



ABBREVIATIONS

Table of abbreviations for plumbing and HVAC systems, including AAV, ACU, AD, AE, AFF, AHU, AS, AV, AW, @, B, BAS, BFP, BHP, BLDG, BOP, BO, BTUH, CD, CH, CHR, CHE, CLG, COND, COP, CT, CU, CV, CW, DC, DF, DI, DN, DOAS, DS, DTR, DTS, DW, EA, EC, EFF, EL, ER, ET, EWC, EWH, EWT, EX, EXT, FCO, FCU, FD, FDC, FDV, FLA, FOR, FOS, FOV, FPM, FS, FSD, FT, FFT, FTR, FW, GAL, GC, GPM, GR, GRH, GS, GUH, GV, GW, GWH, H, HB, HC, HCWR, HD, HF, HPR, HPS, HR, HW, HWR, HWS, and HX.

NOTICE TO CONTRACTORS: OCCUPIED FACILITY

EXISTING FACILITY IS PARTIALLY OCCUPIED. CONTRACTOR SHALL COORDINATE INTERRUPTIONS OF SERVICE WITH OWNER AND NOTIFY OCCUPANTS 48 HOURS BEFORE SERVICE INTERRUPTION. IF ACCESS TO OCCUPIED SPACE IS REQUIRED, ACCESS SHALL BE COORDINATED WITH OWNER AND OCCUPANTS AFFECTED SHALL BE GIVEN 48 HOURS NOTICE.

GENERAL NOTES

- GENERAL PLUMBING REQUIREMENTS
1. Materials, equipment, and systems shall meet all pertinent requirements of the Underwriters Laboratory (UL), the American Society for Testing Materials (ASTM), American Water Works Association (AWWA), American Gas Association (AGA), National Fire Protection Association (NFPA), and other nationally recognized agencies...
2. Bidders shall be licensed contractors in accordance with local and state laws.
3. Provide and install LavGuard by Truebro, Inc. ADA compliant, vinyl coated with standard white finish, foam insulation on all exposed plumbing waste and supply connectors underneath all lavatories...
4. All installed systems, devices and related items shall be tested in place on site.
5. Contractor shall guarantee all work for which materials are furnished, fabricated or field erected, all factory assembled equipment for which no specific manufacturer's guarantee is furnished...
6. The systems shown on the drawings shall be provided to serve all fixtures, equipment, and areas within the Building and 5'-0" beyond building unless noted otherwise.
7. All permits and fees required for the work shall be secured and paid for by the plumbing contractor and included in bid price.
8. Anything drawn or specified on these plans shall not be construed to conflict with any local, municipal or state law, regulation or ordinance which governs the installation of any plumbing or related work.
9. Where job conditions require changes from the contract documents that do not change the scope of installation or nature of work required, the contractor shall make such changes without additional cost to the owner.
10. All equipment and fixtures shall be new and unused and installed in strict conformance to manufacturer's recommendations.
11. Arrange for chases, slots, and openings in other building components to allow for plumbing installations.
12. Do not endanger or damage installed work through procedures and processes of cutting and patching.
13. Coordinate the installation of required supporting devices and sleeves to be set in poured in place concrete and other structural components.
14. Sequence, coordinate, and integrate installations of plumbing materials and equipment for efficient flow of the work.
15. Where mounting heights are not detailed or dimensioned, install plumbing services and overhead equipment to provide the maximum headroom possible while coordinating with other trades.
16. Install plumbing equipment to facilitate maintenance and repair or replacement of equipment components.
17. Coordinate the installation of plumbing materials and equipment above ceilings with suspension system, light fixtures, ductwork, conduit, and other installations.
18. All pipes shall be of the size given on the drawings.
19. Coordinate connection of plumbing systems with exterior underground and overhead utilities and services.
20. Plumbing service rough-in shall be based on information, drawings, equipment cuts, etc. prepared by the equipment supplier.
21. Actual locations and mounting methods for fixtures and penetrations are subject to Architect's approval.
22. The hot and cold water supply line branches for all lavatories and sinks shall have Josam or Zum water hammer arresters installed on the high point at the end of each branch line.
23. All above-ground water supply piping shall be Type L, rigid copper.
24. Flush and sterilize water system after connections are made in accordance with local regulations.
25. All sanitary and storm waste piping below slab shall be cast-iron or solid-wall PVC.
26. All condensate drain piping and indirect drains shall be DW seamless copper tubing with soldered drainage fittings.
27. All floor penetrations and all exterior penetrations shall be completely waterproofed, firesafed, and sealed.
28. Existing piping shown on drawings is based on original drawings, and location, mounting heights and points of connection must be verified in field.
29. In general, do not abandon old piping - remove and dispose of properly, unless inaccessible or under slab, or unless noted otherwise.

PLUMBING SYMBOLS LIST

Table of plumbing symbols including SAN, V, CW, HW, SW, CR, CWS, CWR, HWS, HWR, G, PG, RS/RL, CA, F, U, R, S, N, W, T, and W symbols with their corresponding descriptions.

NOTE: ALL SYMBOLS ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL NOTE THAT NOT ALL SYMBOLS MAY BE USED, AS WELL AS NOT ALL SYMBOLS USED MAY BE LISTED. REFER TO PROJECT SPECIFIC NOTES FOR ADDITIONAL INFORMATION.

DRAWING CONVENTIONS

- NEW WORK - HEAVY AND SOLID LINES
EXISTING TO REMAIN - LIGHT AND SOLID LINES
REMOVE EXISTING - HEAVY AND DASHED LINES

NOTICE TO CONTRACTORS

ALL CONTRACTORS PRIOR TO BID SUBMISSION PROCESS SHALL VISIT PROPOSED WORK SITE AND FIELD VERIFY ALL EXISTING CONDITIONS. ANY CONDITIONS THAT DIFFER FROM THAT SHOWN ON THESE PLANS SHALL BE REPORTED TO ARCHITECT/ENGINEER SO THAT NEW AND REVISED BID DRAWINGS OR INFORMATION MAY BE ISSUED. MODIFICATIONS TO SCOPE OF WORK WHICH RESULT FROM CONTRACTORS NEGLECT TO VISIT THE SITE PRIOR TO SUBMITTING BID, SHALL BE THE CONTRACTORS SOLE RESPONSIBILITY.

Professional Certification:

Table for professional certification with columns for Name, Title, and Signature.

100% Bid Set 2023.07.27

Table for drawing revision with columns for No., Issue / Revision, and Date.

Sheet Number

P-001
Abbreviations,
General Notes,
Symbols List

Project Number IDC #23-010 File Name







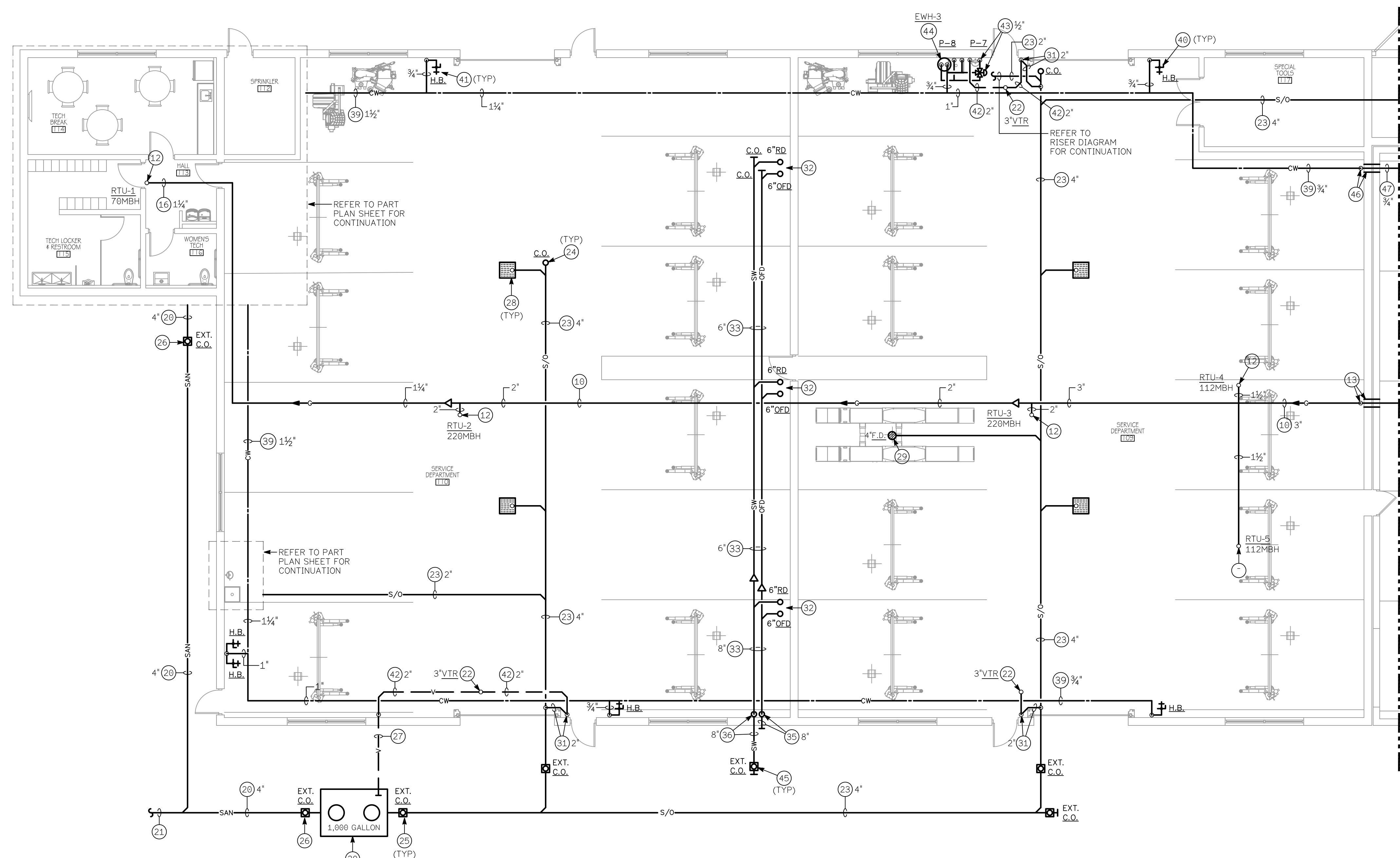


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No. Issue / Revision	Date
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Plot Date:	-

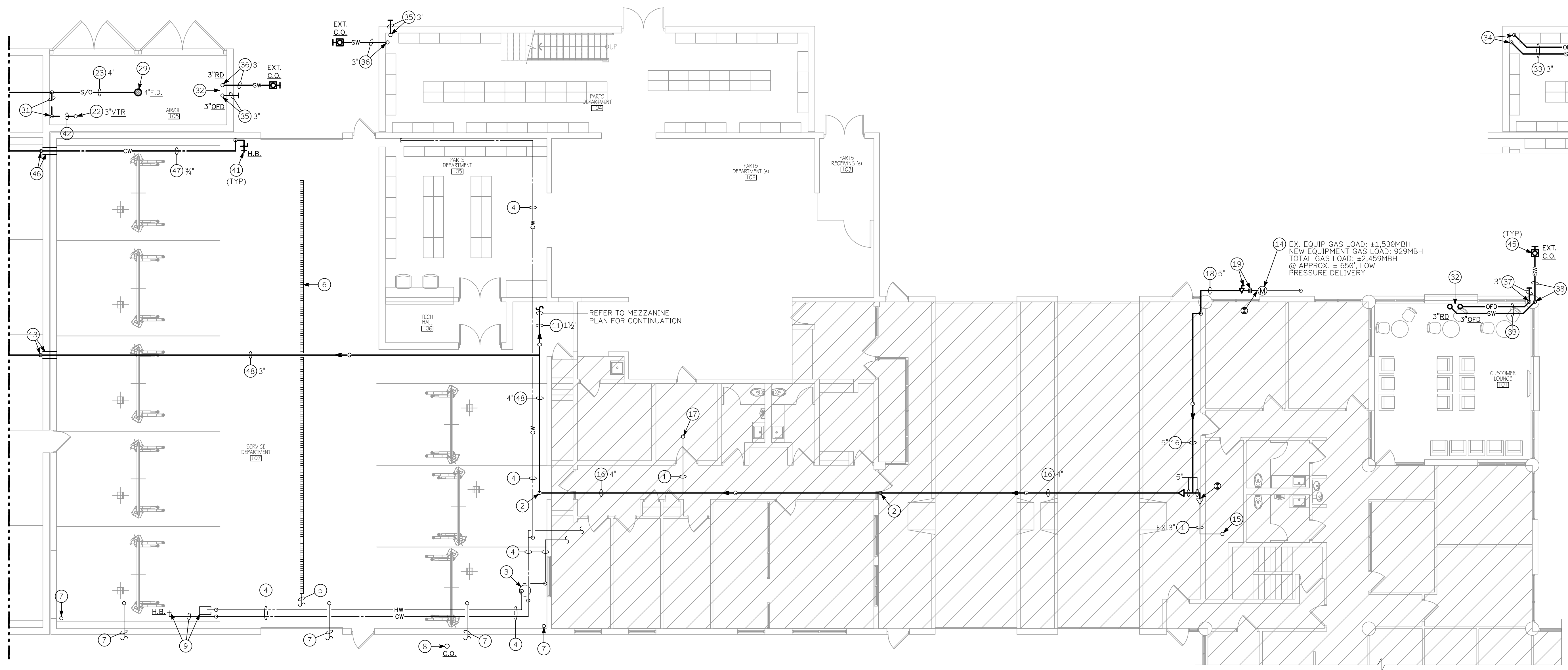
Sheet Number	
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Sheet Title	
<b>FLOOR PLAN - NEW WORK</b>	
Project Number	IDC #23-010
File Name	

