTERCEPTOR. INSULATE ALL PIPES THAT HAVE LESS THAN 4" OF COVER PER PORTAGE COUNTY WATER RESOURCES STANDARDS AND SPECIFICATIONS. INSTALL GREASE INTERCEPTOR, CLEANOUTS AND SAMPLING BASIN PER DETAIL SHEET C-11.
- CONTRACTOR TO CONFIRM DEPTH OF EXISTING SANITARY SEWER LATERAL FROM EXISTING FLOOR DRAINS. INSTALL NEW 6" SANITARY LATERAL @ 1.00% MINIMUM SLOPE FROM EXISTING CLEANOUT TO PROPOSED GREASE INTERCEPTOR. INSULATE ALL PIPES THAT HAVE LESS THAN 4" OF COVER PER PORTAGE COUNTY WATER RESOURCES STANDARDS AND SPECIFICATIONS. INSTALL GREASE INTERCEPTOR, CLEANOUTS AND SAMPLING BASIN PER DETAIL SHEET C-11.
- INV. 6" ELEV. = 1073.2±
INV. 1-1/4" ELEV. = 1073.7±
- Sanitary Mh
Top=1077.91
Inv=1072.71
- Sanitary Sewer Easement
Cir. 14', Page 98

GENERAL NOTES

1. COORDINATE EXACT LOCATION OF ALL BUILDING UTILITY CONNECTIONS WITH BUILDING PLUMBING PLANS PRIOR TO INSTALLATION OF UTILITIES.
2. THE EXISTING UNDERGROUND UTILITIES AS SHOWN ARE OBTAINED FROM A COMBINATION OF FIELD LOCATION AND RECORD INFORMATION OBTAINED FROM THE RESPECTIVE UTILITY COMPANIES, WHERE PROVIDED. THESE UTILITIES, THEIR LOCATION AND THEIR ACTIVE OR INACTIVE STATUS, SHALL BE VERIFIED BY THE CONTRACTOR BY CALLING THE OHIO UTILITIES PROTECTION SERVICE (O.U.P.S.), PRIOR TO CONSTRUCTION. LOCATION, SIZE, DEPTH AND STATUS OF USE ARE SHOWN AS ACCURATE AS POSSIBLE WITH THE AVAILABLE EXISTING DATA.
3. ALL PAVEMENT, CURB AND SIDEWALK TO BE REMOVED SHALL BE SAW CUT FULL DEPTH AT EXISTING CONSTRUCTION JOINTS. ALL SAW CUTTING MUST BE DONE WET, TO CONFORM TO THE OHIO EPA'S FUGITIVE DUST ACT.
4. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS INCLUDING ANY FOR WORK IN THE R/W.
5. ADJUST TO GRADE/COORD. ADJUSTMENT TO GRADE OF ALL VALVE BOXES, UTILITY COVERS, GRATES, ETC. SCHEDULED TO REMAIN.

STORM SEWER NOTES

1. ALL STORM SEWER PIPES TO BE ITEM 611, CONDUIT TYPE B. BACKFILL UNDER PAVEMENT SHALL BE GRANULAR MATERIAL. PAYMENT FOR COMPACTED GRANULAR BACKFILL MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 611.
2. ALL STORM SEWER TO HAVE ODOT TYPE 2 BEDDING.
3. PROVIDE STORM SEWER JOINTS THAT ARE GASKETED AND SILT TIGHT.
4. ALL PIPE, UNLESS OTHERWISE SHOWN ON THE PLAN, ARE TO BE HDPE (ODOT 707.33) OR BETTER.
5. ALL HOLES IN PROPOSED STRUCTURES, INCLUDING DOWNSPOUT AND UNDERDRAIN CONNECTIONS, SHALL BE CORED AT TIME OF PRECAST MANUFACTURE.

SANITARY SEWER NOTES

1. SEE SHEET C-11 FOR PORTAGE COUNTY WATER RESOURCES SANITARY SEWER DETAILS.
2. BUILDING FLOOR DRAINS, ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED ON THIS PROJECT.
3. ALL SEWERS CONSTRUCTED UNDER THIS PLAN SHALL MEET THE REQUIREMENTS OF PORTAGE COUNTY WATER RESOURCES.
4. THE MINIMUM REQUIREMENTS FOR SANITARY PIPE SHALL BE PVC PLASTIC SEWER PIPE, ASTM D-3034, SDR 35. ALL SANITARY LATERAL SHALL BE LAID AT A MINIMUM GRADE OF 1.0%. JOINTS SHALL CONFORM TO ASTM D3212, INSTALLED PER ASTM D2321, AND VACUUM TESTED PER
5. FORCE MAIN MATERIAL SHALL BE HDPE DR-9, MEETING THE REQUIREMENTS OF ASTM F714 WITH JOINTS CONFORMING TO ASTM F2620 AND INSTALLED PER ASTM D2321.
6. ALL SANITARY GRAVITY AND PRESSURE SEWER PIPE MUST PASS A LOW PRESSURE AIR TEST, WHICH SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM F-1417. THE MAXIMUM ALLOWABLE TEST LEAKAGE SHALL BE 100 GALLONS/INCH OF DIAMETER/MILE/DAY.
7. ALL SANITARY SEWER CONSTRUCTION SHALL BE MONITORED AND INSPECTED BY PORTAGE COUNTY WATER RESOURCES. THE CONTACT INFORMATION IS 330-298-2066.
8. ALL NEW, EXTERIOR SANITARY SEWER TO HAVE A MINIMUM 4' OF COVER ABOVE THE TOP OF PIPE.
9. SANITARY UTILITY CONNECTION FEES SHALL BE DUE BEFORE START OF CONSTRUCTION. CONTACT JOHN EVANS AT 330-298-2066 OR JEVA@PORTAGECO.COM.

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ISSUES / REVISIONS

A	02-15-23	DESIGN DEVELOPMENT
B	03-15-23	CD-PERMIT 03-15-23
1	05-11-23	ADDENDUM #1



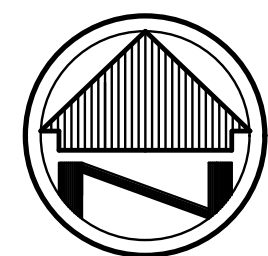
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UNDERGROUND UTILITIES Contact Two Working Days Before You Dig OHIO811.org Before You Dig	BASIS OF BEARINGS THE BASIS FOR BEARINGS FOR THIS SURVEY IS GRID NORTH OF THE OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83 (2011). BENCHMARK MAG NAIL IN GUARD RAIL POST IN SOUTH RIGHT-OF-WAY OF STATE ROUTE 59. ELEVATION = 1077.68	4216 KARG INDUSTRIAL PKWY KENT, OH 44240 (330) 673-2400
OHIO811, 8-1-1, or 1-800-362-2764 (Non-members must be called directly)	REG PROJECT NO. 20220103	

PROJECT NO.

22048.001

UTILITY
PLAN

SCALE
1" = 20'

C-3

DH502/DR502

General Features

The model DH502 or DR502 grinder pump station is a complete unit that includes: two grinder pumps, check valve, FRP (fiberglass reinforced polyester) tank, controls, and alarm panel. A single DH502 or DR502 is ideal for up to nine, average single-family homes and can also be used for up to 24 average single-family homes where codes allow and with consent of the factory.

- Rated for flows of 6000 gpd (22,714 lpd)
- 500 gallons (1893 liters) of capacity
- Indoor or outdoor installation
- Standard outdoor heights range from 104 inches to 160 inches

The DH502 is the "hardwired," or "wired," model where a cable connects the motor controls to the level controls through watertight penetrations.

The DR502 is the "radio frequency identification" (RFID), or "wireless," model that uses wireless technology to communicate between the level controls and the motor controls.

Operational Information

Motor

1 hp, 1,725 rpm, high torque, capacitor start, thermally protected, 120/240V, 60 Hz, 1 phase

Inlet Connections

4-inch inlet grommet standard for DWV pipe. Other inlet configurations available from the factory.

Discharge Connections

Pump discharge terminates in 1.25-inch NPT female thread. Can easily be adapted to 1.25-inch PVC pipe or any other material required by local codes.

Discharge

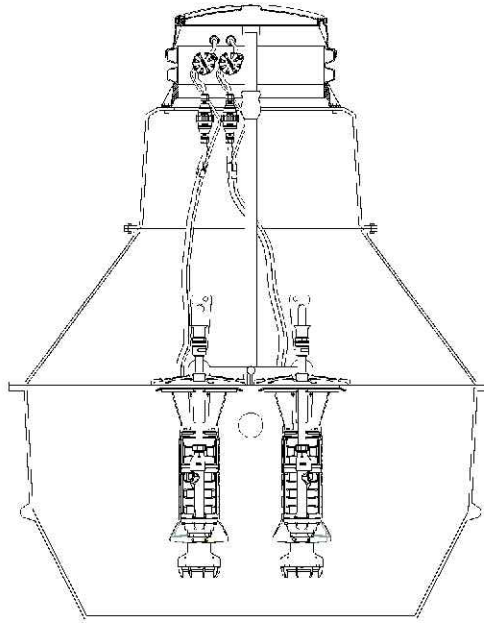
15 gpm at 0 psig (0.95 lps at 0 m)
11 gpm at 40 psig (0.69 lps at 28 m)
7.8 gpm at 80 psig (0.49 lps at 56 m)

Accessories

E/One requires that the Uni-Lateral, E/One's own stainless steel check valve, be installed between the grinder pump station and the street main for added protection against backflow.

Alarm panels are available with a variety of options, from basic monitoring to advanced notice of service requirements.

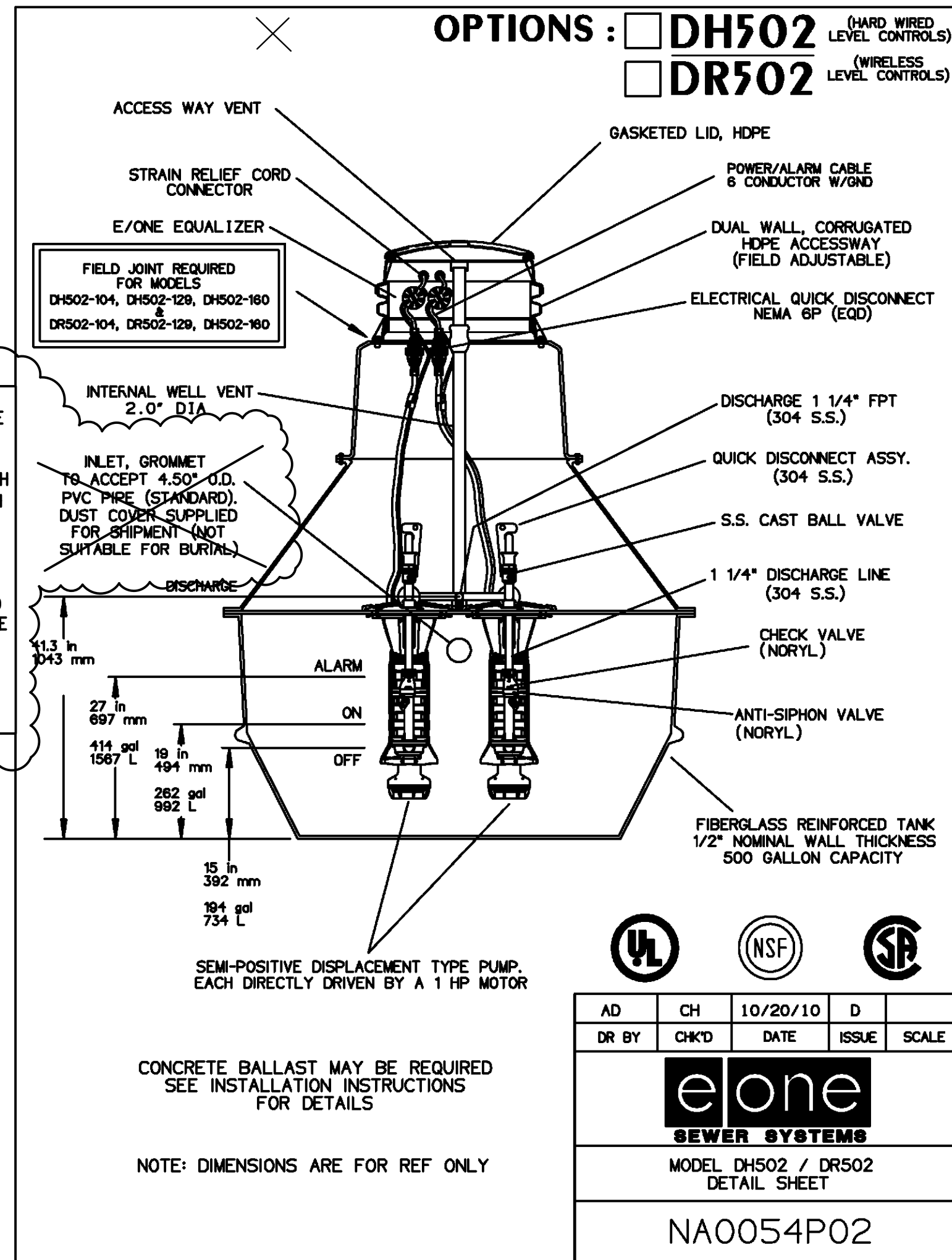
The Remote Sentry is ideal for installations where the alarm panel may be hidden from view.



NA0054P01 Rev E

- PUMPSTATION PROJECT SPECIFIC NOTES:**
1. ORDER PUMP STATION WITH INLET FLANGE CAPABLE OF MAKING 6" INLET PIPE CONNECTION
 2. DISCHARGE CONNECTION TO BE MADE WITH 1-1/4" MAIL THREADED PVC FITTING WITH 1 FOOT LONG 1-1/4" PVC PIPE. CONNECT PVC PIPE TO HOPE PIPE USING 1-1/4" FLEXIBLE COUPLING (FERNO).
 3. THE CONTRACTOR SHALL PROVIDE A PUMP STATION DRAWING FOR PUMP REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PERFORM A PUMP STATION START-UP AND TESTING EVENT FOR PUMP INSPECTION AND APPROVAL BEFORE THE PROJECT IS APPROVED FOR COMPLETION.

1



E/One Sentry™

Alarm Panel — Duplex Protect Plus Package

Description

The E/One Sentry Protect Plus panels are custom designed for use with Environment One Duplex grinder pump stations. They can be configured to meet the needs of your application, from basic alarm indication to advanced warning of pending service requirements.

E/One Sentry Protect Plus panels are supplied with audible and visual high level alarms. They are easily installed in accordance with relevant national and local codes. Standard panels are approved by UL, CSA, CE and NSF to ensure high quality and safety.

The panel features a corrosion-proof, NEMA 4X-rated, thermoplastic enclosure. A padlock is provided to prevent unauthorized entry (safety front).

Features

Includes all features of the basic configuration of the E/One Sentry Simplex panel, including circuit breakers, 240 or 120 VAC service, terminal blocks and ground lugs, audible alarm with manual silence, manual run feature and run indicator, safety front, conformal-coated board and overload protection.