**DRAWING NOTES**

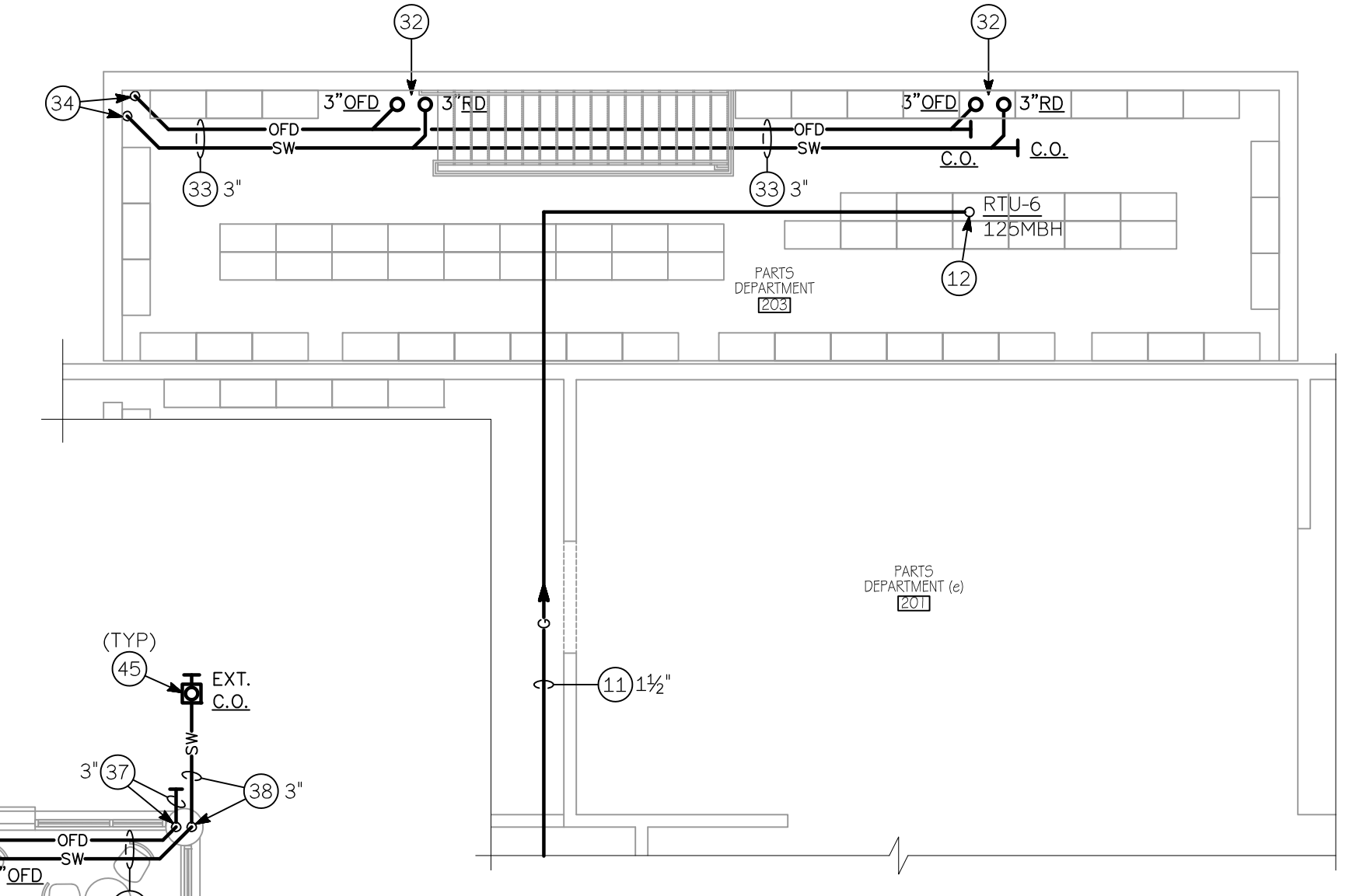
- EXISTING GAS PIPING SUPPORTED FROM STRUCTURE ABOVE TO REMAIN.
- GAS PIPING FROM HIGH ABOVE DROPPING DOWN ALONG WALL AND THRU WALL TO ABOVE CEILING.
- EXISTING WATER HEATER TO REMAIN.
- EXISTING DOMESTIC WATER PIPING SUPPORTED FROM STRUCTURE ABOVE TO REMAIN.
- APPROXIMATE LOCATION OF EXISTING SAND/OIL PIPING BELOW FLOOR TO REMAIN. CONTRACTOR TO VERIFY EXACT LOCATION, SIZE, INVERT, ETC., AND DIRECTION OF FLOW PRIOR TO WORK BEING PERFORMED.
- EXISTING TRENCH DRAIN TO REMAIN. CONTRACTOR TO CLEAN AND INSPECT FOR ANY BLOCKAGES.
- EXISTING ROOF AND OVERFLOW DRAIN TO REMAIN.
- EXISTING CLEANOUT TO REMAIN.
- EXISTING SINK, HOSE BIBB AND DOMESTIC WATER PIPING TO REMAIN.
- GAS PIPING SUPPORTED HIGH IN SERVICE DEPARTMENT FROM STRUCTURE ABOVE.
- GAS PIPING SUPPORTED HIGH IN MEZZANINE FROM STRUCTURE ABOVE.
- GAS PIPING UP THRU ROOF IN PITCH POCKET.
- GAS PIPING SUPPORTED HIGH FROM STRUCTURE ABOVE DROPPING DOWN WALL AND THRU WALL IN PIPE SLEEVE TO LOWER CEILING IN EXISTING SERVICE DEPARTMENT.
- EXISTING GAS METER ON EXTERIOR WALL TO REMAIN.
- EXISTING 3" GAS LINE UP THRU ROOF TO SERVE ROOFTOP UNITS ON ROOF.
- GAS PIPING SUPPORTED HIGH FROM STRUCTURE ABOVE.
- EXISTING GAS PIPING UP THRU ROOF TO ROOFTOP UNIT TO REMAIN.
- EXISTING GAS PIPING CONNECTED TO EXISTING GAS METER. COORDINATE WITH LOCAL GAS COMPANY.
- GAS COCK AND UNION AT CONNECTION TO EQUIPMENT.
- SANITARY PIPING BELOW GRADE SLOPED AT MINIMUM 1/8" PER FOOT.
- REFER TO CIVIL DRAWING FOR CONTINUATION.
- SANITARY VENT PIPING UP THRU ROOF.
- SAND/OIL PIPING BELOW FLOOR SLAB/GRADE SLOPED AT MINIMUM 1/8" PER FOOT. ALL 2" SAND/OIL PIPING BELOW FLOOR SLAB/GRADE SHALL BE SLOPED AT 1/4" PER FOOT.
- SAND/OIL CLEANOUT IN FLOOR (TYPICAL).
- EXTERIOR SAND/OIL CLEANOUT (TYPICAL).
- EXTERIOR SANITARY CLEANOUT.
- SANITARY VENT PIPING BELOW GRADE SLOPED UP TOWARDS BUILDING.
- 24"x24" AREA DRAIN WITH HEAVY-DUTY CAST IRON GRATE AND 4" OUTLET. WATTS MODEL FD-530 OR APPROVED EQUAL (TYPICAL).
- 4" FLOOR DRAIN WITH DEEP SEAL TRAP.
- 1,000 GALLON SAND/OIL INTERCEPTOR LOCATED BELOW GRADE. UNIT SHALL BE JENSEN PRECAST MODEL JP1000EF-50, MARYLAND CONCRETE, OLD CASTLE OR APPROVED EQUAL WITH 4" CONNECTIONS AND H-20 HEAVY-DUTY CONSTRUCTION. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODES. EARTH COVER SHALL NOT EXCEED 5'-0" OR PER LOCAL CODES. COORDINATE WITH CIVIL DRAWINGS.
- SANITARY VENT PIPING DROPPING DOWN WALL EXPOSED TO BELOW FLOOR SLAB AND OVER TO TOP OF SAND/OIL MAIN.
- STORM AND OVERFLOW PIPING UP THRU ROOF, SIZE AS INDICATED. COORDINATE EXACT HEIGHT OF OVERFLOW PIPE ABOVE ROOF WITH STRUCTURAL ENGINEER.
- STORM WATER AND OVERFLOW PIPING SUPPORTED HIGH FROM TOP CHORD OF ROOF JOIST AND SLOPED AT MINIMUM 1/8" PER FOOT.
- STORM AND OVERFLOW PIPING DOWN ALONG WALL TO FIRST FLOOR.
- OVERFLOW PIPING DOWN ALONG WALL AND THRU EXTERIOR WALL TO DISCHARGE NOZZLE AT 12" ABOVE GRADE. WADE MODEL 3940 OR APPROVED EQUAL WITH NICKLE FINISH.
- STORM WATER PIPING DOWN ALONG WALL AND THRU EXTERIOR WALL WITH CLEANOUT AT BASE OF RISER AND EXTENDED OUT TO 5'-0" BEYOND BUILDING.
- OVERFLOW PIPING DOWN THRU COLUMN AND OUT THRU WALL TO DISCHARGE NOZZLE AT 12" ABOVE GRADE. WADE MODEL 3940 OR APPROVED EQUAL WITH NICKLE FINISH.
- STORM WATER PIPING DOWN THRU COLUMN AND OUT THRU WALL WITH CLEANOUT AT BASE OF RISER AND EXTENDED OUT TO 5'-0" BEYOND BUILDING.
- DOMESTIC WATER PIPING SUPPORTED FROM STRUCTURE ABOVE HIGH IN SERVICE DEPARTMENT.
- BALL VALVE (TYPICAL).
- DOMESTIC COLD WATER PIPING DOWN ALONG WALL EXPOSED TO 24" ABOVE FLOOR WITH INTERIOR WALL MOUNTED HOSE BIBB (SPIGOT) WITH VACUUM BREAKER AND HOSE END CONNECTION (TYPICAL). WATTS SC8 OR APPROVED EQUAL.
- SANITARY VENT PIPING SUPPORTED FROM STRUCTURE ABOVE (TYPICAL).
- 1/2" DOMESTIC HOT/COLD WATER PIPING CONNECTED TO ANSI Z358.1 LISTED TEMPERING VALVE SET AT 60°F FOR EYE WASH. EXTEND 1/2" PIPING DOWN ALONG WALL TO CONNECTION OF EYE WASH.
- ELECTRIC WATER HEATER MOUNTED ON PLATFORM ON WALL AT APPROXIMATELY 10'-0" ABOVE FLOOR, IN FULL SIZE DRAIN PAN. REFER TO SCHEDULE.
- EXTERIOR STORM WATER CLEANOUT (TYPICAL).
- DOMESTIC WATER PIPING SUPPORTED FROM STRUCTURE ABOVE DROPPING DOWN WALL AND THRU WALL IN PIPE SLEEVE TO LOWER CEILING IN EXISTING SERVICE DEPARTMENT.
- DOMESTIC WATER PIPING SUPPORTED FROM STRUCTURE ABOVE HIGH IN EXISTING SERVICE DEPARTMENT.
- GAS PIPING SUPPORTED FROM STRUCTURE ABOVE HIGH IN EXISTING SERVICE DEPARTMENT.



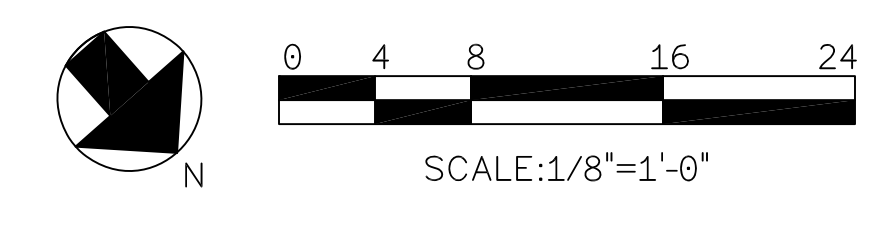
**FLOOR PLAN-NEW WORK**  
SCALE: 1/8" = 1'-0"



**FLOOR PLAN-NEW WORK**  
SCALE: 1/8" = 1'-0"



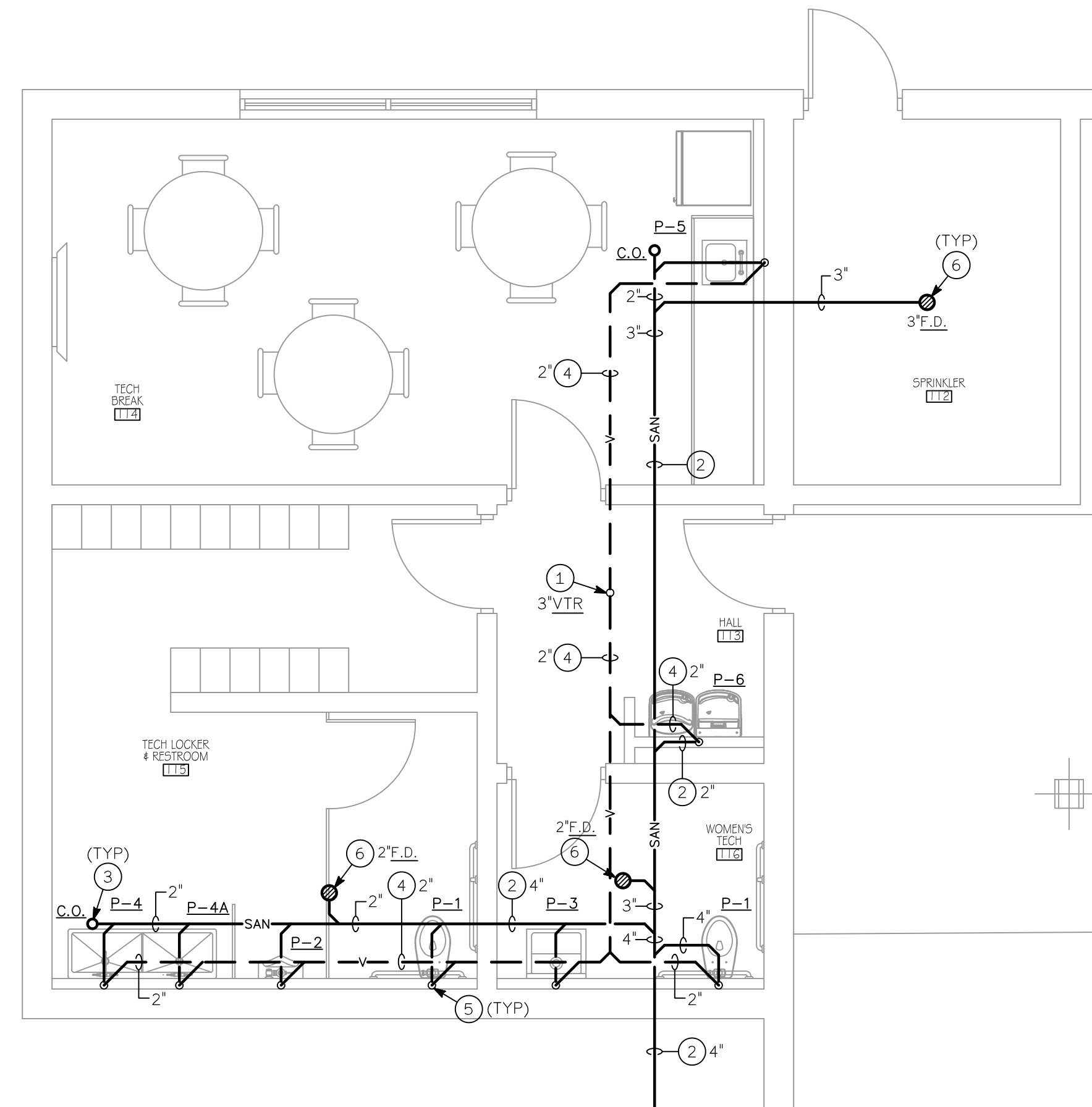
**MEZZANINE PLAN-NEW WORK**  
SCALE: 1/8" = 1'-0"



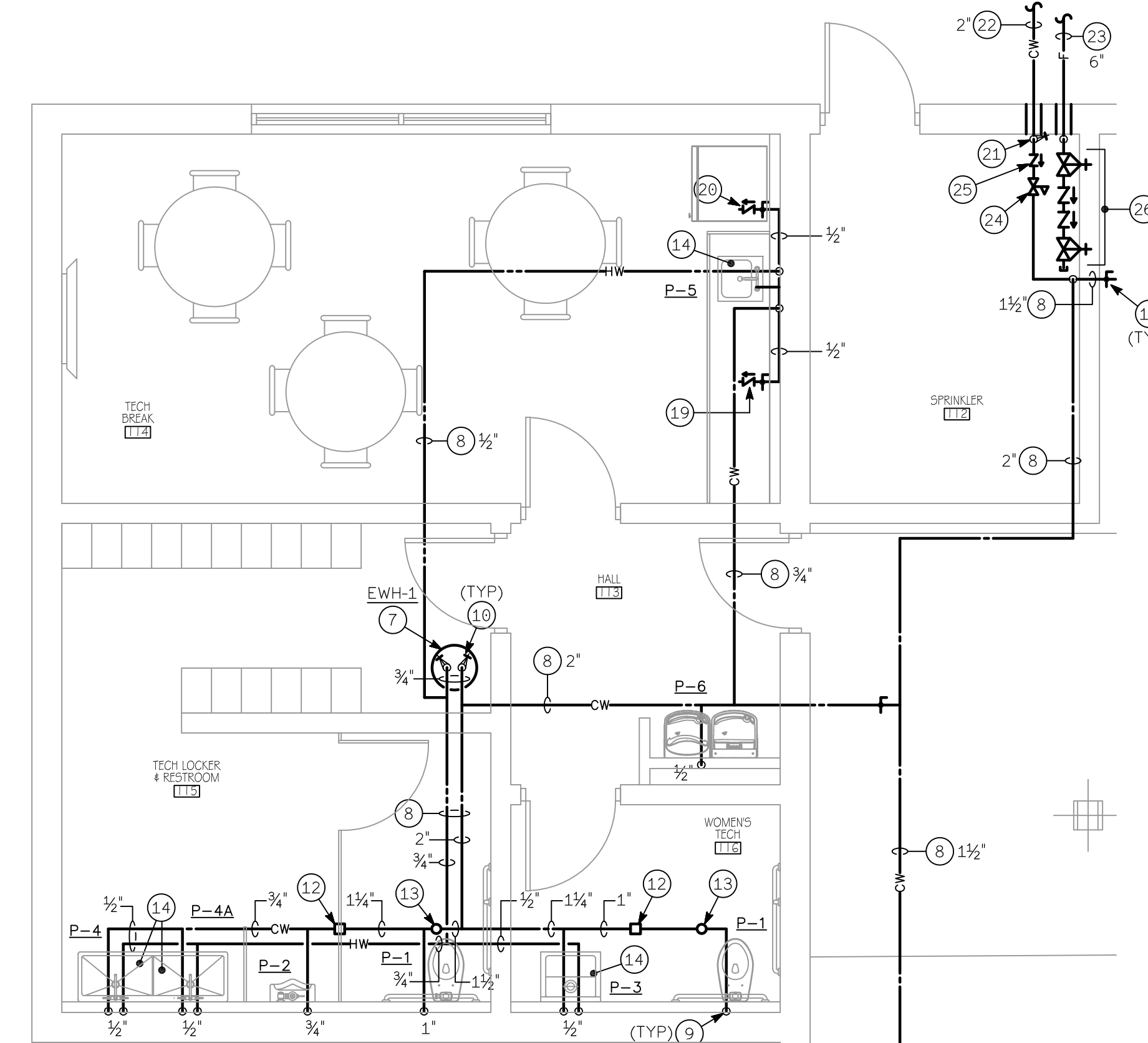








PART FLOOR PLAN -  
PLUMBING - NEW WORK  
SCALE: 1/4" = 1'-0"



PART FLOOR PLAN -  
PIPING - NEW WORK  
SCALE: 1/4" = 1'-0"

**DRAWING NOTES** (10)

1. SANITARY VENT PIPING UP THRU ROOF.
2. SANITARY PIPING BELOW FLOOR SLAB/GRADE SLOPED AT MINIMUM 1/8" PER FOOT. ALL 2" SANITARY PIPING BELOW FLOOR SLAB/GRADE SHALL BE SLOPED AT 1/4" PER FOOT.
3. SANITARY CLEANOUT IN FLOOR (TYPICAL).
4. SANITARY VENT PIPING SUPPORTED HIGH FROM STRUCTURE ABOVE CEILING.
5. SANITARY VENT PIPING UP INSIDE WALL AND ROUTED ABOVE CEILING AS INDICATED (TYPICAL).
6. FLOOR DRAIN WITH TRAP PRIMER (TYPICAL), SIZE AS INDICATED.
7. ELECTRIC WATER HEATER MOUNTED ON PLATFORM ABOVE CEILING IN FULL SIZE DRAIN PAN. REFER TO SCHEDULE.
8. DOMESTIC WATER PIPING SUPPORTED HIGH FROM STRUCTURE ABOVE AND/OR HIGH IN SHOP (TYPICAL).
9. DOMESTIC WATER PIPING DOWN INSIDE WALL AND EXTENDED TO FIXTURES (TYPICAL).
10. BALL VALVE (TYPICAL).
11. ELECTRIC WATER HEATER MOUNTED ON PLATFORM ON WALL 10'-0" ABOVE FLOOR IN FULL SIZE DRAIN PAN. REFER TO SCHEDULE.
12. AUTOMATIC TRAP PRIMER/DISTRIBUTION UNIT LOCATED ABOVE CEILING WITH BALL VALVE AND ACCESS DOOR. EXTEND 1/2" PIPING TO EACH FLOOR DRAIN TRAP. UNIT SHALL BE PPP MODEL PR-500 PRIMER WITH DU-U-500 DISTRIBUTION UNIT, ASSE1018 LISTED, OR APPROVED EQUAL.
13. LEAD-FREE ASSE1010 LISTED WATER HAMMER ARRESTOR LOCATED ABOVE CEILING. WATTS MODEL LF15M2 OR APPROVED EQUAL.
14. UNDERSINK THERMOSTATIC MIXING VALVE WITH TAMPER-PROOF LOCKING CAP AND SET AT 105°F. WATTS LEAD-FREE LFUSG-B-M1 OR APPROVED EQUAL WITH ASSE1070 LISTING.
15. SAND/OIL PIPING BELOW FLOOR SLAB SLOPED AT MINIMUM 1/8" PER FOOT. ALL 2" SAND/OIL PIPING BELOW FLOOR SLAB SLOPED AT 1/4" PER FOOT.
16. SANITARY VENT PIPING SUPPORTED HIGH FROM STRUCTURE ABOVE IN SERVICE DEPARTMENT.
17. ANSI Z358.1 LISTED TEMPERING VALVE SET AT 60°F FOR EYE WASH WITH 1/2" HOT/COLD WATER CONNECTIONS AND 1/2" TEPID PIPING TO EYE WASH CONNECTION.
18. DOMESTIC WATER PIPING DOWN ALONG WALL TO FIXTURE.
19. DOMESTIC WATER PIPING STUBBED OUT BELOW COUNTER WITH BALL VALVE AND STAINLESS STEEL ASSE1022 DOUBLE CHECK VALVE FOR COFFEE MAKER. WATTS MODEL SD-3 OR APPROVED EQUAL.
20. DOMESTIC WATER PIPING STUBBED OUT AT WATER VALVE BOX MOUNTED APPROXIMATELY 48" ABOVE FLOOR FOR ICE MAKER CONNECTION. WATER-TITE MODEL W9700 OR EQUAL WITH 1/2" CONNECTION AND 1/4" TURN VALVE. PROVIDE LEAD-FREE, ASSE1024 BRONZE DUAL CHECK BACKFLOW PREVENTER UPSTREAM OF VALVE BOX, WATTS MODEL SERIES LF7 OR APPROVED EQUAL.
21. 2" DOMESTIC COLD WATER SERVICE UP THRU FLOOR IN SEALED PIPE SLEEVE WITH MAIN SHUT-OFF VALVE.
22. DOMESTIC COLD WATER PIPING TO BUILDING BELOW GRADE (BELOW FROST LEVEL) AND EXTEND OUT TO 5'-0" BEYOND BUILDING. COORDINATE WITH CIVIL DRAWINGS FOR CONTINUATION AND METER SIZE IN METER VAULT.
23. 6" FIRE PROTECTION SERVICE (BELOW GRADE) TO BUILDING AND UP THRU FLOOR IN SEALED PIPE SLEEVE. COORDINATE WITH CIVIL DRAWINGS FOR CONTINUATION.
24. LEAD-FREE ASSE1068 LISTED WATER PRESSURE REDUCING VALVE SET AT 70 PSI. WATTS SERIES LF223 OR APPROVED EQUAL.
25. LEAD-FREE, BRONZE ASSE1015 DOUBLE CHECK VALVE ASSEMBLY. WATTS MODEL SERIES LF007 OR APPROVED EQUAL.
26. 6" FIRE PROTECTION PIPING MOUNTED FROM FLOOR/WALL AT 36" ABOVE FLOOR WITH U.L./F.M. LISTED AND COUNTY APPROVED OS&Y VALVES AND BACKFLOW PREVENTOR ASSEMBLY. WATTS SERIES 709DCDAOSY OR APPROVED EQUAL. COORDINATE USAGE WITH THE LOCAL FIRE MARSHALL.