Includes all features of the E/One Sentry Simplex Protect package, including a Trouble indication that shuts down the pumps temporarily in the event of an unacceptable operating condition (brownout, system over-pressure, run-dry), as well as:

Predictive status display module

Pre-alarm indication for major operating parameters

Alarm indications for major operating parameters

Hour meter, cycle counter and alarm delay

LCD display and user-friendly interface

Inner cover (dead front)

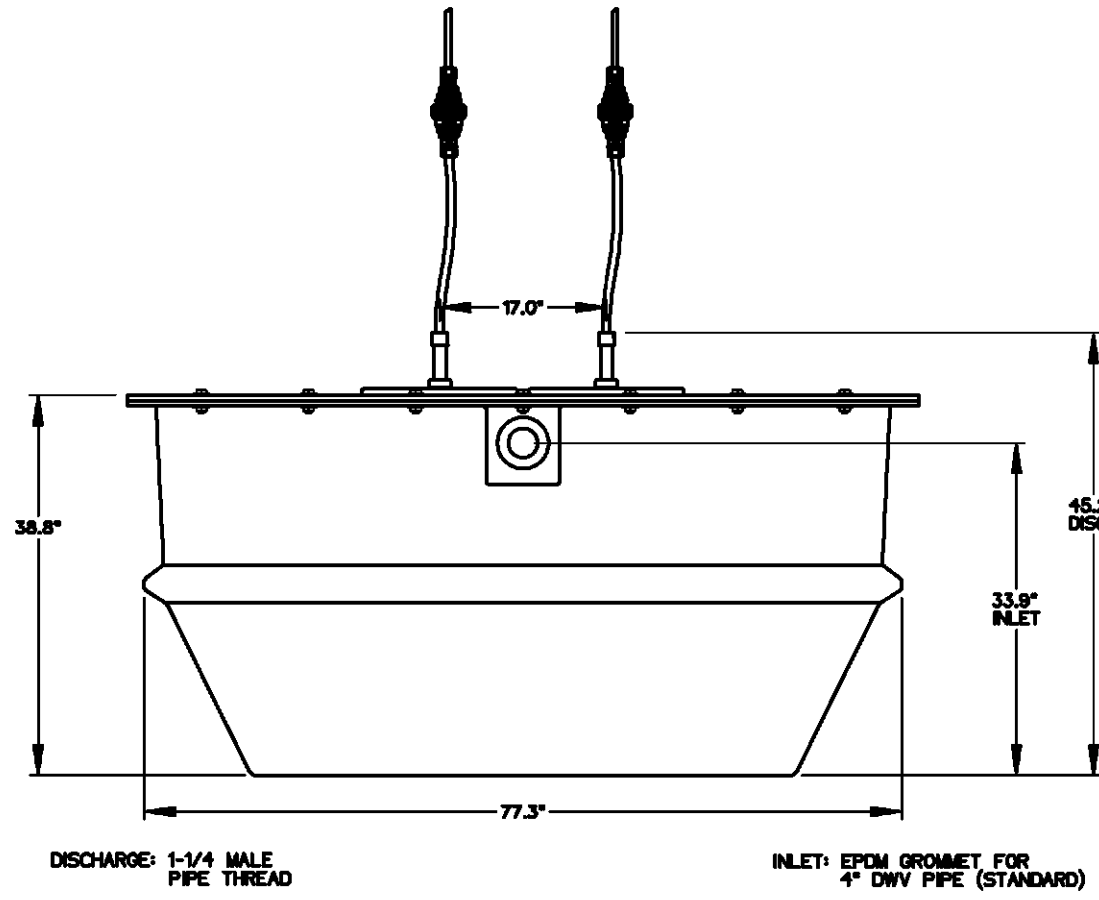
Contact group — dry contacts and Remote Sentry contacts

Programmable User Settings

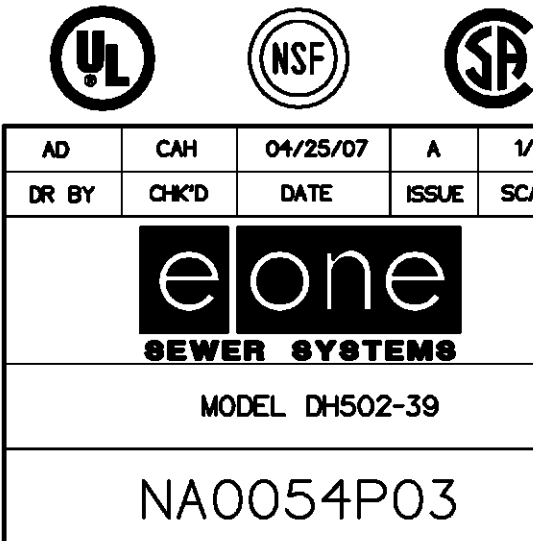
Please consult factory for special applications.



NA0344P01 Rev. —



DH502-39 INDOOR UNIT



ISSUES / REVISIONS

1	02-15-23	DESIGN DEVELOPMENT
3	03-15-23	CD-PERMIT 03-15-23
1	05-11-23	ADDENDUM #1



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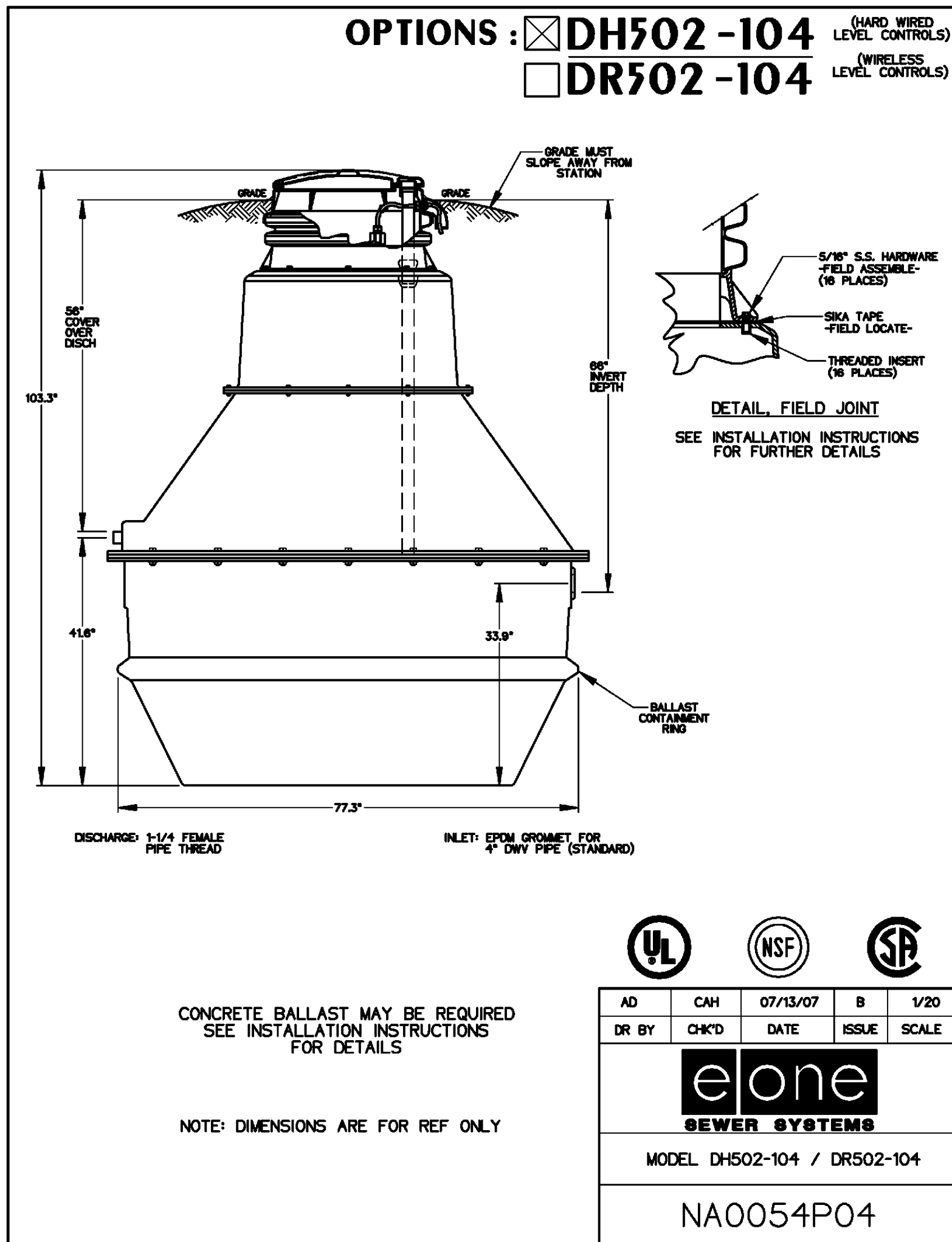
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Akron, Ohio 44304
(330) 434-4464
(330) 434-8546 Fax
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PROJECT NO.
22048.001

CONSTRUCTION
NOTES AND
DETAILS

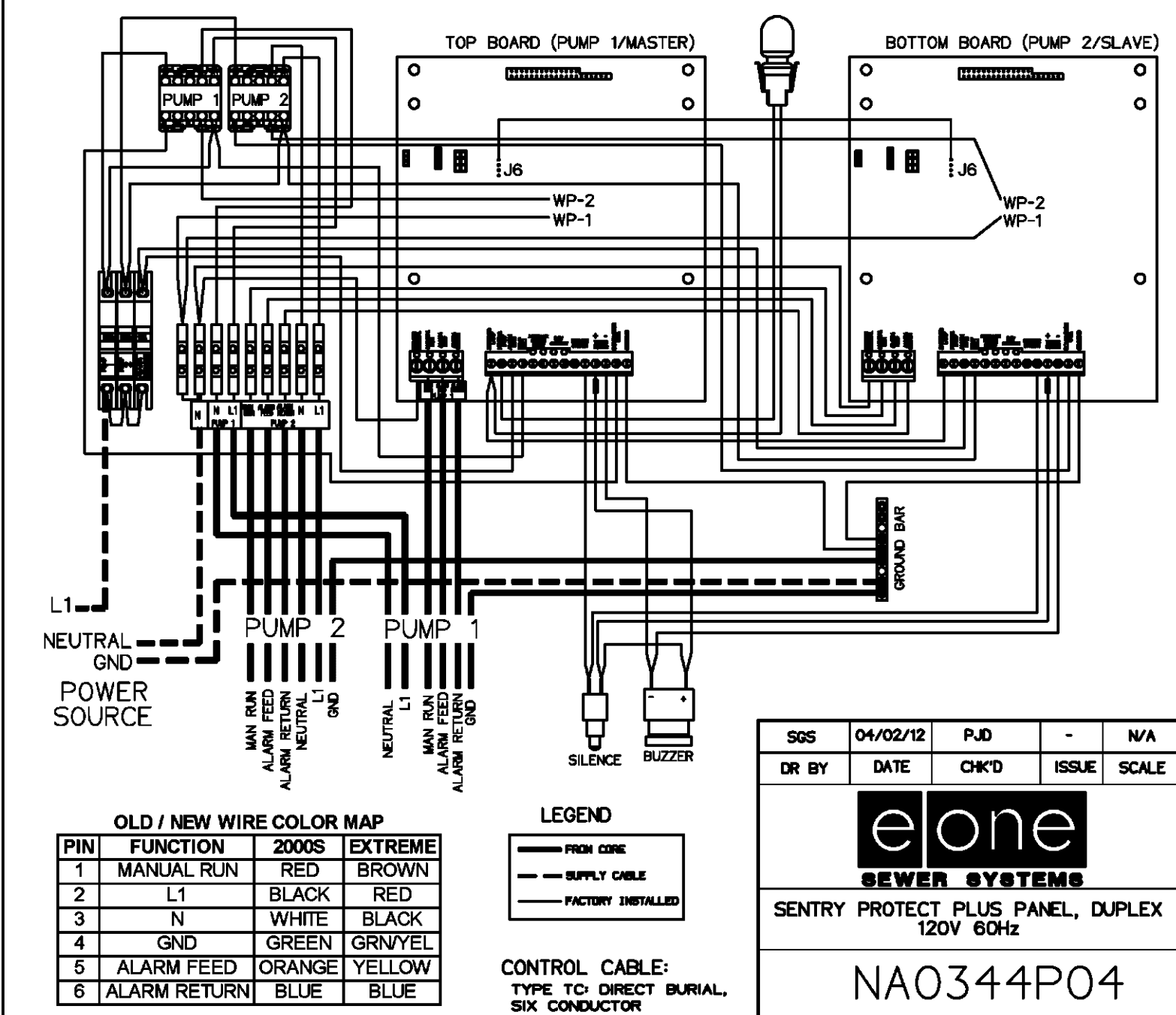
SCALE

C-9



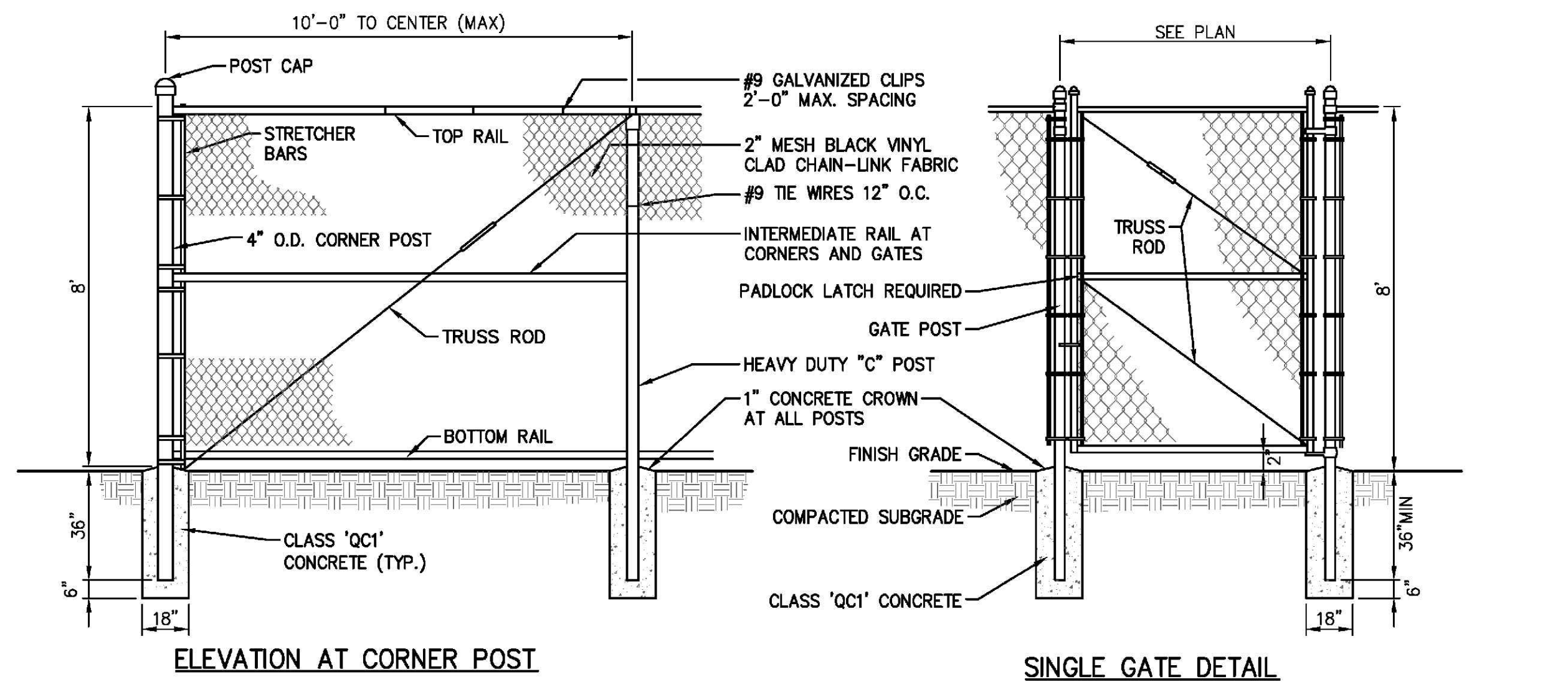
SENTRY PROTECT PLUS DUPLEX

EXTERNAL VISUAL & AUDIBLE ALARM
REMOTE SENTRY DRY CONTACTS FOR
OPTIONAL POWER LOSS HIGH LEVEL
ALARM (POWER LOSS ALARM FOR WIRELESS)
MANUAL ALARM SILENCE
STATUS LED'S: NORMAL, PUMP RUNNING, HIGH LEVEL
TROUBLE INDICATIONS: RUN DRY, OVERPRESSURE, BROWNOUT,
VOLTAGE, EXTENDED RUN TIME
DRY CONTACTS
CONFORMAL COATED CIRCUIT BOARD (BOTH SIDES)
PADLOCK
DEAD FRONT
PREDICTIVE ALARMS
REAL TIME PUMP PERFORMANCE
ADJUSTABLE ALARM DELAY
ADJUSTABLE RUN TIME DELAY
HOUR/CYCLE COUNTER
NEMA 4X ENCLOSURE ASSEMBLY