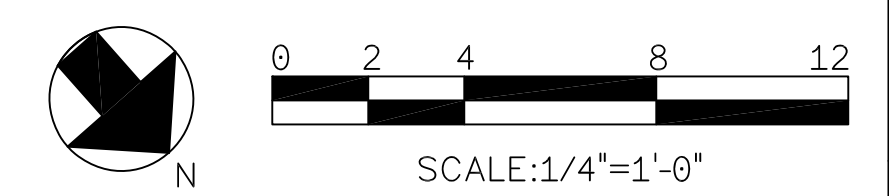
CMA HONDA WINCHESTER  
EXPANSION  
3985 VALLEY PIKE WINCHESTER,  
VA 22602

CMA  
3985 VALLEY PIKE  
WINCHESTER, VA  
22602

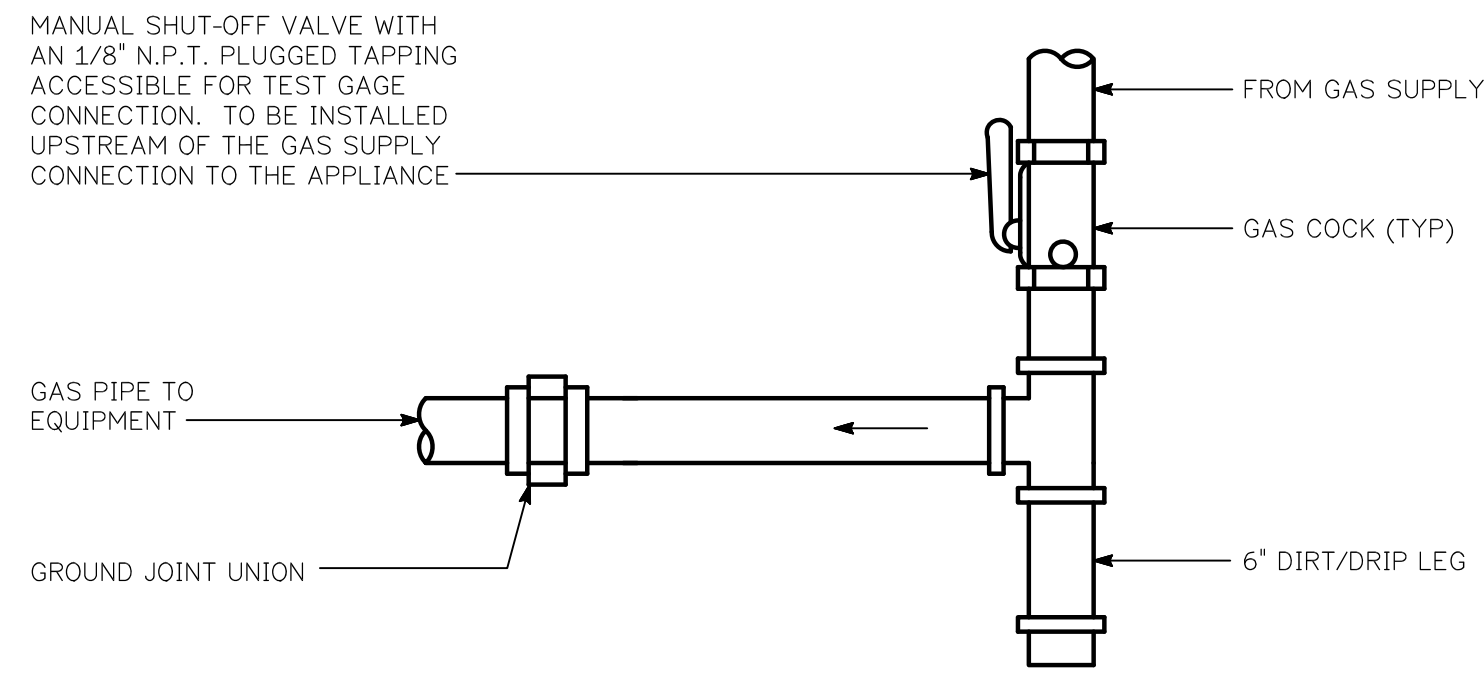
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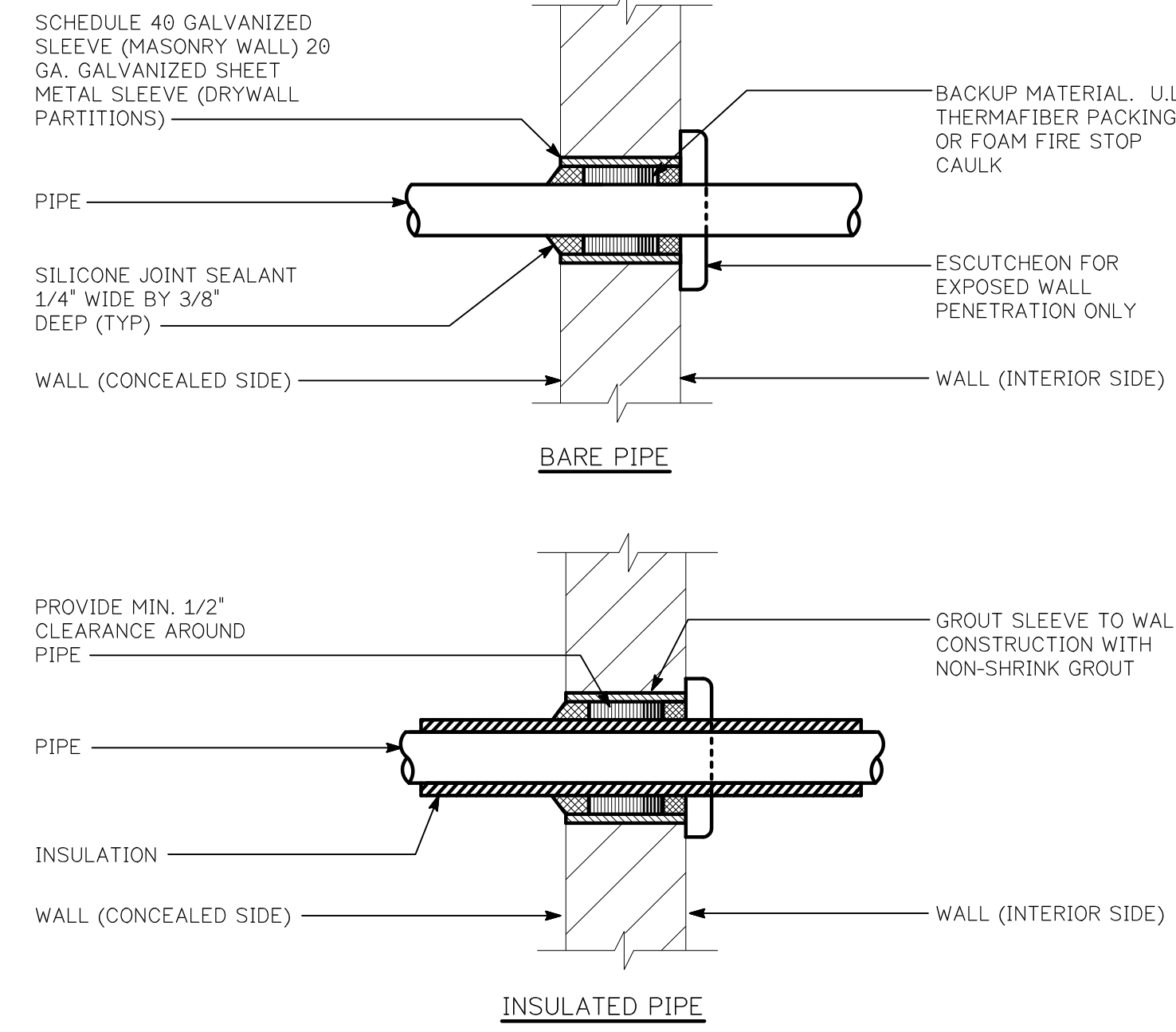
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Sheet Title	PART FLOOR PLANS- PLUMBING/PIPING- NEW WORK
Project Number	IDC #23-010
File Name	





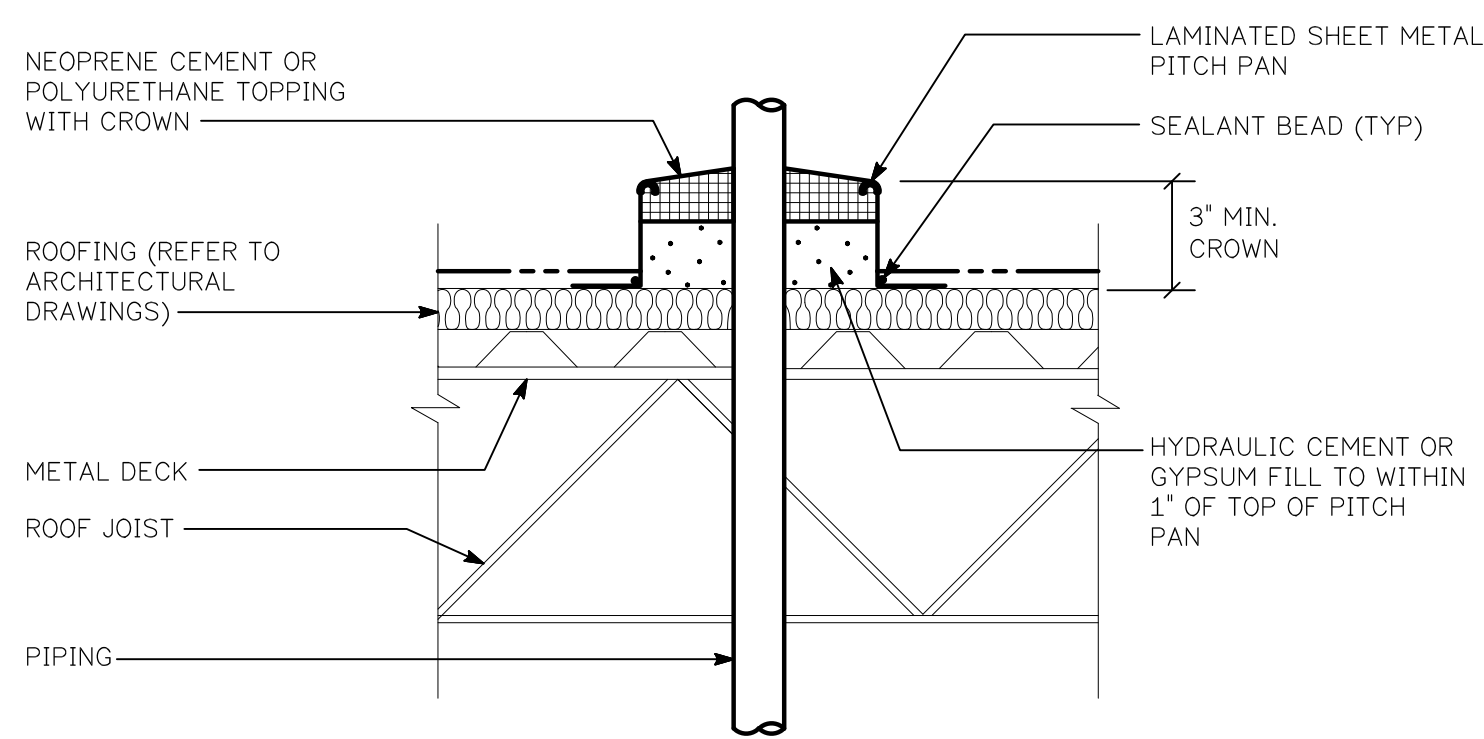


**GAS CONNECTION TO EQUIPMENT**  
NO SCALE

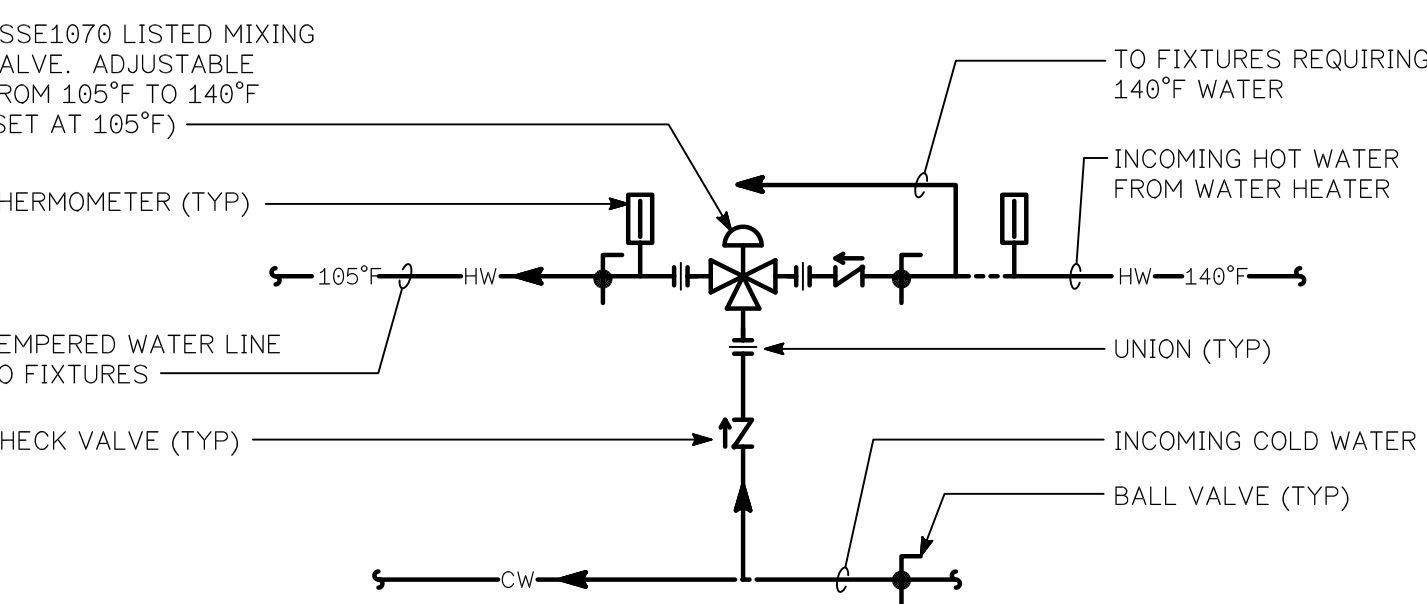


**PIPE SLEEVE THRU WALL**  
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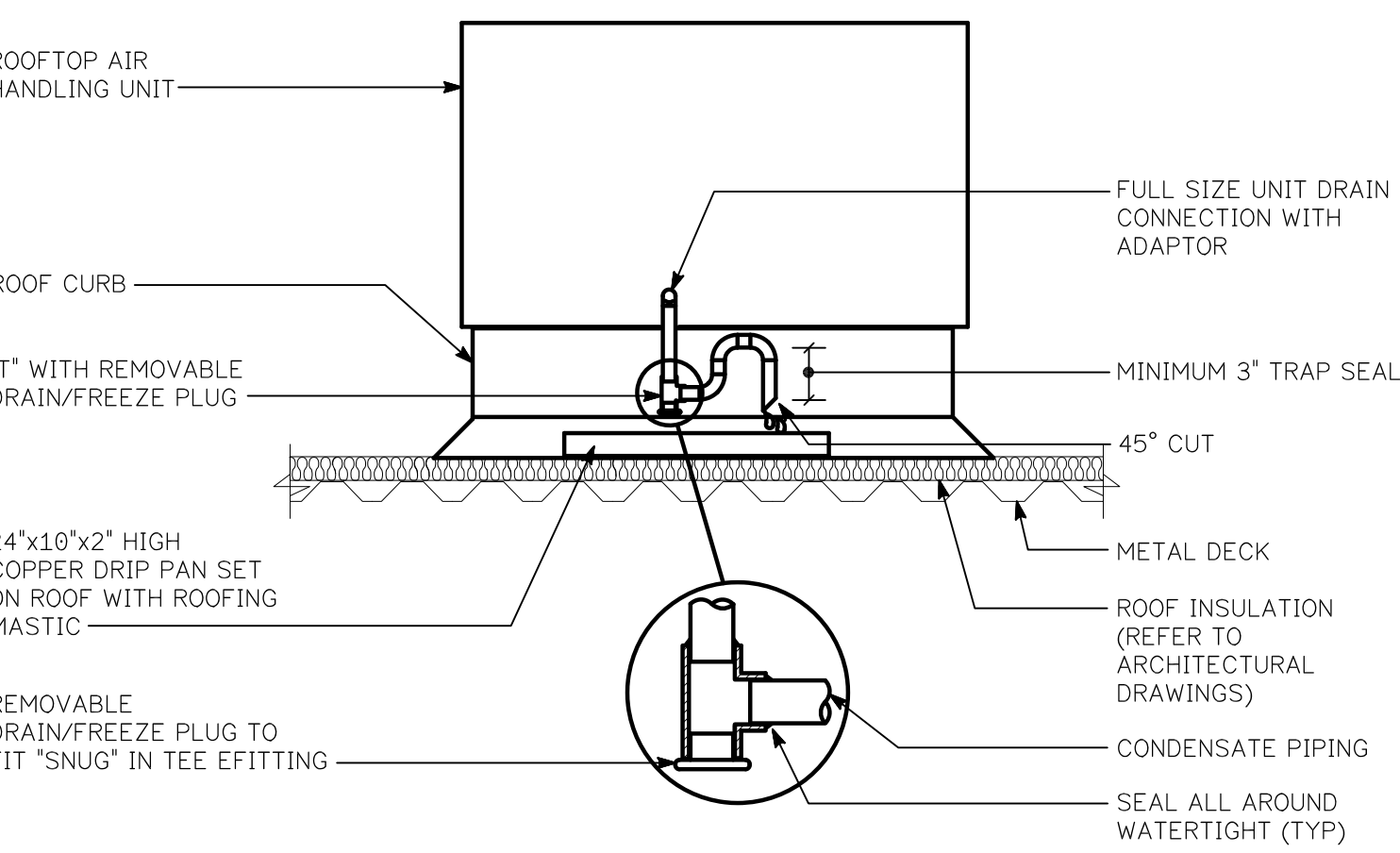
- NOTES:  
 1) AT THE CONTRACTORS' OPTION A U.L. LISTED/APPROVED FIRE STOP PIPE SLEEVE ASSEMBLY MAY BE SUBMITTED FOR APPROVAL.  
 2) FOR EXISTING POURED CONCRETE WALLS, CORE DRILL OR STAR DRILL OPENING THRU EXISTING WALL FOR PIPE SLEEVES AS DIRECTED.  
 3) GALVANIZED SLEEVE SHALL BE CAST INTO NEW CONCRETE WALL POURS.



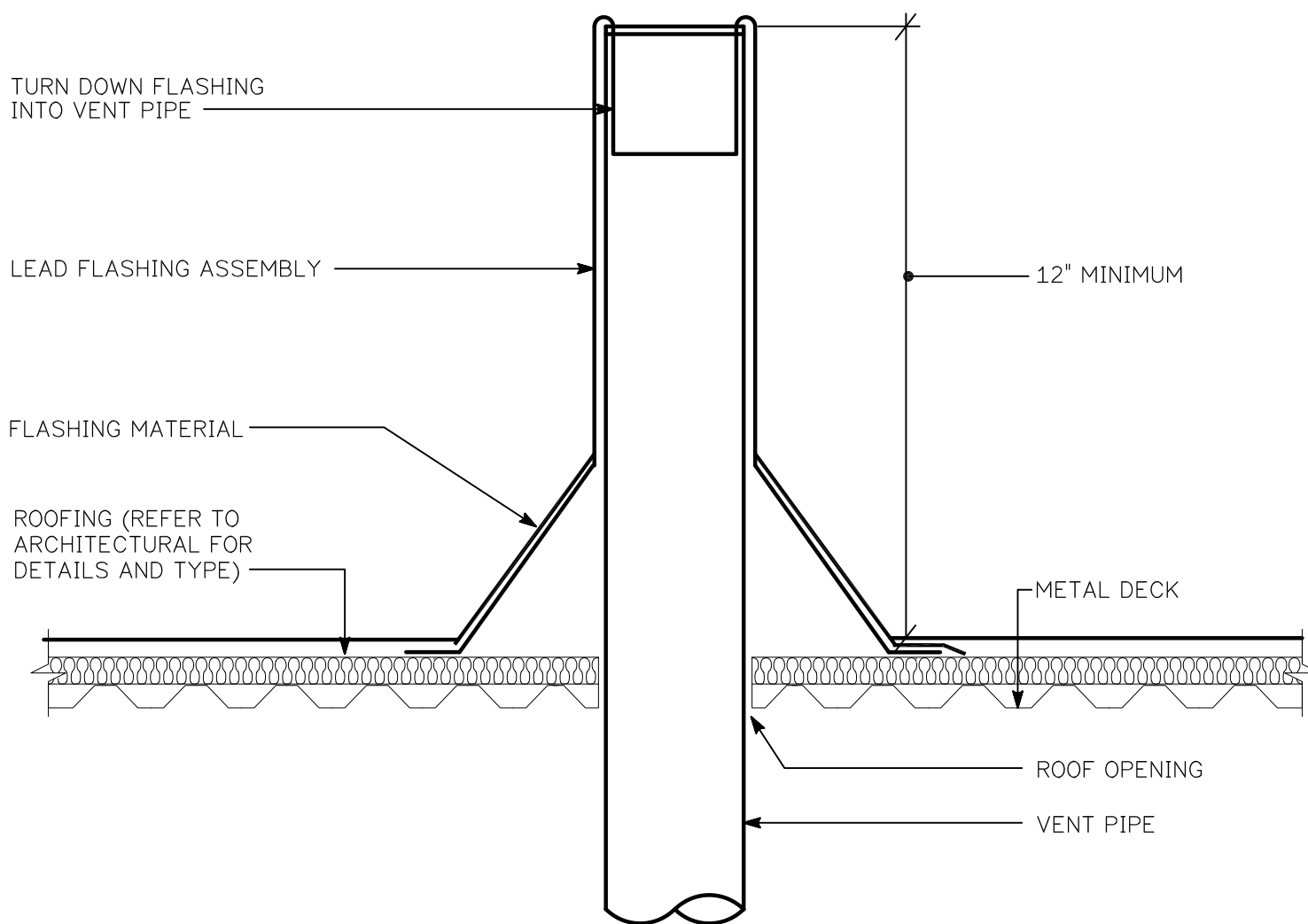
**PITCH POCKET THRU ROOF**  
NO SCALE  
NOTE: DETAIL SIMILAR FOR WOODEN ROOF JOIST.