NOTES:

1. ALL PIPE FRAMEWORK AND OTHER FERROUS MATERIALS SHALL BE HOT DIP GALVANIZED, UNLESS OTHERWISE NOTED.
2. DIMENSIONS: ALL DIMENSIONS, SIZES, GAUGES, WEIGHTS OR THICKNESSES SHOWN ARE THE MINIMUM ACCEPTABLE, UNLESS OTHERWISE INDICATED.
3. FABRIC INSTALLATION: WIRE OR FABRIC ON BOUNDARY AND SECURITY FENCES AND GATES SHALL BE ON THE SIDE OF POSTS TOWARD THE AOA.
4. CONCRETE: CONCRETE SHALL BE OF A COMMERCIAL GRADE WITH A MINIMUM 28 DAY STRENGTH OF 3000 P.S.I. FOOTING TOPS SHALL BE 1-INCH MINIMUM ABOVE GROUND AT THE POST, AND TROWEL FINISHED TO SLOPE AWAY FROM THE POST.
5. FENCE LINE AND ALIGNMENT: FENCE LINES SHALL BE CLEARED OF ALL OBSTRUCTIONS AND SMOOTH GRADED TO THE GENERAL CONTOUR OF THE ADJACENT GROUND. GRADE SO THAT THERE IS A 2" MAXIMUM CLEARANCE FROM THE BOTTOM RAIL OR TENSION WIRE TO THE GROUND SURFACE. THE FENCE SHALL BE CONSTRUCTED VERTICAL, STRAIGHT AND TRUE TO LINE. THE LONGITUDINAL GRADIENT SHALL BE PARALLEL TO THE GENERAL SLOPE OF THE GROUND. CONTRACTOR SHALL LAY OUT THE FENCE ALIGNMENT AS SHOWN ON THE CONSTRUCTION PLANS. THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL APPROVE THE ALIGNMENT OF THE FENCE AND THE GATE LOCATION(S) PRIOR TO CONSTRUCTION.
6. GATE WIDTHS VARY. SEE LAYOUT PLANS. GATE POSTS, HINGES AND FOUNDATIONS ARE BASED ON GATE OPENING WIDTH. SEE MANUFACTURER'S RECOMMENDED SPECIFICATIONS.

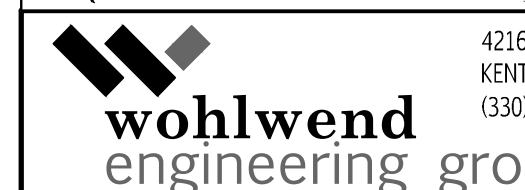


CHAIN LINK FENCE DETAILS

NO SCALE



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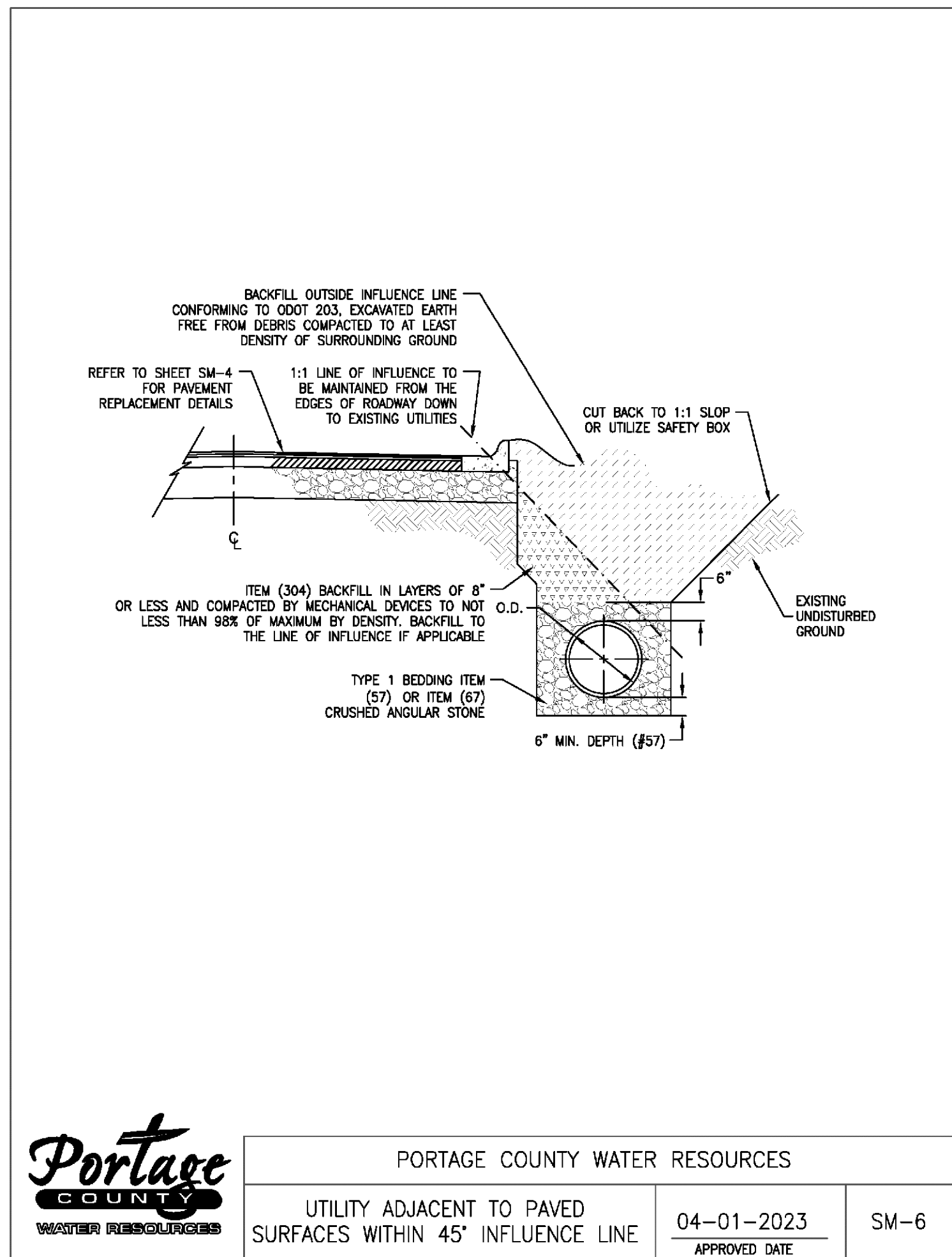
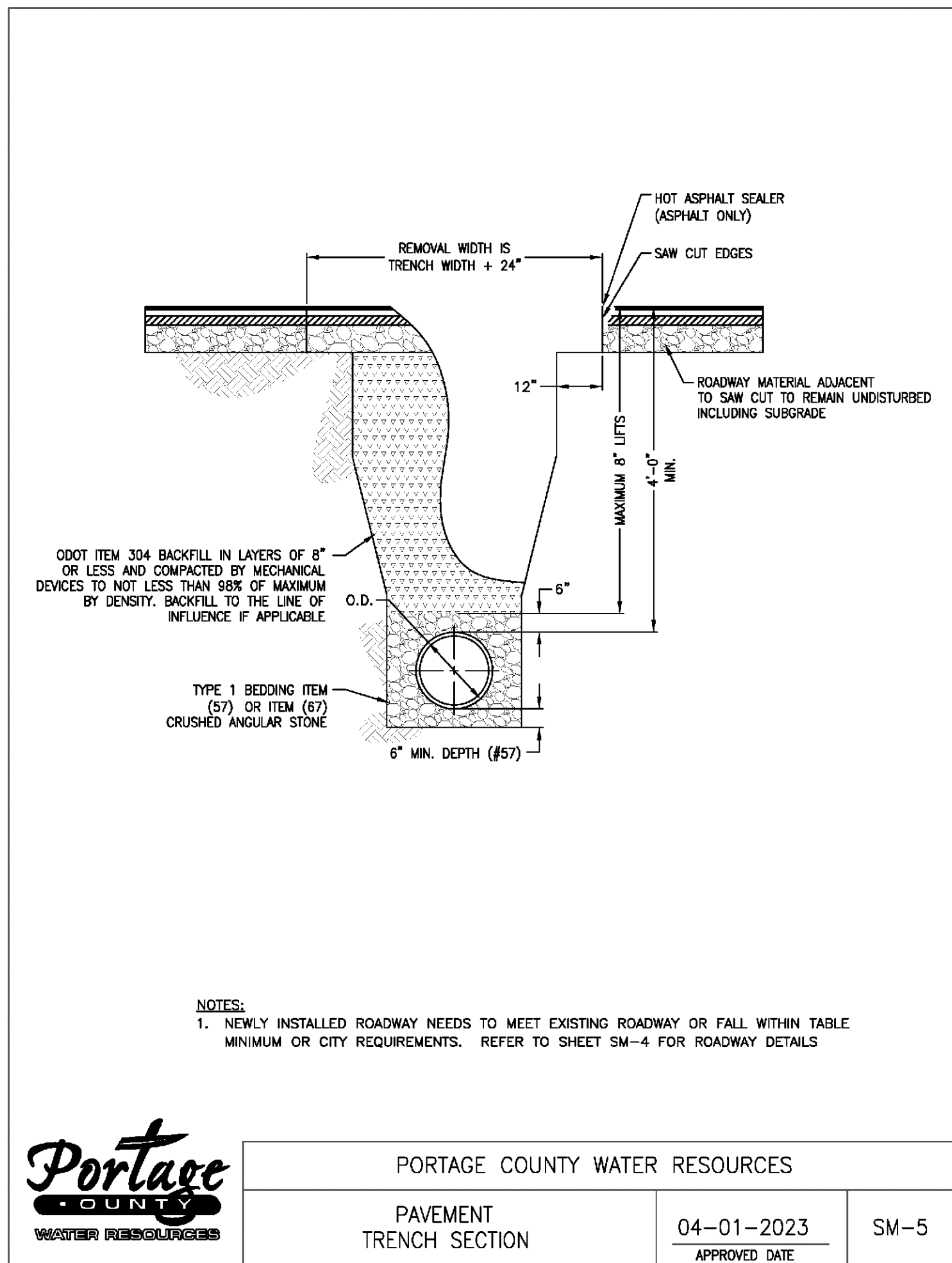
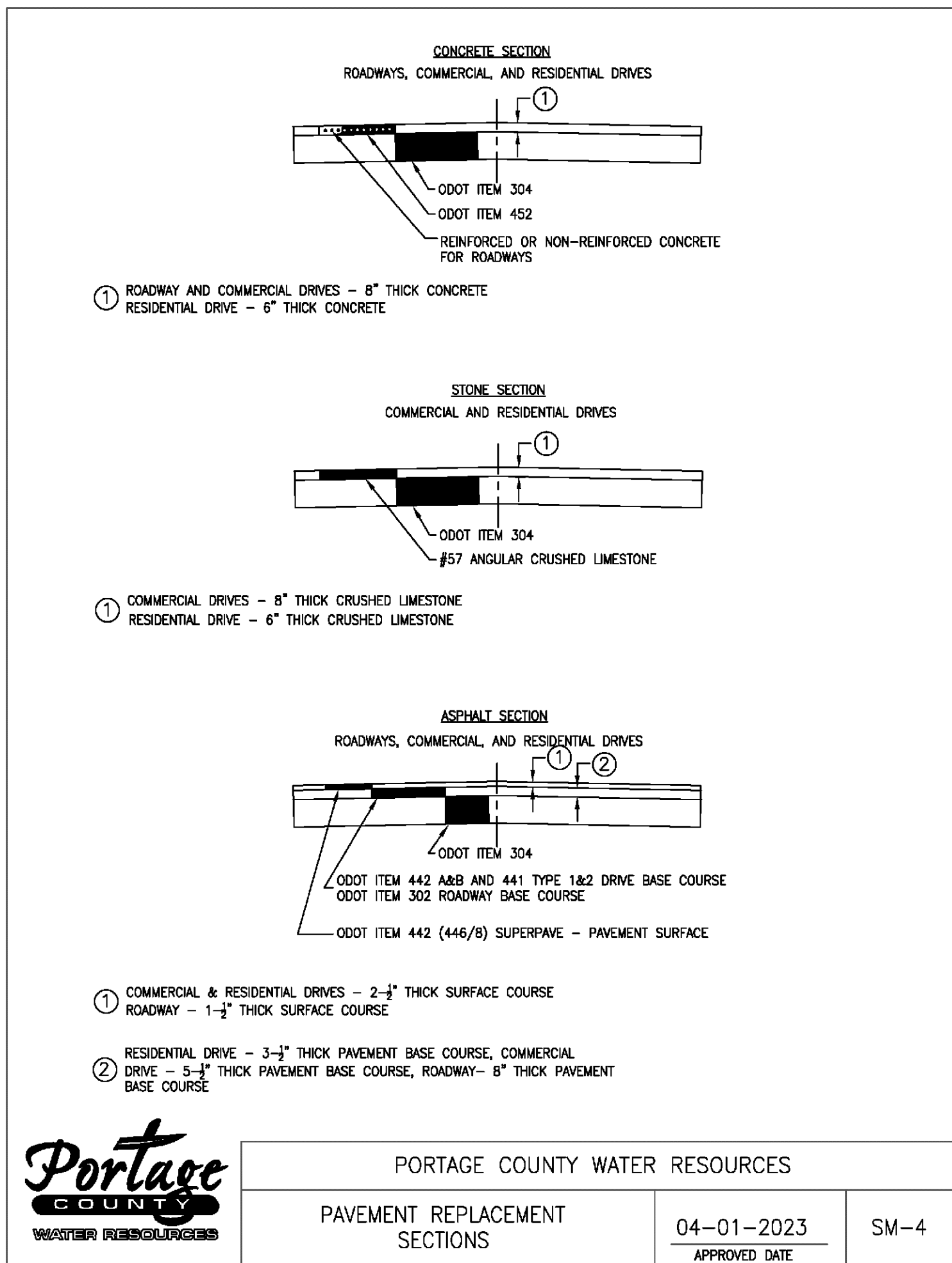
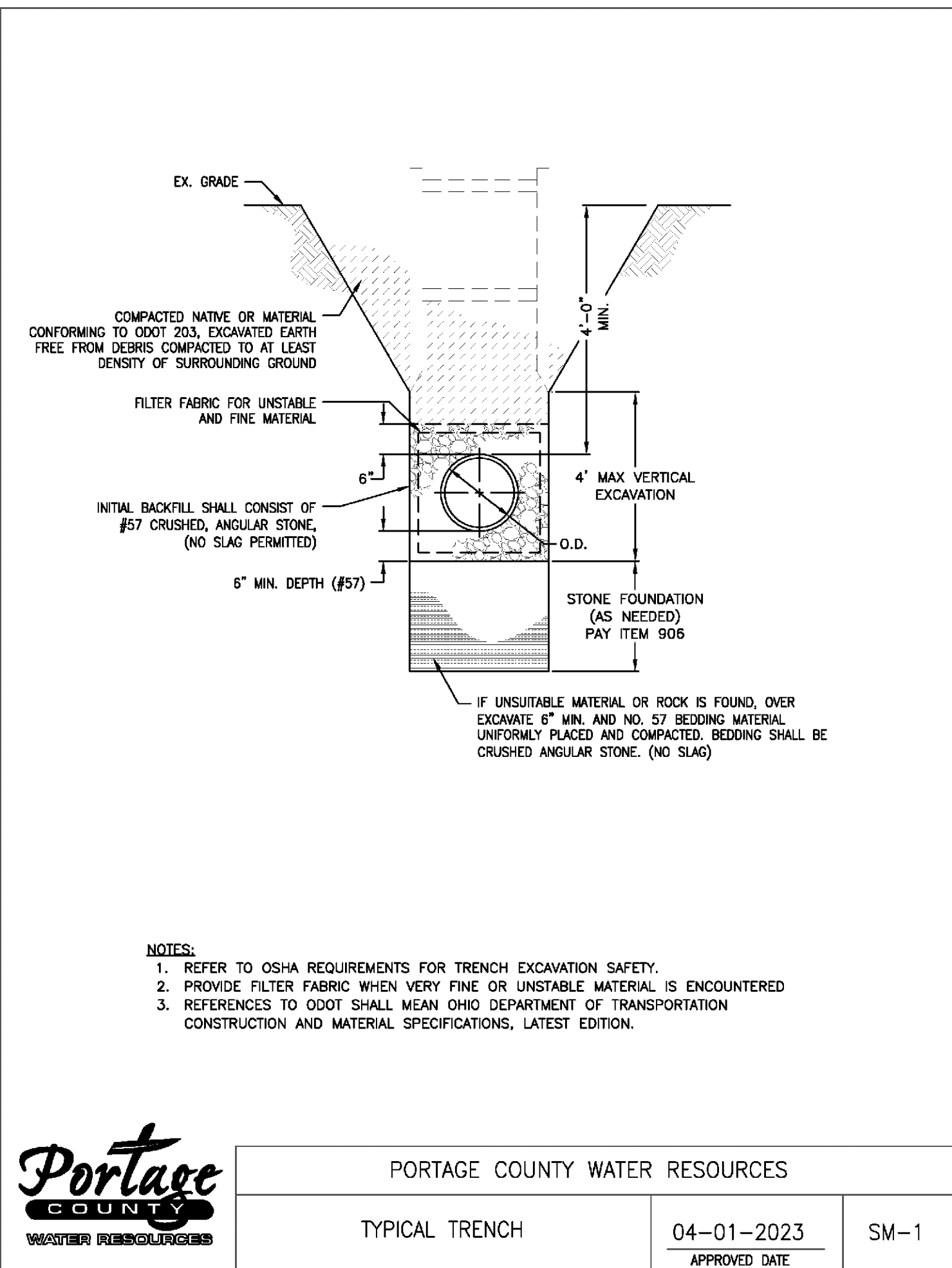
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Surveying • Engineering
3485 Fortuna Drive, Suite 100
Akron, Ohio 44312
(330) 946-4117
www.campbellsurvey.com