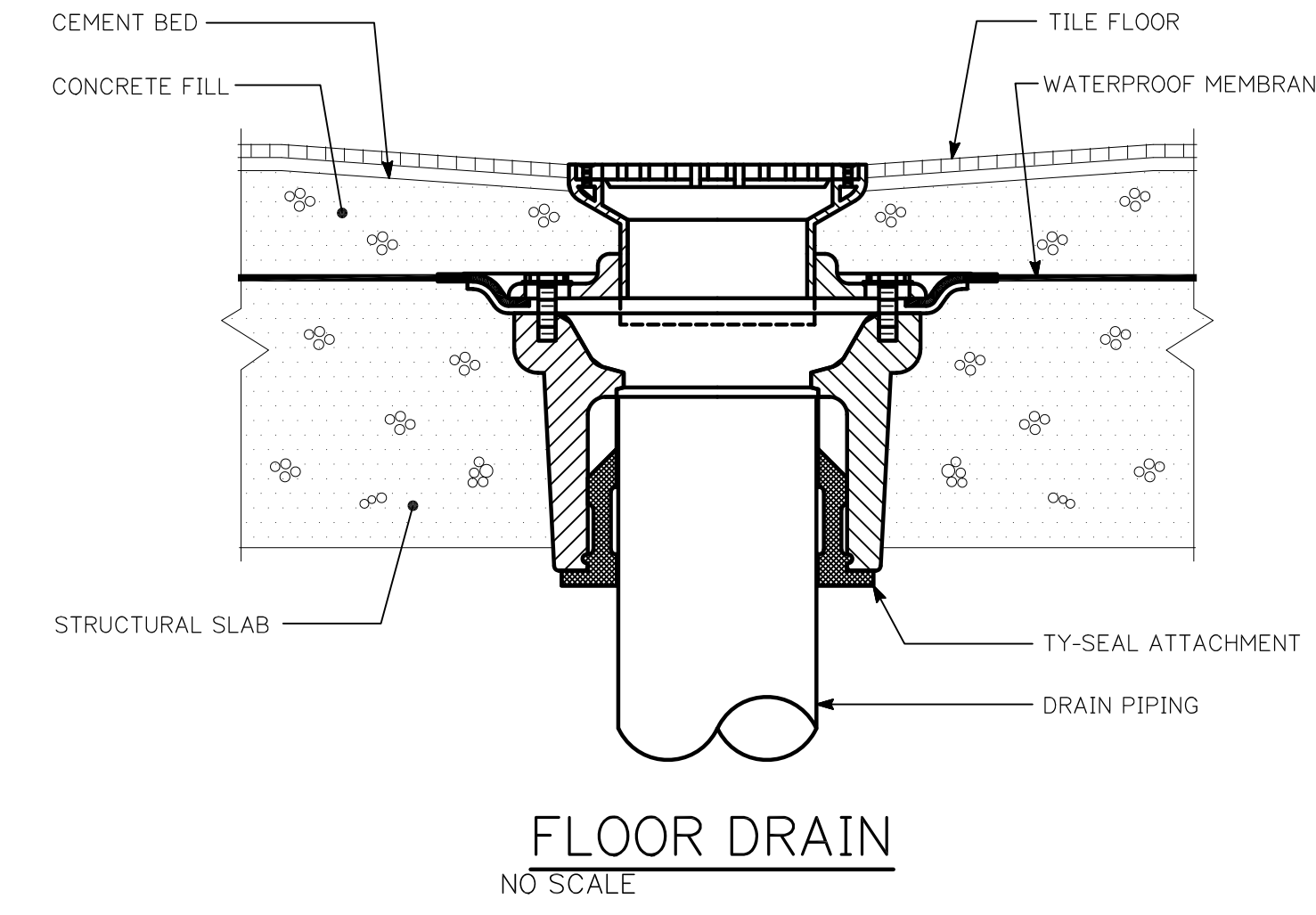
**3-WAY MIXING VALVE**  
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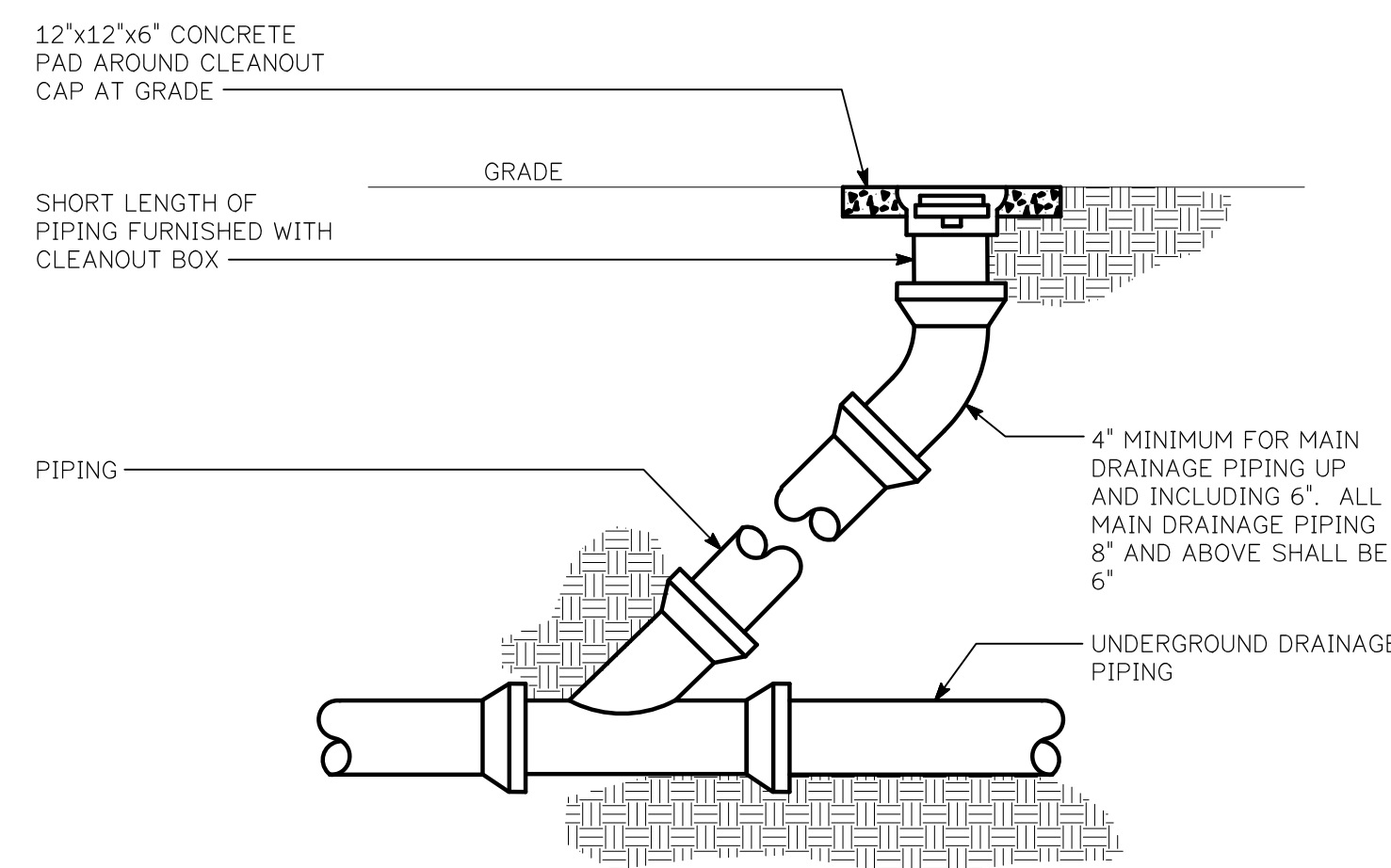
**ROOFTOP UNIT CONDENSATE TRAP**  
NO SCALE