BASIS OF BEARINGS
THE BASIS FOR BEARINGS FOR THIS SURVEY IS GRID NORTH OF THE OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83 (2011).

BENCHMARK
MAG NAIL IN GUARD RAIL POST IN SOUTH RIGHT-OF-WAY OF STATE ROUTE 59.
ELEVATION = 1077.68

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KENT, OH 44240
(330) 679-2400

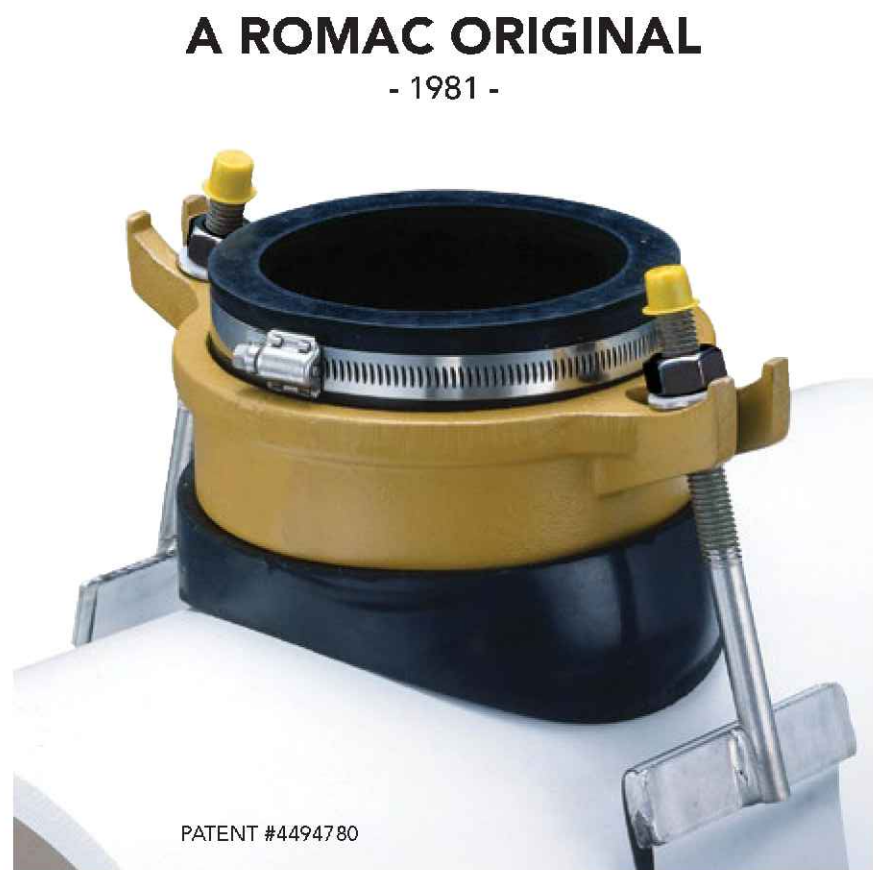
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ROMAC INDUSTRIES, INC.

STYLE "CB"™ SEWER SADDLE



DESIGN ADVANTAGES:

- **INVENTORY REDUCTION:** Unique gaskets fit wide range of diameters.
- **EASE OF INSTALLATION:** Saddle can be installed by unskilled labor, using a socket or open end wrench. Built-in stop prevents blockages due to inadvertent insertion of branch into main.
- **SUPERIOR STRAP:** Strong 304 stainless steel band GMAW & GTAW welded to roll threaded 304 stainless bolts adjust over a wide range. Clamping force is well distributed by 3 1/2" width.
- **FLEXIBILITY:** Gasket allows considerable deflection due to earth movement, while large soiling surface and wide band strongly resist displacement.
- **RELIABILITY:** Continuous rubber connection between rim and branch eliminates potential leak spots. Saddles have been tested to pressures well in excess of typical service test requirements.

NOTE: A pipe stop capable of withstanding 1000 pounds of thrust is molded into the CB saddle gasket. Care must be taken during system design and installation to assure that this thrust limit is not exceeded.

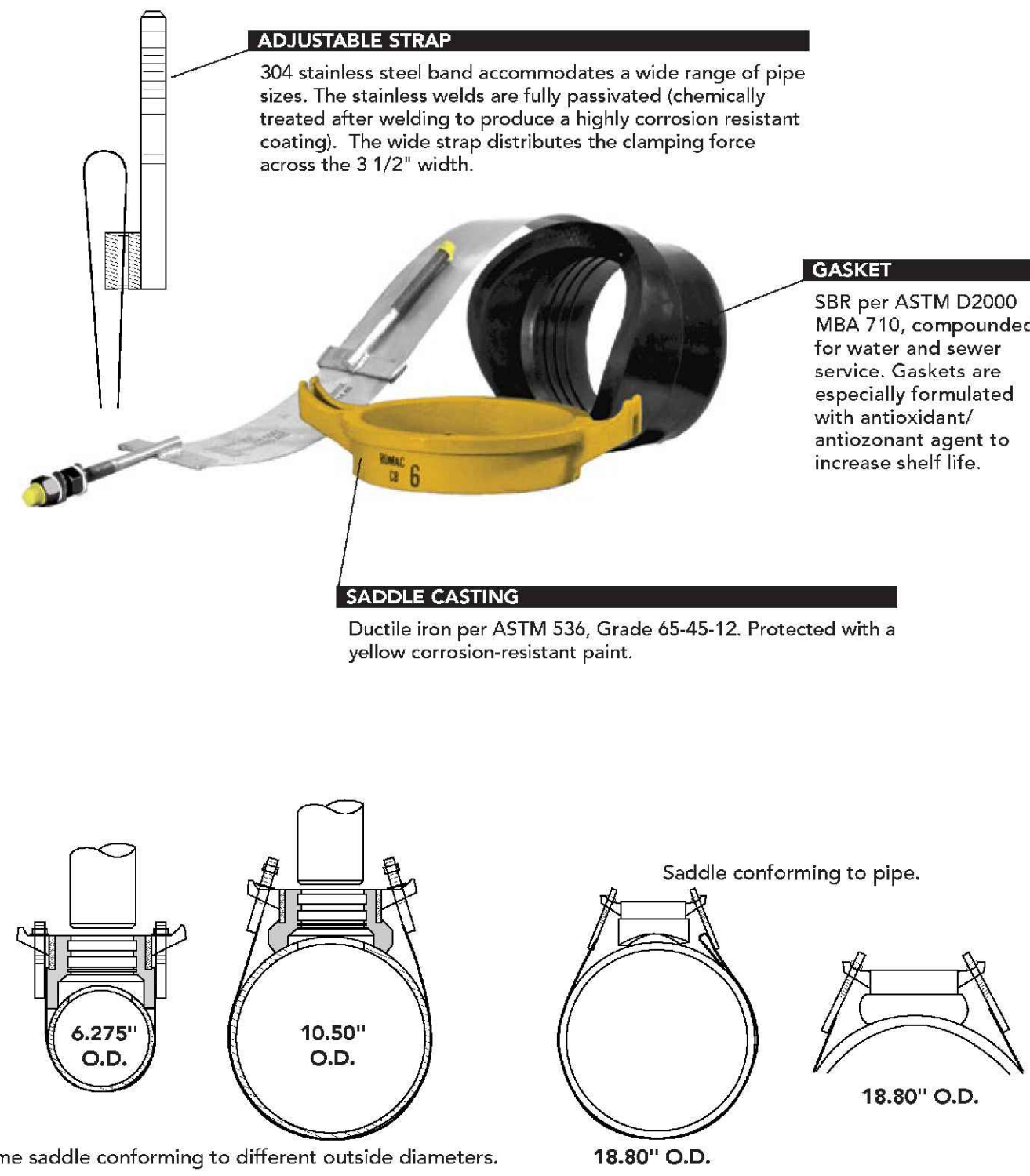
Manufactured with Domestic and Import materials. For Domestic requirements please contact our Operations Department. JANUARY 10, 2022

7-3

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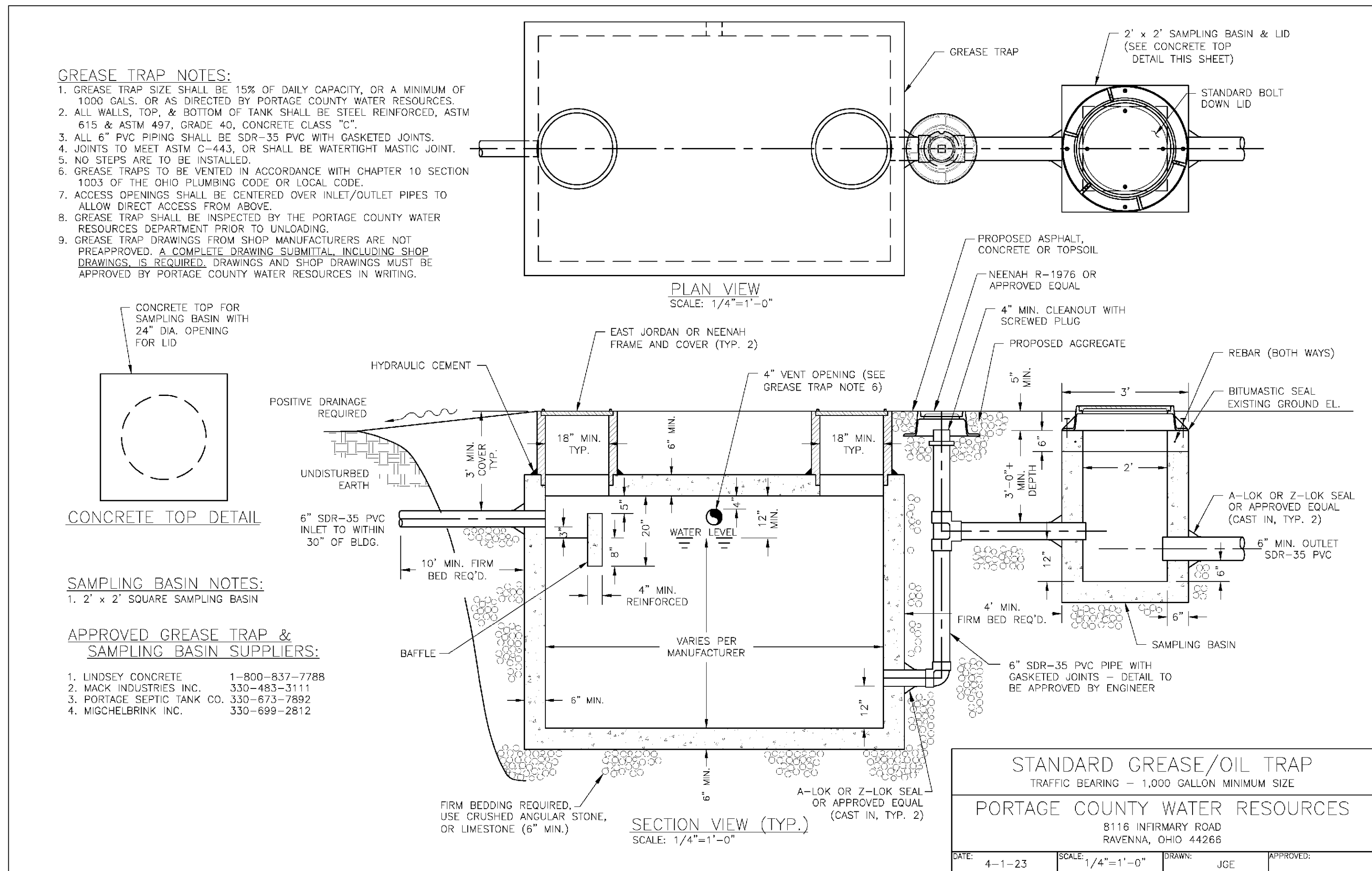
ROMAC INDUSTRIES, INC.