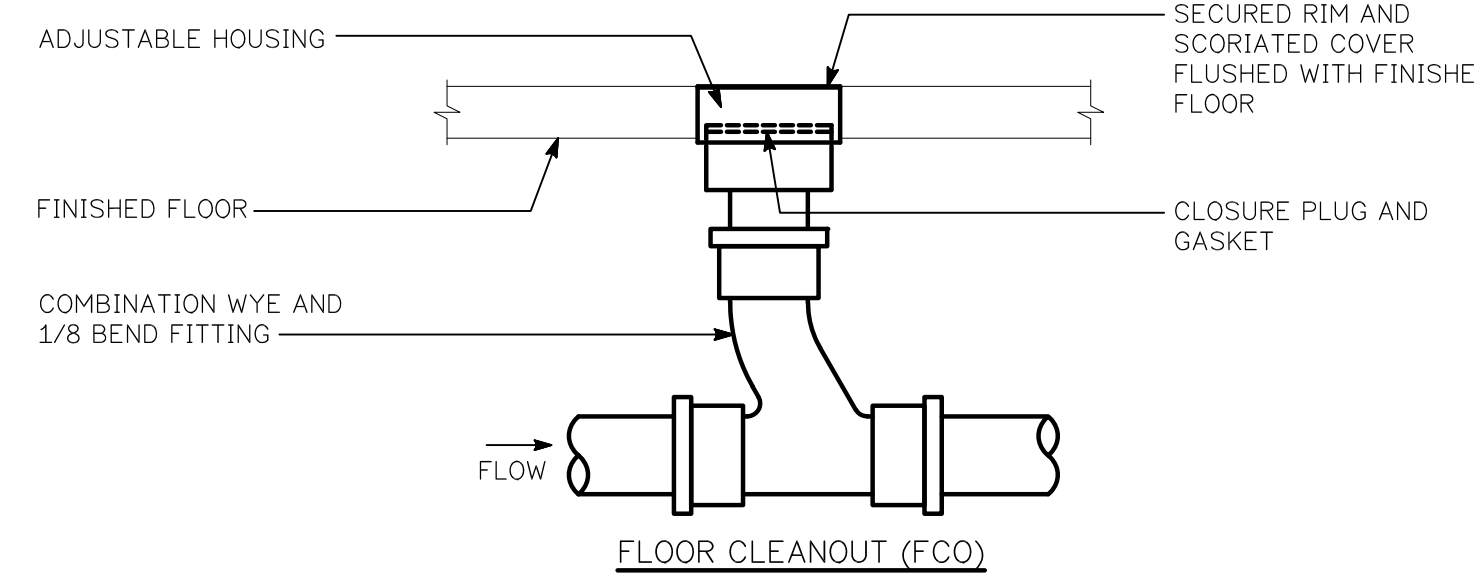
**VENT PIPE THRU ROOF**  
NO SCALE



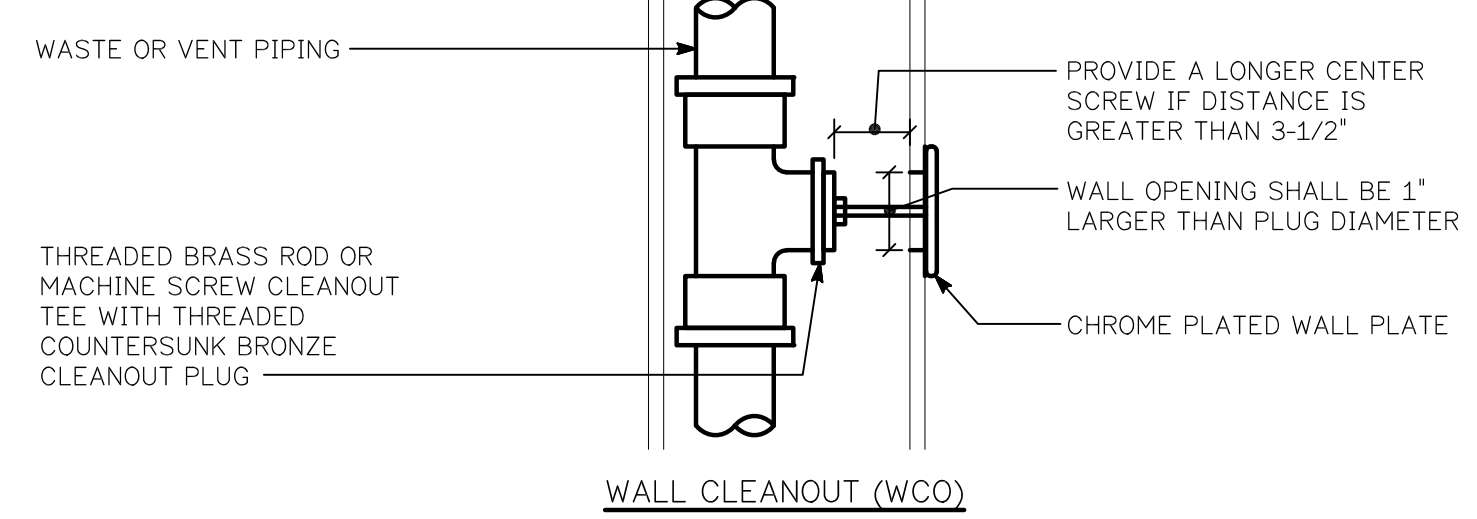
**FLOOR DRAIN**  
NO SCALE



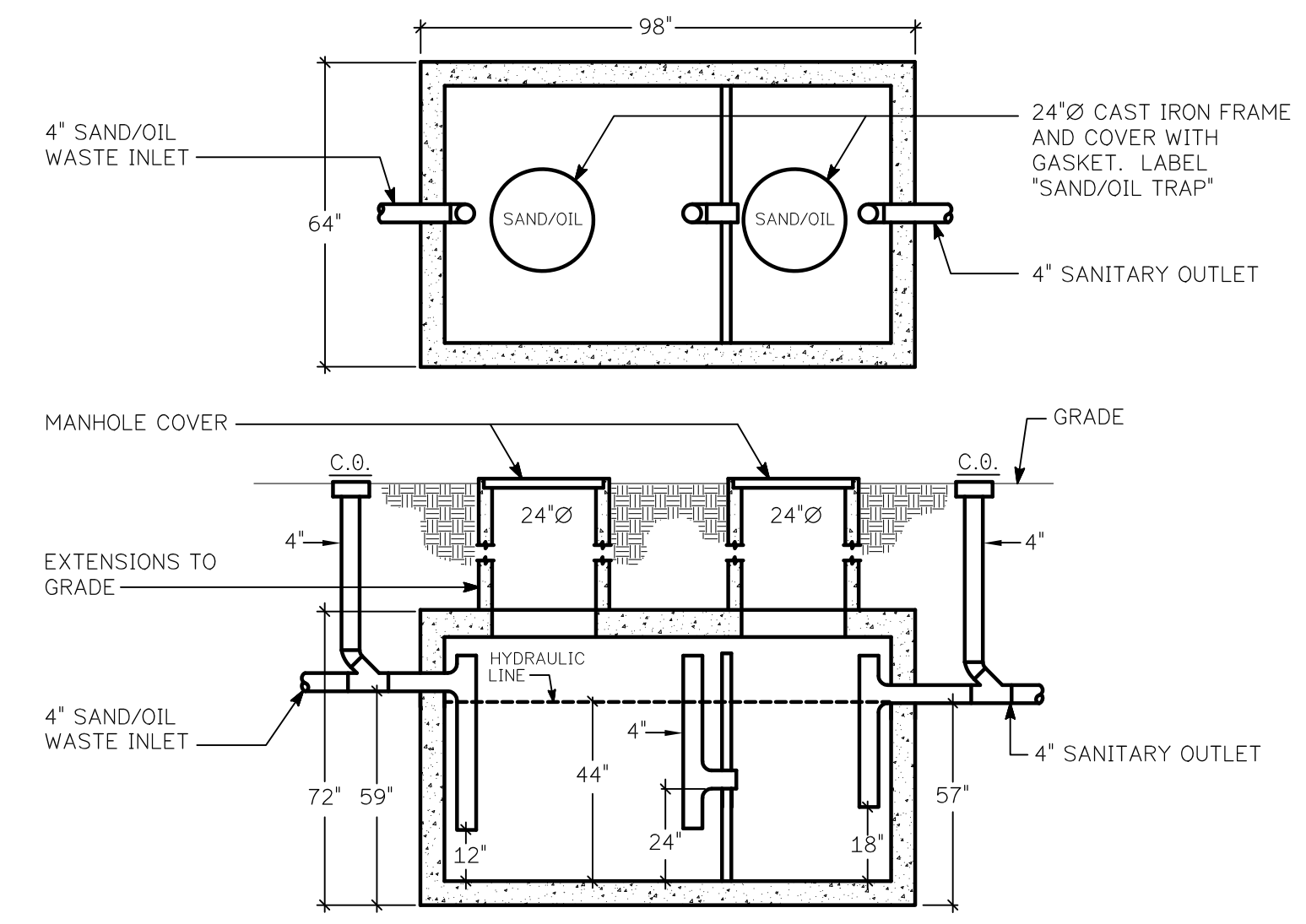
**EXTERIOR CLEANOUT**  
NO SCALE



**FLOOR CLEANOUT (FCO)**

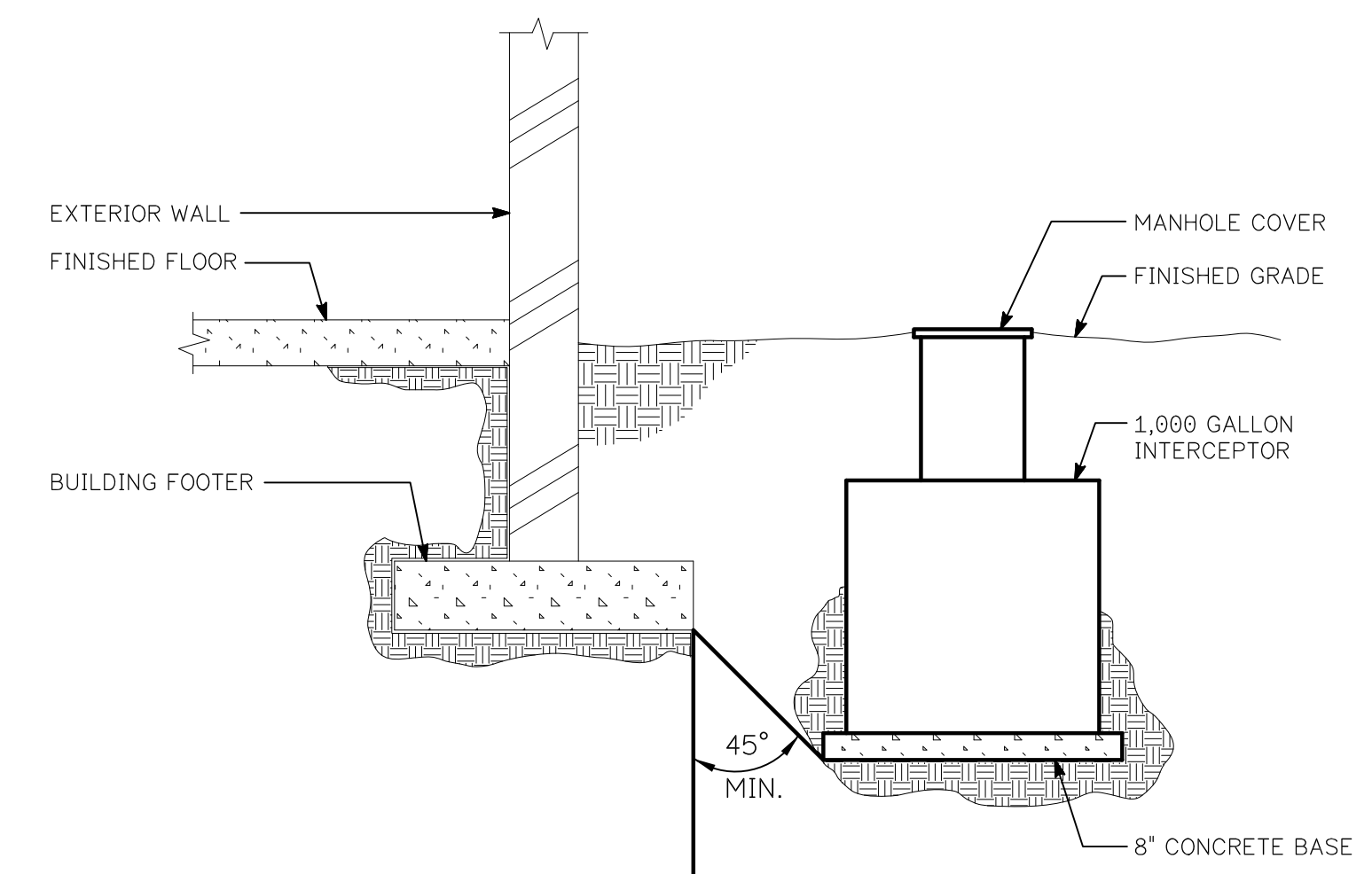


**INTERIOR CLEANOUT**  
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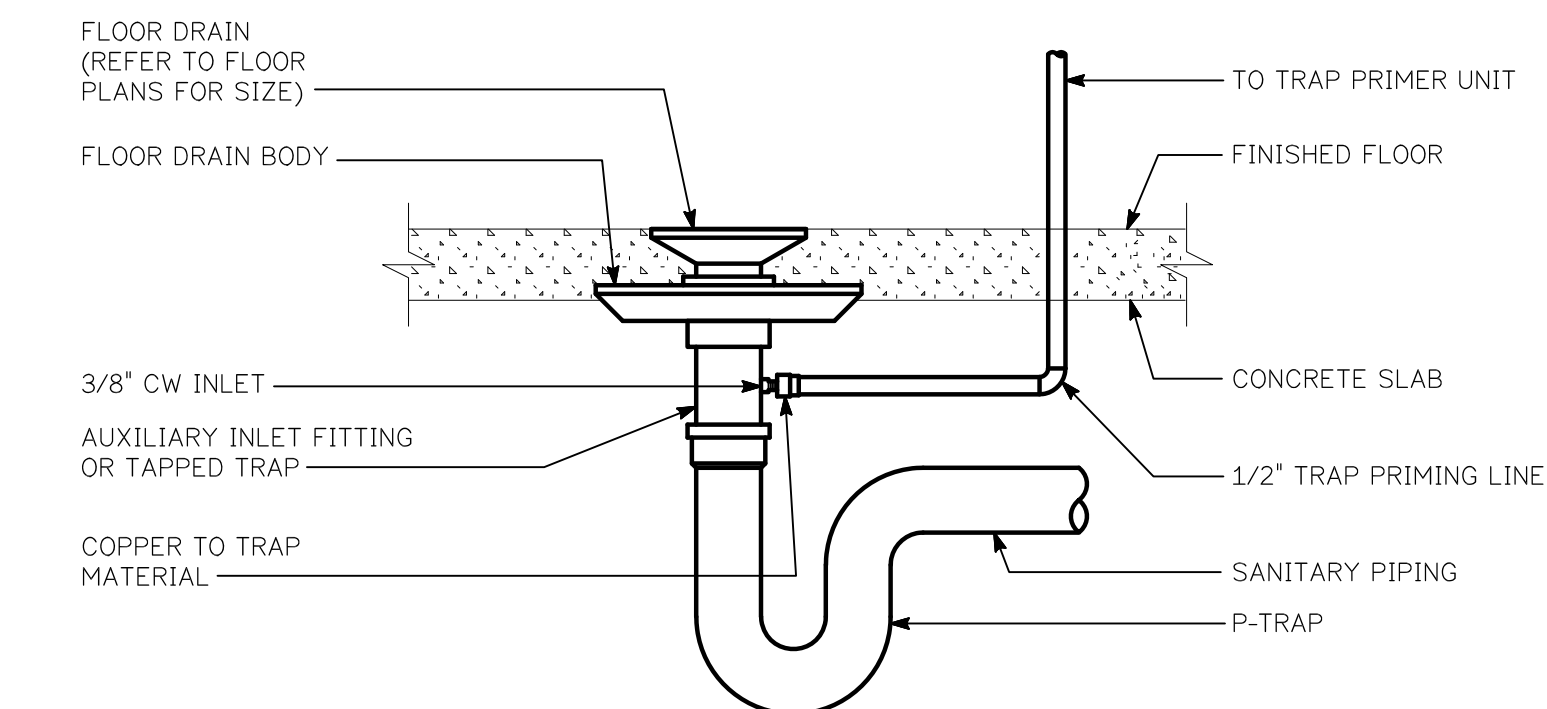


**1,000 GALLON SAND/OIL INTERCEPTOR DETAIL**  
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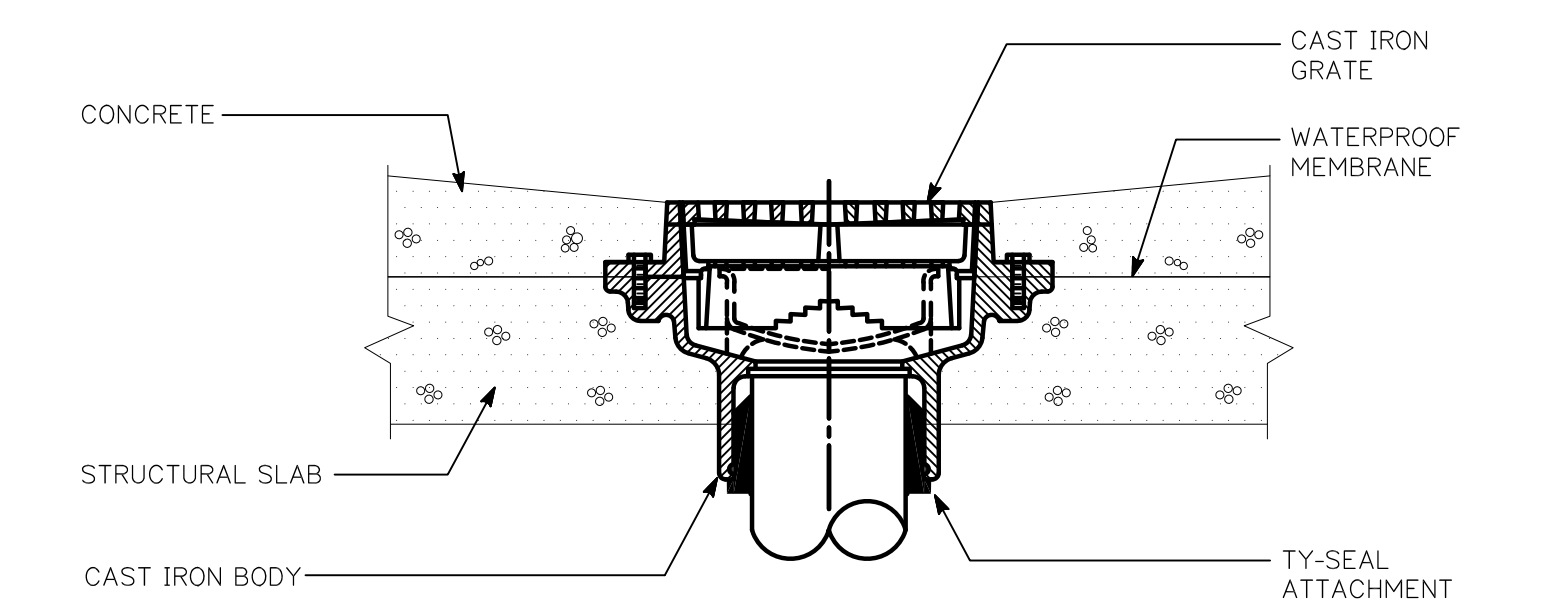
- NOTES:  
 1) SAND/OIL INTERCEPTOR TO BE IN ACCORDANCE WITH ALL LOCAL CODE CODES AND REQUIREMENTS.  
 2) TANK SHOWN IS MANUFACTURED BY MAYER BROS., INC. COORDINATE SIZE AND DIMENSIONS WITH SELECTED MANUFACTURER AND WITH CIVIL DRAWINGS.  
 3) TANK DESIGNED FOR H-20 HEAVY DUTY TRAFFIC. EARTH COVER SHALL NOT EXCEED 5'-0\"/>



**INTERCEPTOR INSTALLATION**  
NO SCALE



**TYPICAL FLOOR DRAIN WITH TRAP PRIMER**  
NO SCALE



**AREA DRAIN**  
NO SCALE







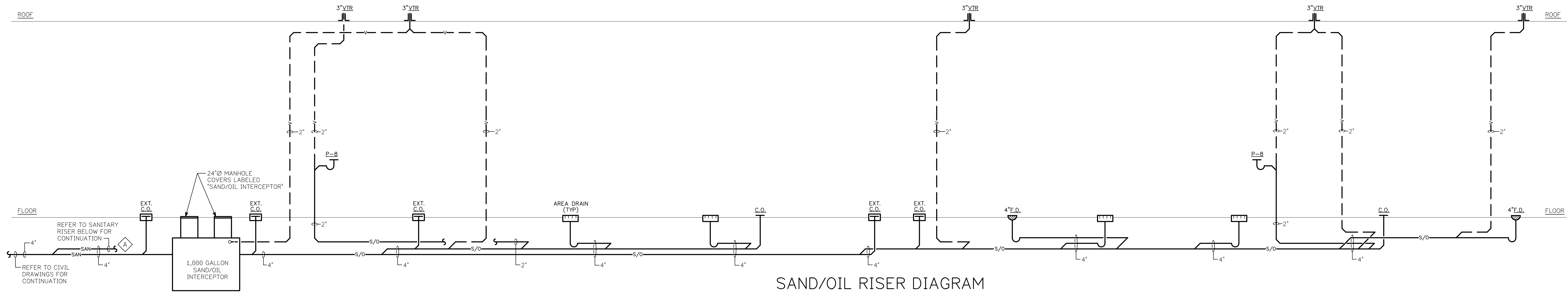
ITEM#	DESCRIPTION	PIPE SIZES				TRAP TYPE	REMARKS
		H.W.	C.W.	SAN.	VENT		
P-1	WATERCLOSET (FLUSH VALVE)		1"	4"	2"	INTEGRAL	ADA COMPLIANT
P-2	URINAL (FLUSH VALVE)		3/4"	2"	2"	INTEGRAL	ADA COMPLIANT
P-3	WALL HUNG LAVATORY	1/2"	1/2"	2"	2"	'P'	ADA COMPLIANT
P-4	TECH WALL HUNG LAVATORY	1/2"	1/2"	2"	2"	'P'	
P-4A	TECH WALL HUNG LAVATORY	1/2"	1/2"	2"	2"	'P'	ADA COMPLIANT
P-5	TECH BREAKROOM SINK	1/2"	1/2"	2"	2"	'P'	ADA COMPLIANT
P-6	ELECTRIC WATER COOLER W/BOTTLE FILLER		1/2"	2"	2"	'P'	ADA COMPLIANT
P-7	SINGLE EYE WASH STATION		1/2"				60°F TEPID HOT WATER
P-8	HEAVY-DUTY SHOP WORK SINK	3/4"	3/4"	3"	2"	'P'	

ITEM#	AREA SERVED	NOMINAL TANK SIZE (GAL.)	DIAMETER (IN.)	HEIGHT (IN.)	RECOVERY RATE (G.P.H.) @ 90° RISE	PIPE CONNECTIONS		K.W.	ELECTRICAL DATA	OPERATING WEIGHT (LBS.)	MOUNTING LOCATION	MODEL #	MANUFACTURER
						INLET	OUTLET						
EWH-1	TECH AREA	20	22"	22"	20	3/4"	3/4"	4.5	277V/1Ø	250	ABOVE CEILING	PCE-20-10MSA	STATE
EWH-2,3	SHOP SINK, EYE WASH	30	22"	31"	20	3/4"	3/4"	4.5	277V/1Ø	350	18'-0" AFF ON WALL	PCE-30-28LSA	STATE

NOTES:  
1) 1 KW WILL RAISE 4.1 GALLONS 100°F PER HOUR.  
2) PROVIDE HEAT TRAPS AT INLET/OUTLET CONNECTIONS.  
3) STORAGE WATER TEMPERATURE SHALL BE SET AT 140°F.

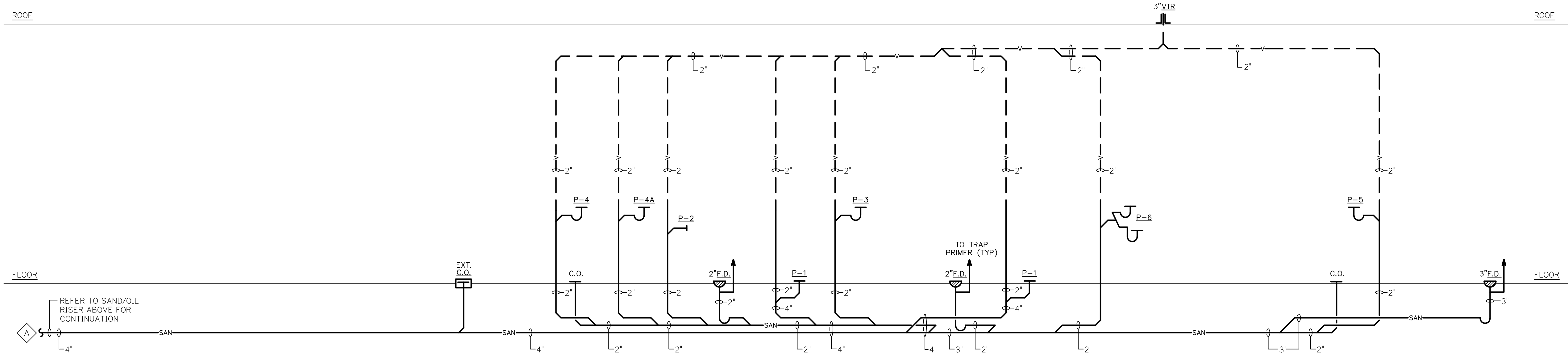
SAND/OIL INTERCEPTER	
LOCATION	SQ.FT.
109 SERVICE SHOP	6,080
110 SERVICE SHOP	5,960
108 AIR/OIL ROOM	260
<b>TOTAL SQUARE FOOTAGE AREA=</b>	<b>12,300</b>

BASED ON THE 2018 INTERNATIONAL PLUMBING CODE CHAPTER 10, SECTION #1003.4.2.2  
FIRST 100 SQ.FT. REQUIRES 6 CUBIC FEET, ADDITIONAL AREA REQUIRES 1 CUBIC FOOT FOR EVERY 100 SQ.FT.  
 $(12,300-100)/100 = 122 \rightarrow 122+6 = 128$   
128 CUBIC FEET = 958 GALLONS  
\* A 1,000 GALLON INTERCEPTER WILL BE PROVIDED \*



**SAND/OIL RISER DIAGRAM**  
NO SCALE

NOTES:  
1) ALL VENTING PIPING FROM HORIZONTAL BRANCH SHALL BE FROM TOP OF BRANCH AT A MINIMUM 45 DEGREE ANGLE AND SLOPED UPWARD. NO FLAT VENTING IS ALLOWED. REFER TO PLUMBING CODE SECTION 905.4.  