DETAIL SPECIFICATIONS FOR ROMAC "CB"™ SEWER SADDLES



7-4

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1	05-11-23	ADDENDUM #1



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SCALE

C-11

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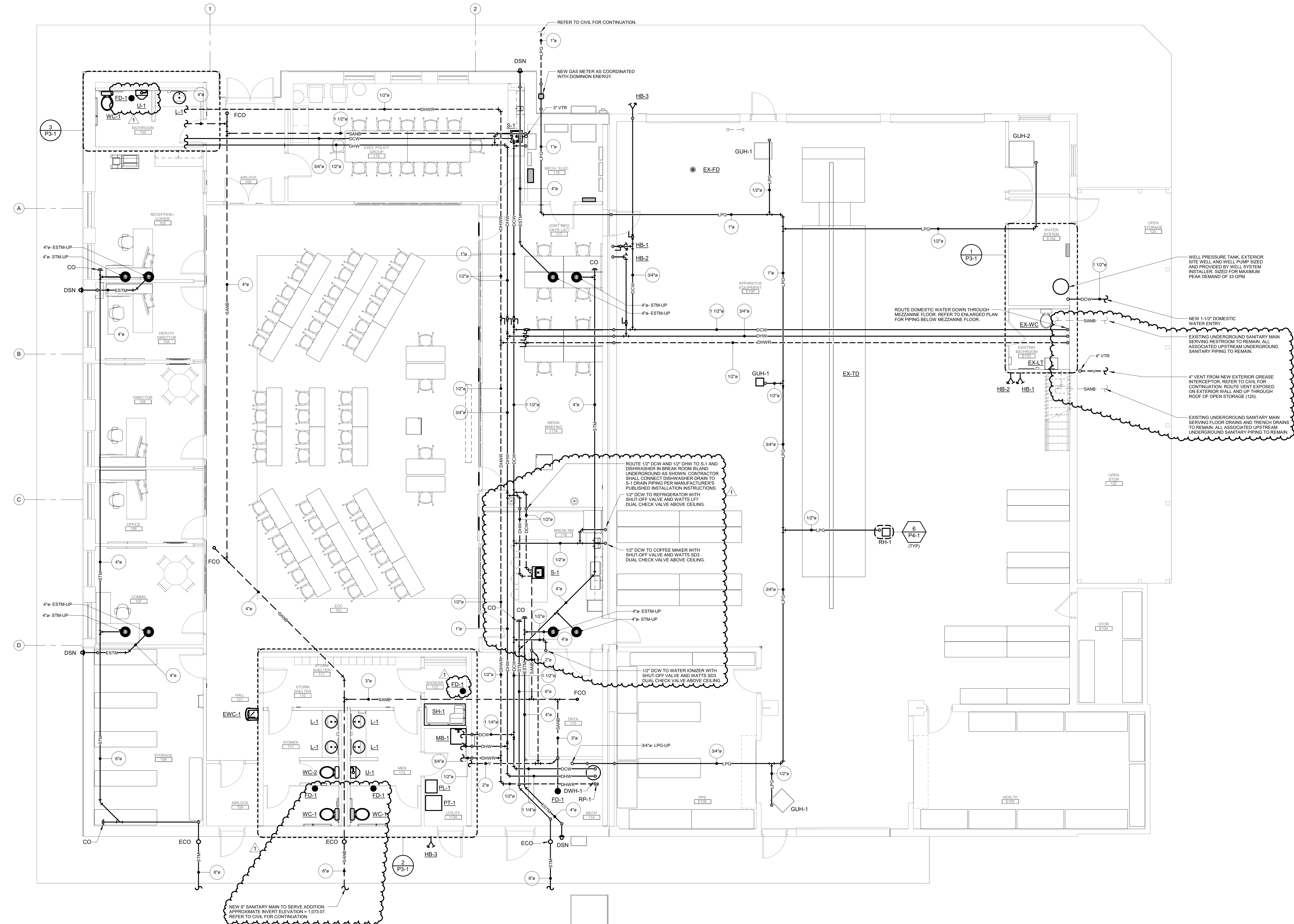


PROJECT NO.

SCALE $3/16" = 1'-0"$

P1-1





1 FIRST FLOOR PLUMBING PLAN
P2-1 3/16" = 1'-0"

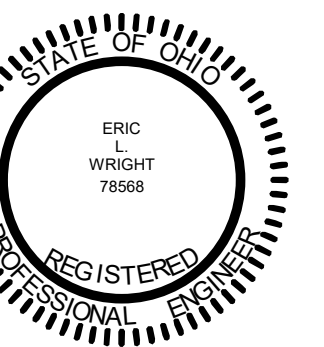
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1	05-11-23	ADDENDUM NO. 1



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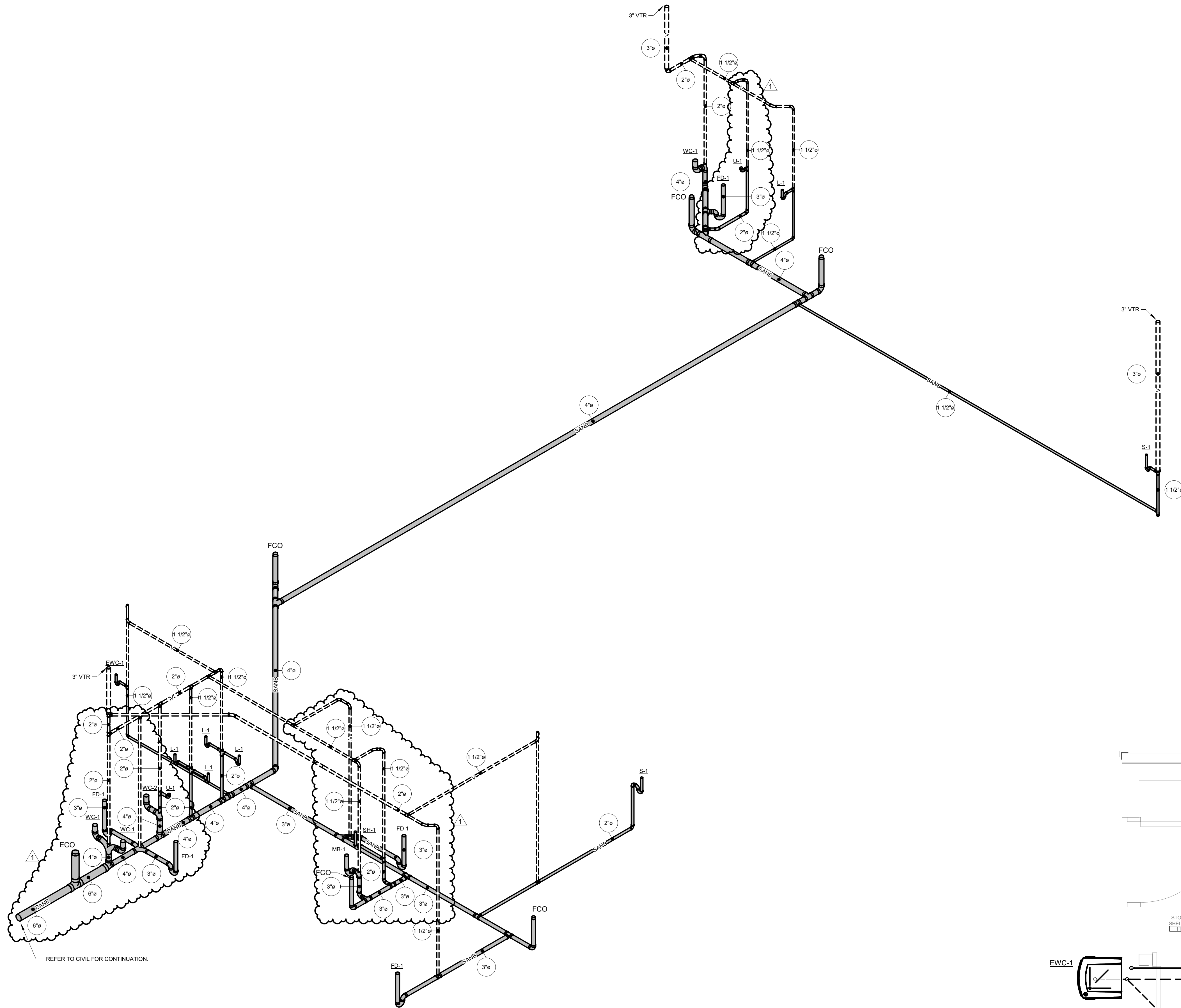


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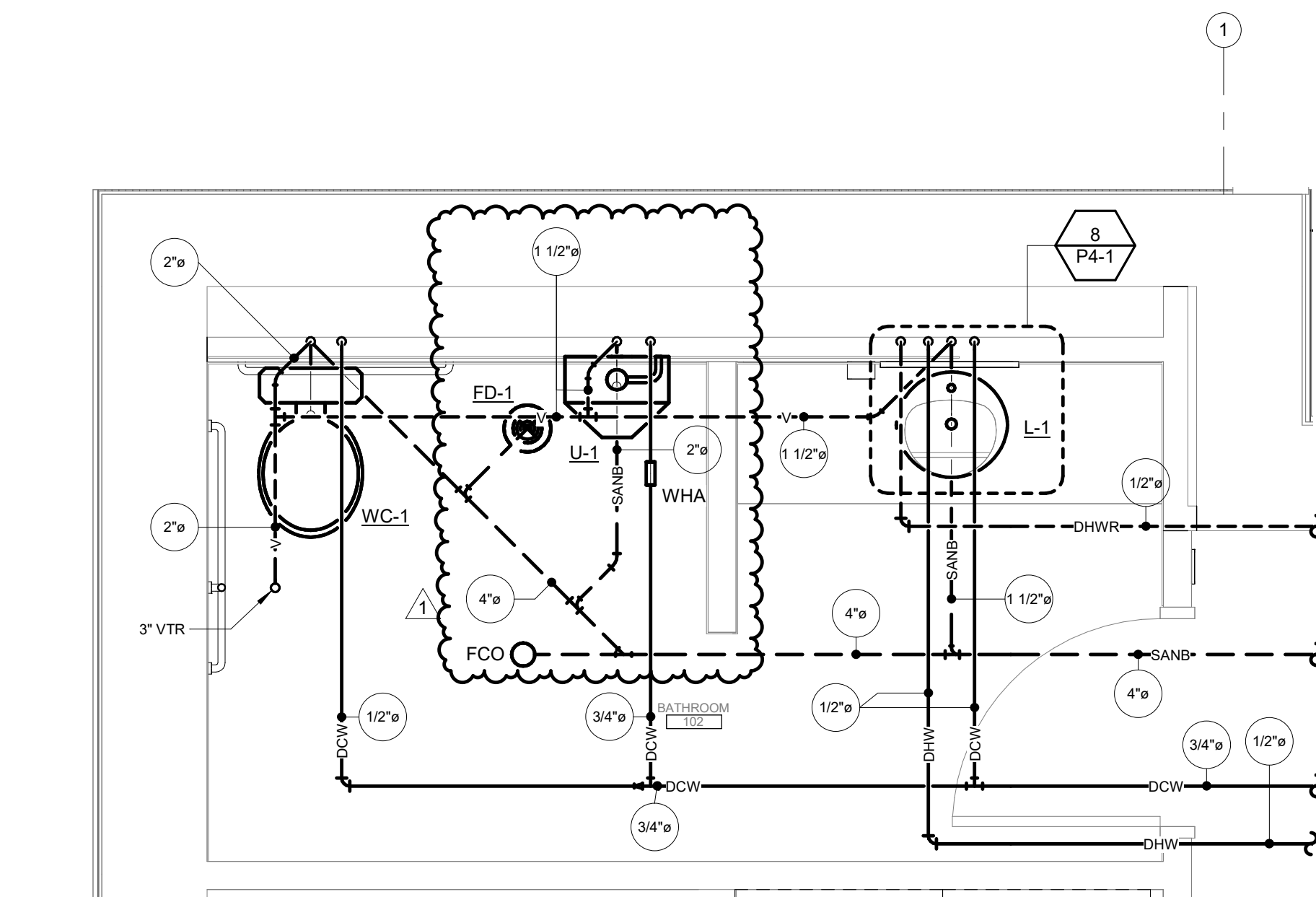
PROJECT NO.
22048.001
PLUMBING PLAN

SCALE
3/16" = 1'-0"

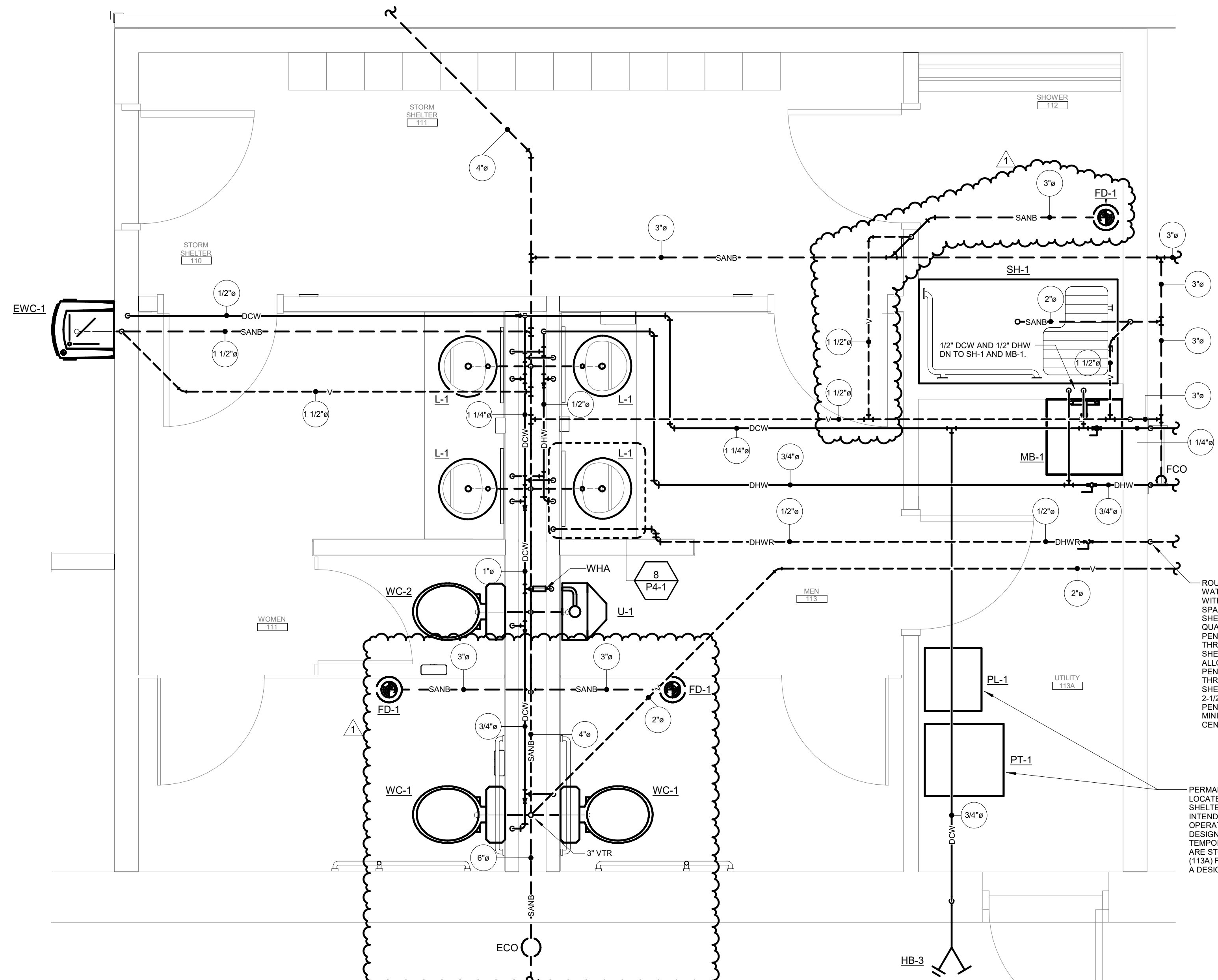
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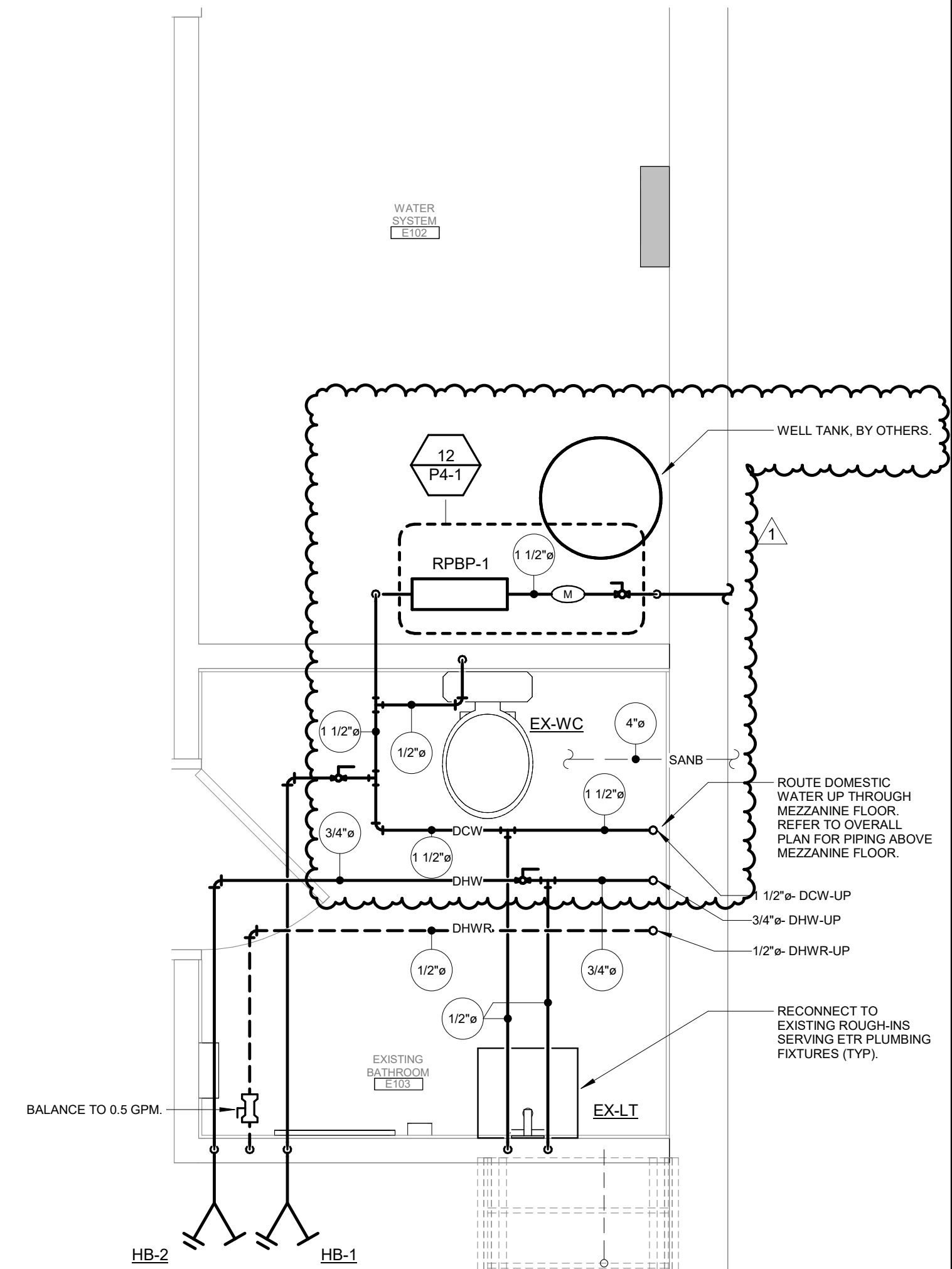
4 SANITARY ISOMETRIC
P3-1



3 ENLARGED BATHROOM PLUMBING PLAN
1/2" = 1'-0"



2 ENLARGED BATHROOMS PLUMBING PLAN
1/2" = 1'-0"



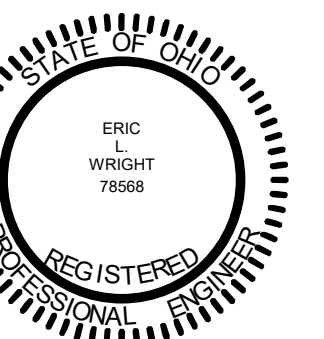
1 ENLARGED MECH ROOM/BATHROOM PLUMBING PLAN
1/2" = 1'-0"



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ENLARGED
PLUMBING PLANS
AND SANITARY ISO

SCALE
1/2" = 1'-0"

P3-1

SHOWER SCHEDULE														
REMARKS:														
1. PROVIDE WITH OPTIONAL FOLD-UP SEAT.														
2. PROVIDE WITH OPTIONAL GRAB BAR AND SOAP DISH.														
FIXTURE					SHOWER HEAD					MIXING VALVE		CONNECTIONS		
MARK	TYPE	MFR	MODEL	DRAIN	MFR	MODEL	HEAD	OUTLET	MFR	MODEL	DHW	DCW	SAN	VENT
SH-1	ADA ROLL-IN (DOME TOP)	AQUA BATH	C6536BF-FUS	INTEGRAL	CHICAGO FAUCETS	151-ACP	HAND WAND	2.5 GPM	CHICAGO FAUCETS	1905-VOCPC	1/2"	1/2"	2"	1-1/2"
REMARKS: 1, 2														

COUNTER MOUNTED LAVATORY SCHEDULE																
REMARKS:																
1. PROVIDE THERMOSTATIC MIXING VALVE: LEONARD VALVE 170-LF OR APPROVED EQUAL.																
		FIXTURE		FAUCET				HANDLES		CONNECTIONS						
MARK	TYPE	MFR	MODEL	DRAIN	MFR	MODEL	FAUCET	HANDLES	OUTLET	MFR	MODEL	DHW	DCW	SAN	VENT	REMARKS
L-1	INTEGRAL COUNTER - BY GC	BY GC	BY GC	BY GC	CHICAGO FAUCETS	2200-E70ABCP	SINGLE LEVER	LAMINAR	0.5 GPM	1/2"	1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1

STAINLESS STEEL SINK SCHEDULE														
MARK	FIXTURE				FAUCET					CONNECTIONS				
	TYPE	MFR	MODEL	STRAINER	MFR	MODEL	HANDLES	OUTLET	DHW	DCW	SAN	VENT		
S-1	INTEGRAL COUNTER - BY GC	BY GC	BY GC	J-35	CHICAGO FAUCETS	786-GN8AE36ABCP	4" WRISTBLADE	LAMINAR 1.5 GPM	1/2"	1/2"	1-1/2"	1-1/2"		

ELECTRIC WATER COOLER SCHEDULE														
		FIXTURE		FAUCET				HANDLES		CONNECTIONS				
MARK	TYPE	MFR	MODEL	STRAINER	MFR	MODEL	FAUCET	HANDLES	OUTLET	MFR	MODEL	DHW	DCW	SAN
EW-1	INTEGRAL COUNTER - BY GC	BY GC	BY GC	BY GC	CHICAGO FAUCETS	786-GN8AE36ABCP	4" WRISTBLADE	LAMINAR	1.5 GPM	1/2"	1/2"	1-1/2"	1-1/2"	1

WALL MOUNTED URINAL (FLUSH VALVE) SCHEDULE													
REMARKS:													
1. COORDINATE FLUSH VALVE HANDING WITH ARCHITECT.													
		FIXTURE			VALVE			CONNECTIONS			ADA COMPLIANT		REMARKS
MARK		MFR	MODEL		MFR	MODEL	FLOW RATE (GPF)	DCW	SAN	VENT			
U-1	AMERICAN STANDARD	WASHBROOK 6590.001EC	SLOAN	ROYAL 186-0.5 (MANUAL)			0.5	3/4"	2"	1-1/2"		YES	1

FLOOR MOUNTED FLUSH TANK WATER CLOSET SCHEDULE													
REMARKS:													
1. COORDINATE FLUSH VALVE HANDING WITH ARCHITECT.													
		FIXTURE		SEAT		CONNECTIONS				ADA COMPLIANT		REMARKS	
MARK	MFR	MODEL	MFR	MODEL	DCW	SAN	VENT						
WC-1	AMERICAN STANDARD	CADET 2467.016	AMERICAN STANDARD	5901.1	1/2"	4"	2"			YES			1
WC-2	AMERICAN STANDARD	CADET 2462.016	AMERICAN STANDARD	5901.1	1/2"	4"	2"			NO			1

MOP BASIN SCHEDULE													
REMARKS:													
1. FURNISH WITH HOSE AND HOSE BRACKET, MODEL 832AA.													
2. FURNISH WITH WALL GUARDS, MODEL MSG2424.													
FIXTURE				FAUCET				CONNECTIONS				REMARKS	
MARK	TYPE	MFR	MODEL	MFR	MODEL	HANDLES	OUTLET	DHW	DCW	SAN	VENT		
MB-1	TERRAZZO	FIAT	TSB3000 24"x24"x12"	CHICAGO	897-CCP	2-3/8" LEVER	3/4" HOSE THREAD	1/2"	1/2"	3"	1-1/2"	1, 2	

WATER HEATER (TANK) SCHEDULE													
REMARKS:													
1. FURNISH WITH RELIEF VALVE.													
2. FURNISH WITH CONDENSATE NEUTRALIZATION KIT.													
3. FURNISH WITH CONCENTRIC VENT KIT.													
						WATER							
MARK	MFR	MODEL	TYPE	FUEL TYPE	CAPACITY MBH	STORAGE CAPACITY (GAL.)	MAX GPH (@90 RISE)	EWI (°F)	LWT (°F)	VOLTS/PHASE	DISCONNECT	REMARKS	
DWH-1	A.O. SMITH	BTX-100	TANK	NATURAL GAS	100.0	75	129.0	45	135	120/1	EC	1, 2, 3	

RECIRCULATOR PUMP SCHEDULE													
MARK	MFR	MODEL	TYPE	CONNECTION	FLOW (GPM)	HEAD PRESSURE (FT)	HP	RPM	ELECTRICAL				
									VOLTS/PHASE	DISCONNECT BY			
RP-1	TACO	006B-IFC	CARTRIDGE	1/2"	1.5	8	1/40	3,250	120/1	EC			

PORTABLE FIXTURES SCHEDULE													
REMARKS:													
1. FURNISH WITH ALL WATER, CHEMICALS, SOAP, PAPER TOWELS, ETC AS REQUIRED FOR USE DURING THE DESIGN STORM EVENT.													
2. FURNISH WITH ALL WATER, CHEMICALS, TOILET PAPER, ETC AS REQUIRED FOR USE DURING THE DESIGN STORM EVENT.													
MARK	MFR	MODEL	TYPE	OPERATION	DIMENSIONS				REMARKS				
					WIDTH (IN)	DEPTH (IN)	HEIGHT (IN)						
PL-1	POLYJOHN	PSW3-1000	PORTABLE LAVATORY	FOOT PUMP	18	20	62	1					
PT-1	POLYJOHN	MF02-1000	PORTABLE TOILET	FOOT PUMP	23	25	22	2					

PORTAGE COUNTY WATER RESOURCES DEPARTMENT NOTES:

1. ALL WATER METERS SHALL BE PROVIDED BY MASTER METER. LOCAL DISTRIBUTOR IS FERGUSON WATERWORKS, 3845 GROVEPORT ROAD, COLUMBUS, OHIO 43207. PHONE: 614-497-2323. ALL OTHER METER VENDORS ARE PROHIBITED.
2. THE COMMERCIAL WATER METER SHALL BE 2" DIAMETER MASTER METER MODEL OCTAVE ULTRASONIC WITH MODEL VTR RADIO FREQUENCY REMOTE READABILITY AND SIZE APPLICABLE TO DESIGN DEMAND AND BE LOCATED WITHIN THE BUILDING STRUCTURE.
3. AFTER METER INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE OWNER AND SCHEDULE PORTAGE COUNTY WATER RESOURCES FOR INSTALLATION APPROVAL AND CUSTOMER START-UP.
4. ALL WATER INSPECTIONS AND METER INSTALLATION REQUESTS SHALL CONTACT THE PORTAGE COUNTY WATER RESOURCES PERMIT/PROJECT COORDINATOR AT 330-298-2086 TO SCHEDULE.

REDUCED PRESSURE BACKFLOW ASSEMBLY SCHEDULE									
REMARKS:									
1. FURNISH WITH AIR GAP ACCESSORIES.									
2. FURNISH WITH FULL PORT QT BALL VALVES.									
MARK	MANUFACTURER	MODEL	MAX FLOW (GPM)	PRESSURE DROP (PSI)	SIZE	SERVICE	REMARKS		
RBPB-1	ZURN	975XL2	100	14	1-1/2"	DOMESTIC	1, 2		

1" TEST TEE

SHUT-OFF VALVE (TYP)

RBPB-1

HUB DRAIN FUNNEL
FURNISHED INTEGRAL
WITH RBPB

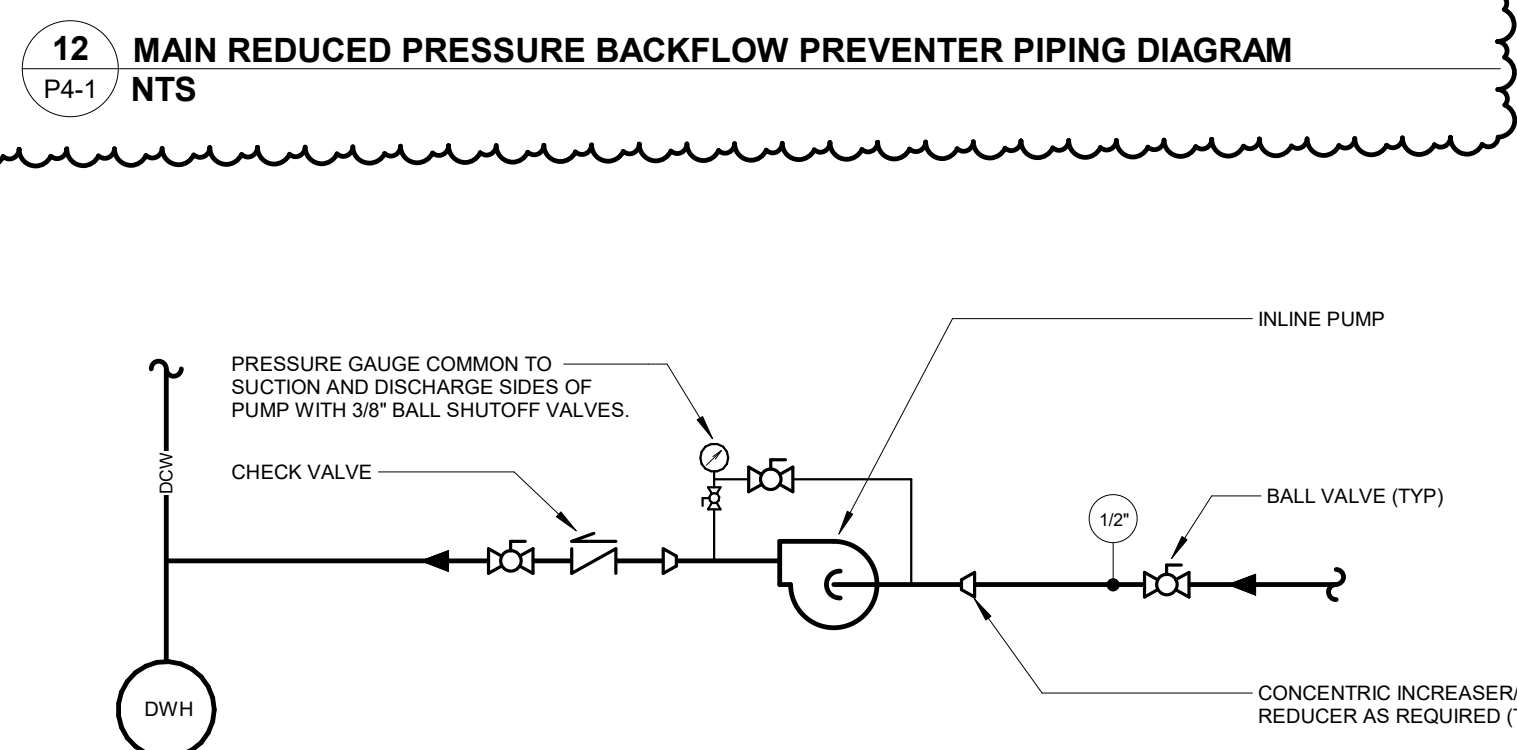
TO NEAREST
FLOOR DRAIN

WATER METER PER
WATER DEPARTMENT.

MAX. 3'-0" AFF
MIN. 3'-0" AFF

FROM WELL
SYSTEM BY
OTHERS.

TO LOAD



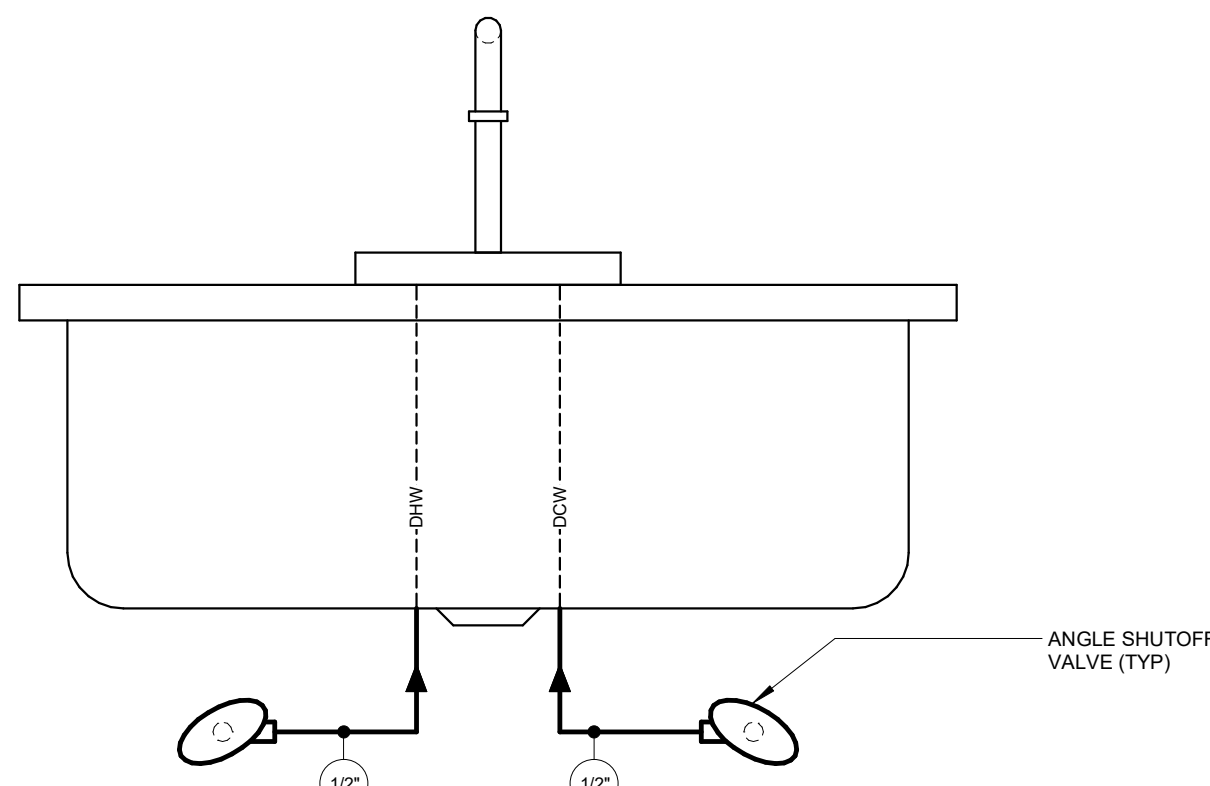
12 MAIN REDUCED PRESSURE BACKFLOW PREVENTER PIPING DIAGRAM
P4-1 NTS

ROOF DRAIN SCHEDULE				
MARK	MFR	MODEL	STRAINER SIZE	STORM SIZE
RO/ERD-1	JAY R. SMITH	1800	15" DIA.	4"

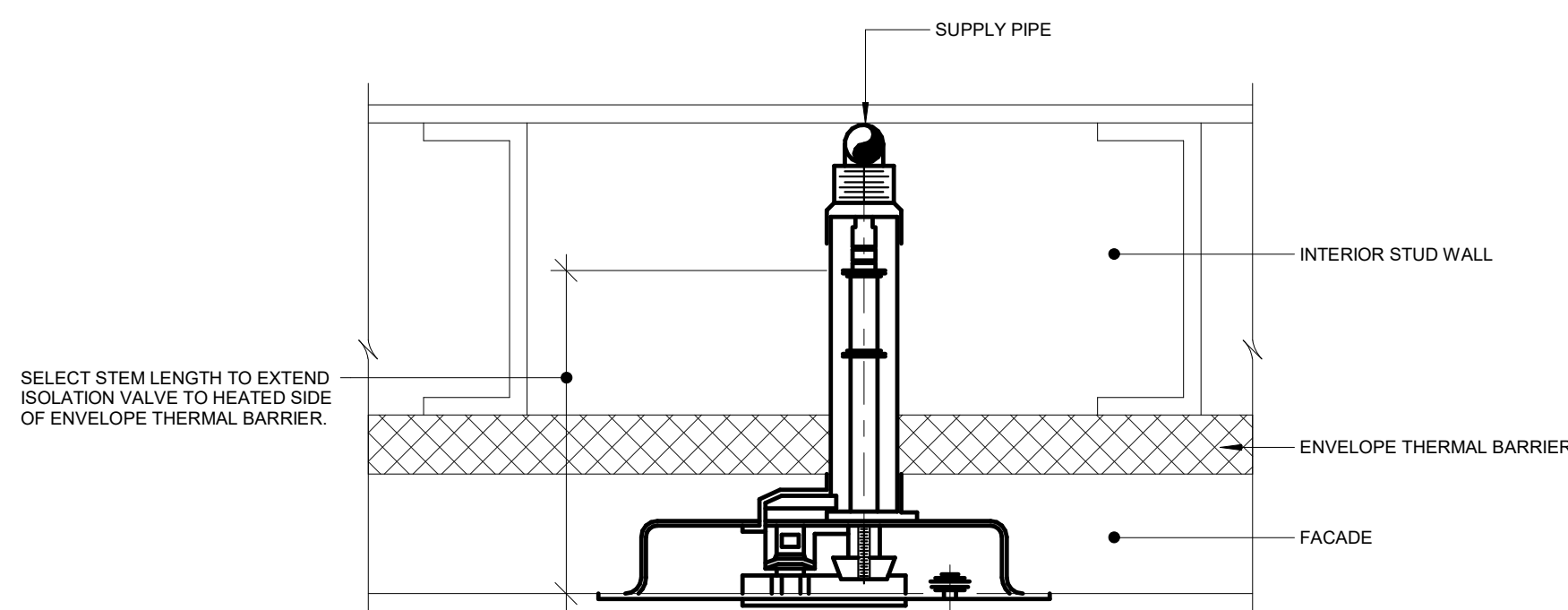
HOSE BIBB SCHEDULE				
MARK	MFR	MODEL	LOCATION	CONNECTIONS
HB-1	JAY R. SMITH	5672	INTERIOR, EXPOSED	1/2"
HB-2	JAY R. SMITH	5672	INTERIOR, EXPOSED	1/2"
HB-3	JAY R. SMITH	5619	EXTERIOR	3/4"

MISCELLANEOUS PLUMBING SCHEDULE				
MARK	MANUFACTURER	MODEL	CONNECTION SIZE	REMARKS
CO	JAY R. SMITH	4420-C1	MATCH PIPE SIZE	CLEANOUT
DSN	JAY R. SMITH	1775	MATCH PIPE SIZE	DOWNSPOUT NOZZLE
ECO	NEENAH	R-1970	MATCH PIPE SIZE	EXTERIOR CLEANOUT
FCO	JAY R. SMITH	4031	MATCH PIPE SIZE	FLUSH WITH FLOOR CLEANOUT
WHA	JAY R. SMITH	5005	3/4"	WATER HAMMER ARRESTOR

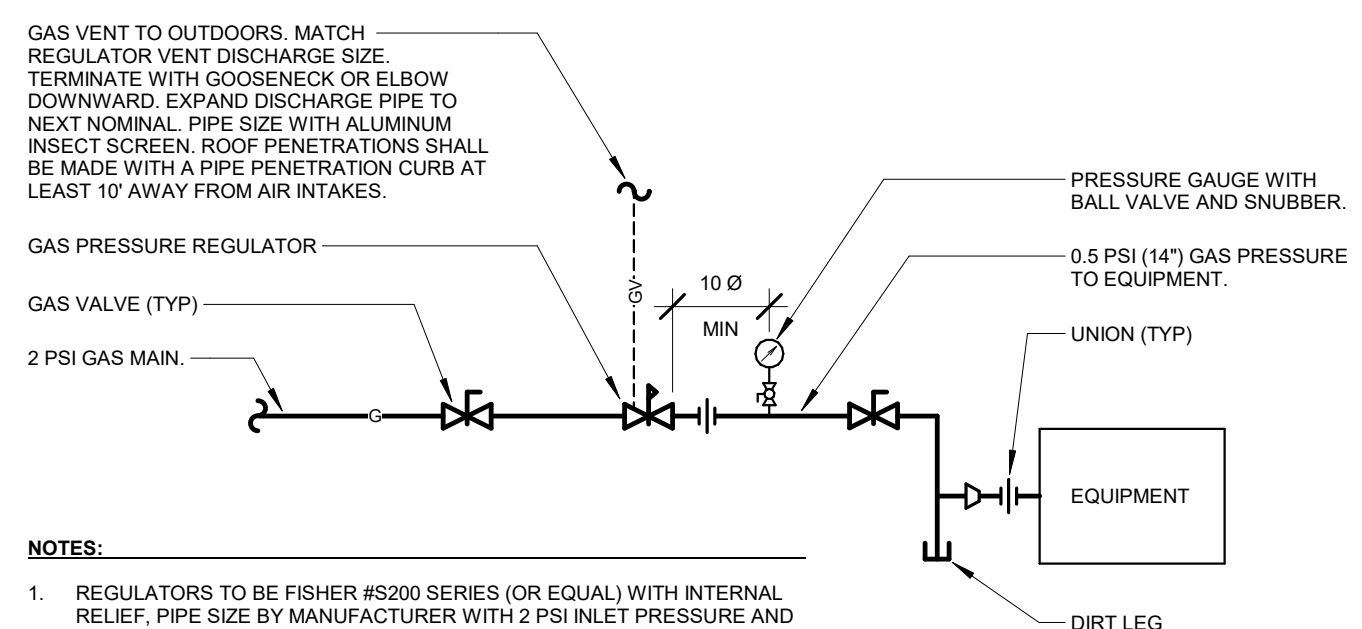
FLOOR DRAIN SCHEDULE					
REMARKS:					
1. FURNISH WITH TRAP SEAL DEVICE.					
MARK	MANUFACTURER	MODEL	STRAINER SIZE	CONNECTION SIZE	REMARKS
FD-1	JAY R. SMITH	2110	8"	4"	- 1
FD-1	JAY R. SMITH	2110	8"	4"	- 1
FD-1	JAY R. SMITH	2110	8"	4"	- 1
FD-1	JAY R. SMITH	2110	8"	4"	- 1



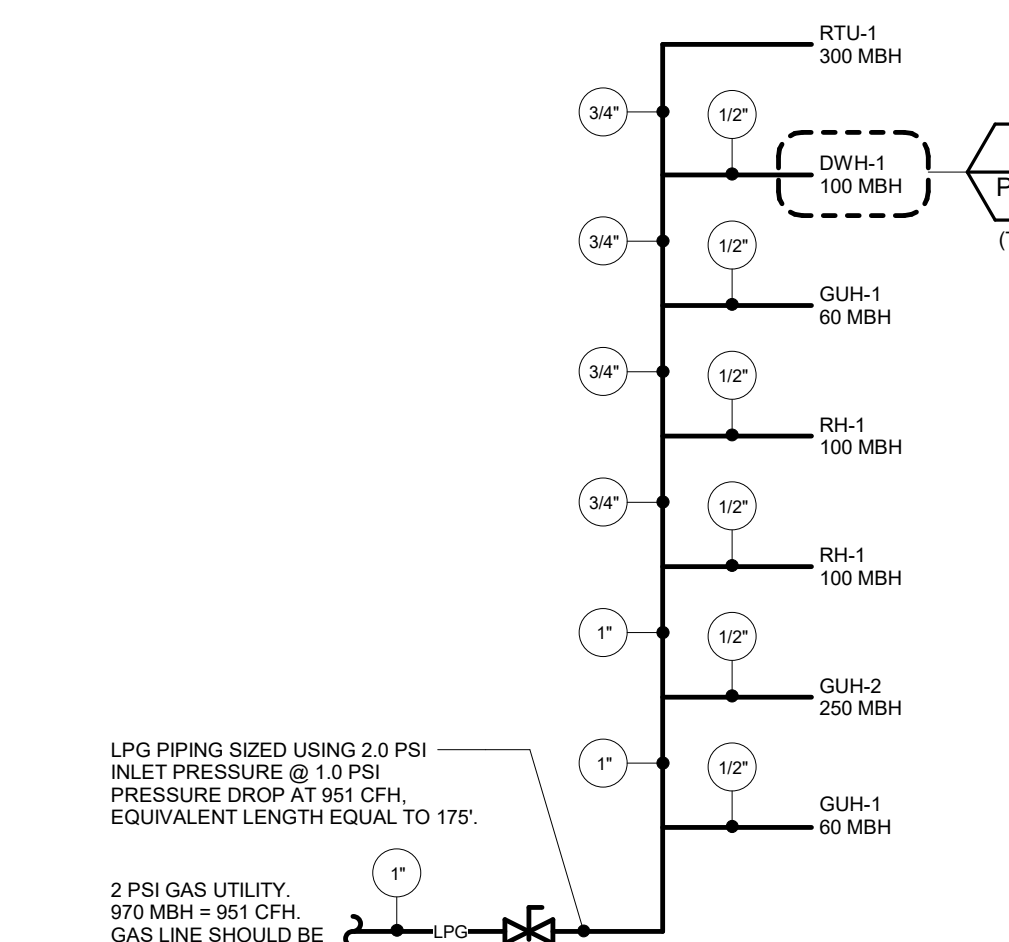
7 LAVATORY / SINK PIPING DETAIL
P4-1 NTS



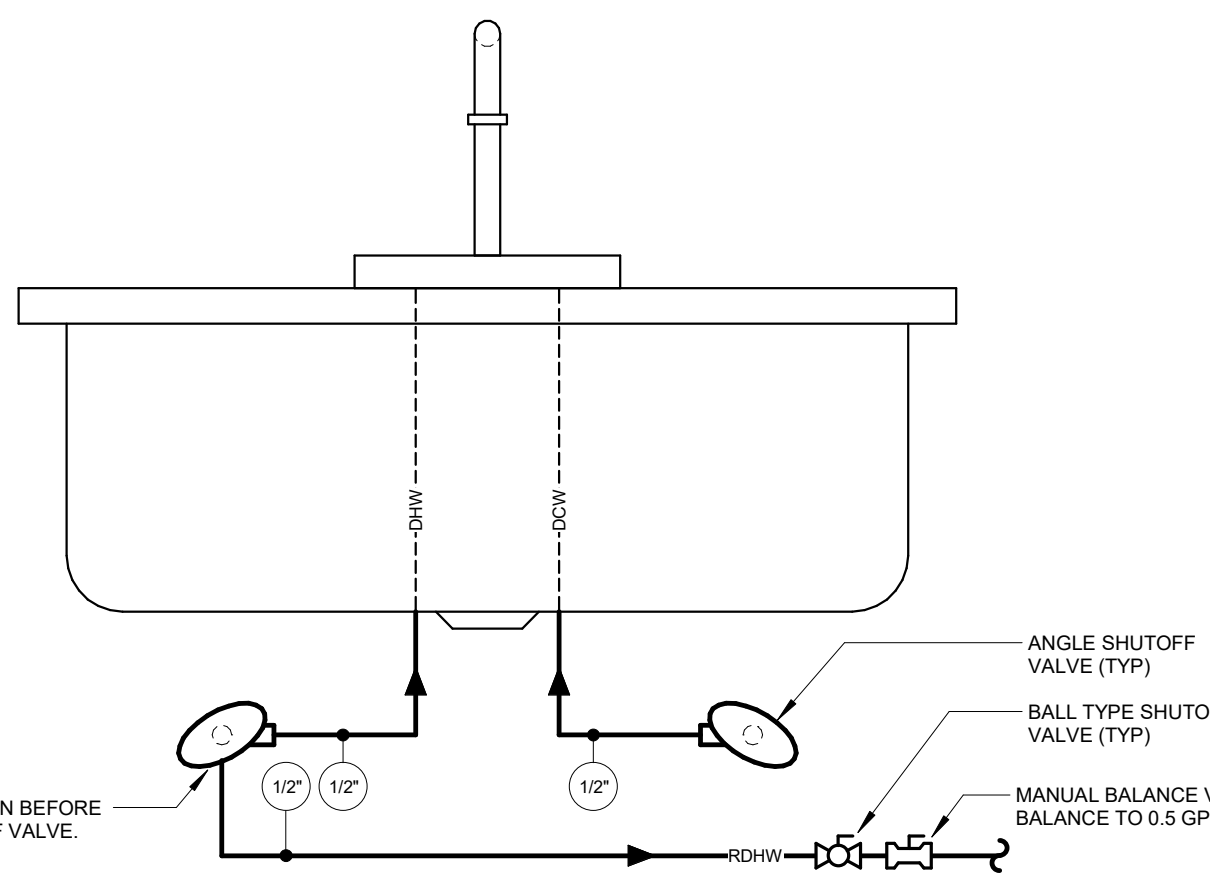
11 NON-FREEZE WALL HYDRANT DETAIL
P4-1 NTS



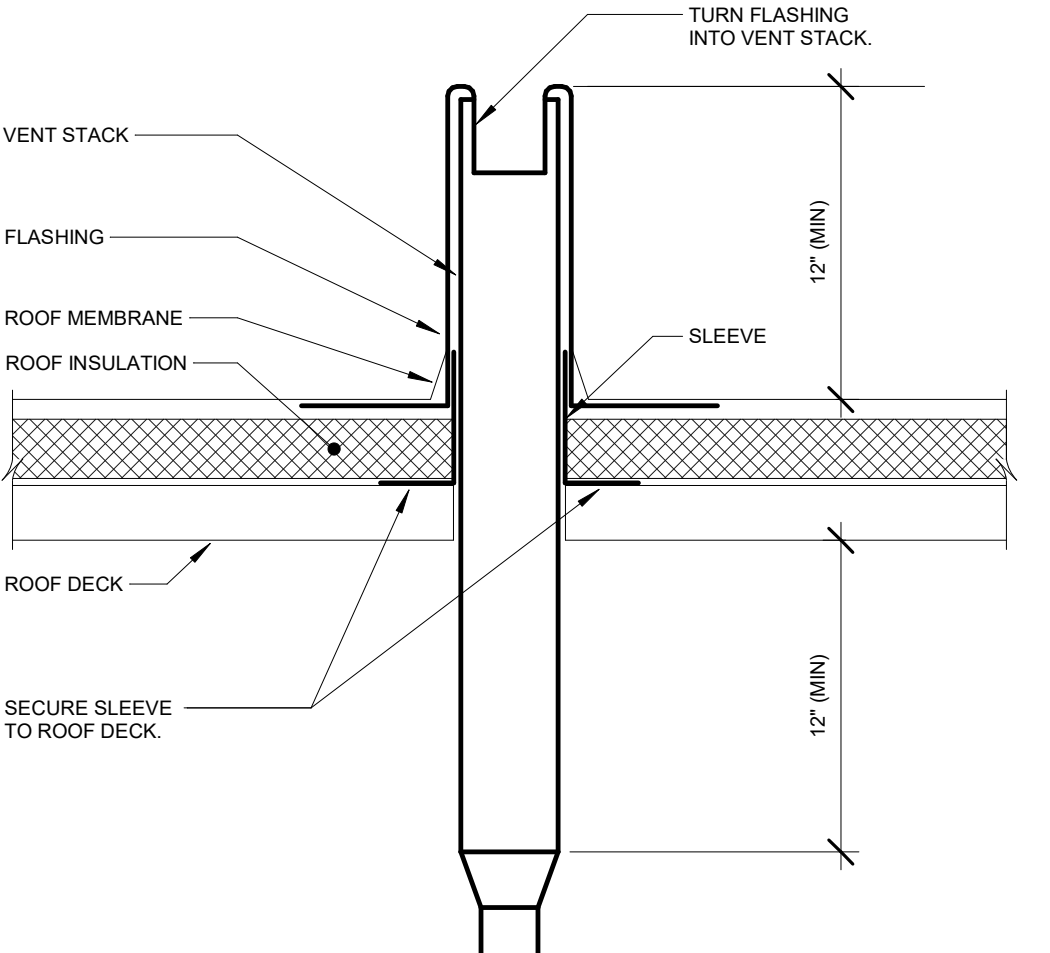
6 NATURAL GAS EQUIPMENT CONNECTION (WITH REGULATOR) DETAIL
P4-1 NTS



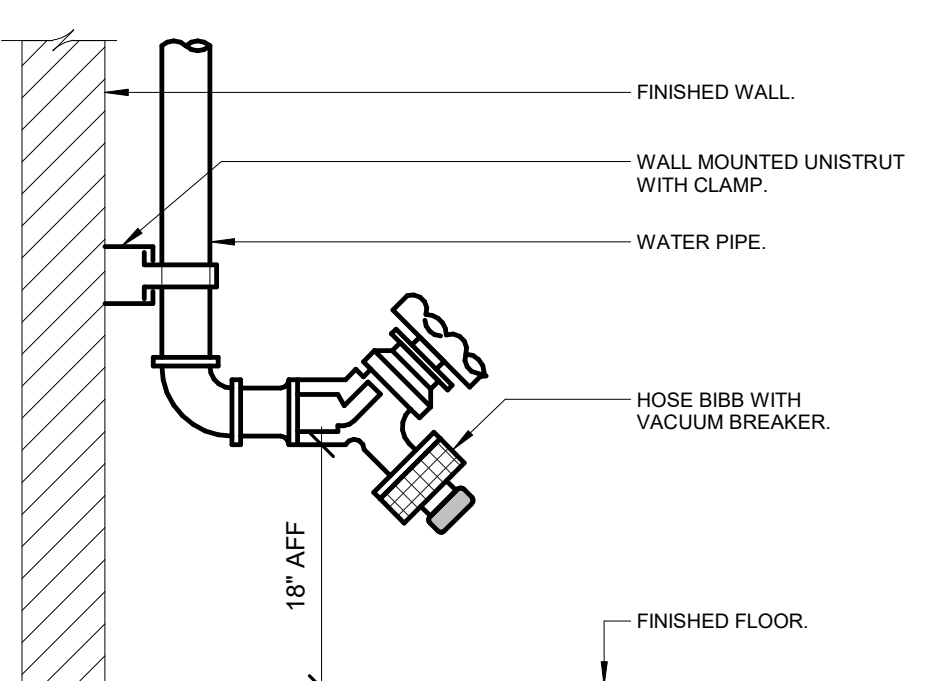
5 NATURAL GAS DIAGRAM
P4-1 NTS



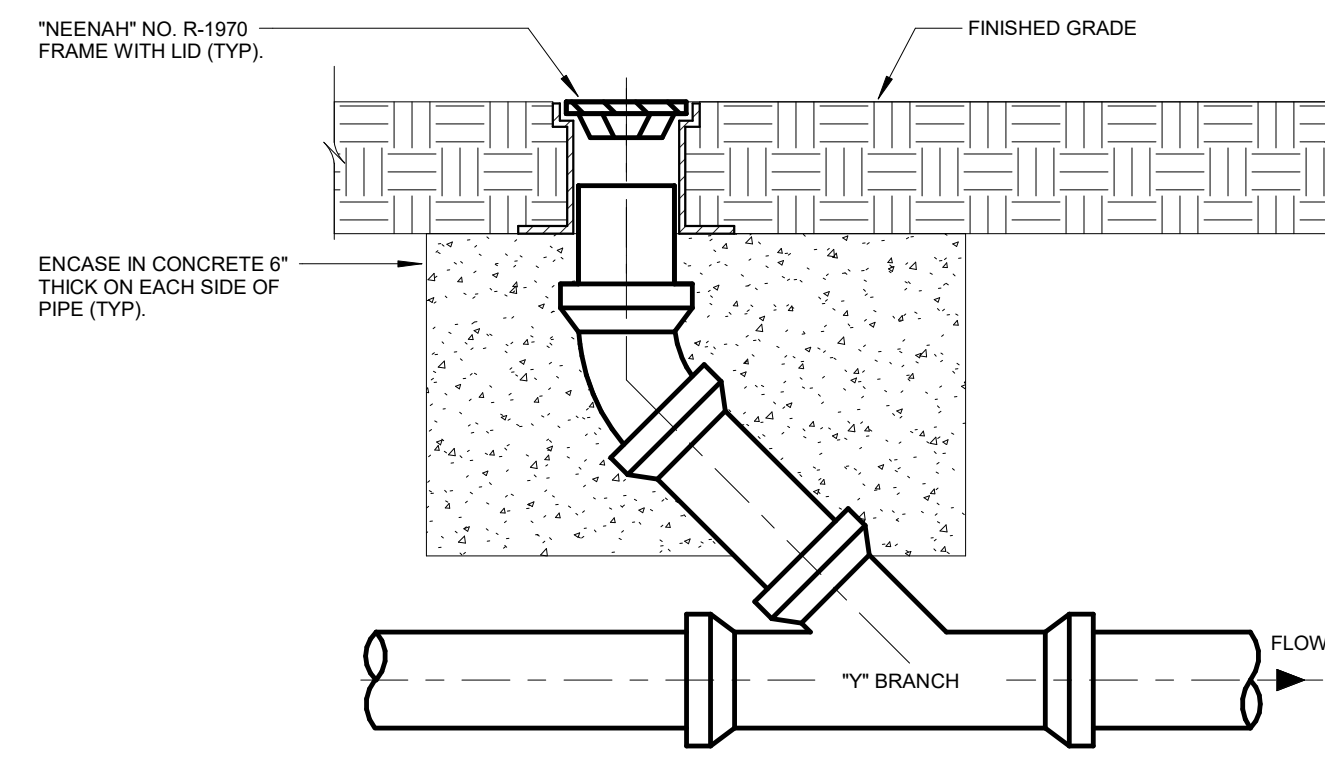
8 LAVATORY / SINK PIPING DETAIL - WITH RECIRCULATING DHW
P4-1 NTS



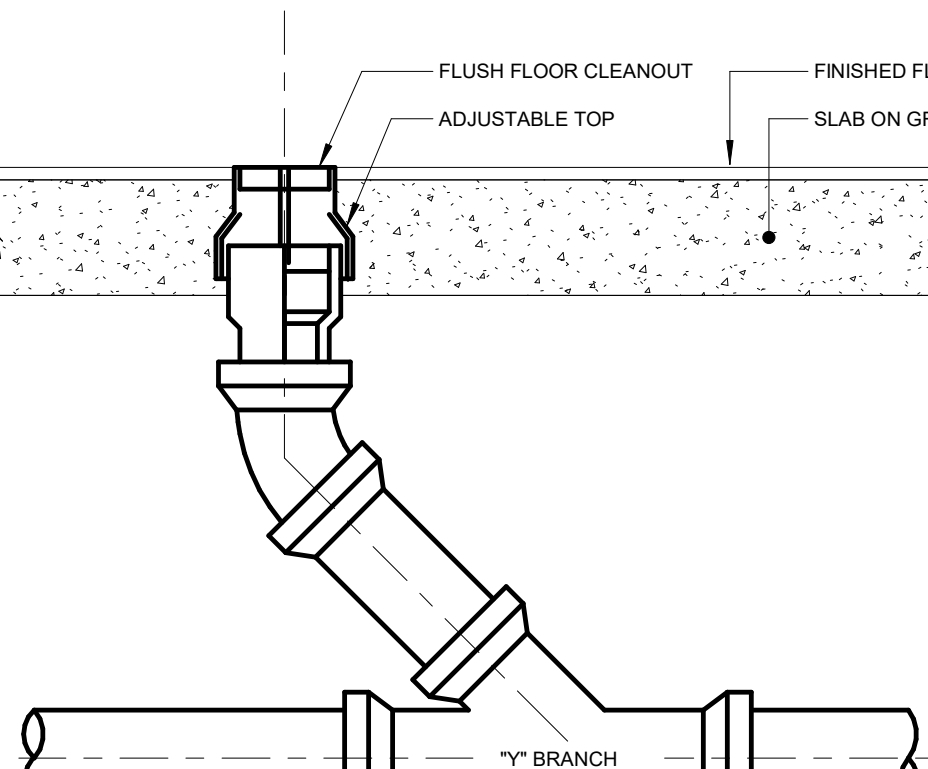
4 VENT THRU ROOF INSTALLATION DETAIL (FLAT ROOF)
P4-1 NTS



3 INTERIOR WALL MOUNTED HOSE BIBB DETAIL
P4-1 NTS



2 EXTERIOR FLOOR CLEANOUT DETAIL
P4-1 NTS



1 INTERIOR FLOOR CLEANOUT DETAIL
P4-1 NTS



Portage County
Internal Services

Portage County
Emergency
Operations
Center

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PROJECT NO.
22048.001

PLUMBING
SCHEDULES AND
DETAILS