2) VERTICAL DISTANCE BETWEEN FIXTURE OUTLET AND TRAP SHALL NOT EXCEED 24". REFER TO PLUMBING CODE SECTION 1002.1.



**SANITARY RISER DIAGRAM**  
NO SCALE

NOTES:  
1) ALL VENTING PIPING FROM HORIZONTAL BRANCH SHALL BE FROM TOP OF BRANCH AT A MINIMUM 45 DEGREE ANGLE AND SLOPED UPWARD. NO FLAT VENTING IS ALLOWED. REFER TO PLUMBING CODE SECTION 905.4.  
2) VERTICAL DISTANCE BETWEEN FIXTURE OUTLET AND TRAP SHALL NOT EXCEED 24". REFER TO PLUMBING CODE SECTION 1002.1.











# PIPING/PLUMBING SPECIFICATIONS

## 1. SECTION 15010 - BASIC PIPING/PLUMBING REQUIREMENTS

- A. The work of each of the following sections includes furnishing and installing the material, equipment and systems complete as specified and/or indicated on the drawings. The installations, when finished, shall be complete and coordinated, ready for satisfactory service.
- B. All work under this contract shall be done in strict accordance with all applicable municipal, state, county, NFPA, International and local codes that govern each particular trade.
- C. The contractor shall make applications and pay all charges for all necessary permits, licenses and inspections as required under the above codes. Upon completion of the work, the customary certifications of approval shall be furnished. The contractor shall also coordinate and make all required submissions to the local utility companies (ie: load letters, water/gas demand forms, etc.).
- D. No materials or equipment shall be used in the work until approved. Before submission of the shop drawings, and not more than thirty (30) days after award of the contract, the contractor shall submit for approval, a complete list of all materials and equipment which he intends to furnish, giving manufacturer and catalog numbers. A complete list of proposed sub-contractors shall also be submitted.
- E. The contractor shall examine all drawings and specifications and shall visit the site and inspect the existing conditions in person. Certain areas may have been in-accessible at the time of the engineers survey and may only be visible during or after the demolition phase; therefore, those systems and coordination of those systems, shall become the responsibility of the contractors. Failure to comply with this requirement shall not relieve the contractors of their responsibilities for complying with the intent of the contract documents.
- F. The contractor shall snake/camera all existing below floor/grade sanitary systems serving the project area, as required, to verify sizes, inverts, direction of slope, etc. and ensure that the new sanitary system can connect to the existing system where indicated on the drawings.
- G. The drawings indicate the general arrangement of the plumbing installations. Details of proposed departures due to actual field conditions or other causes shall be submitted for approval prior to installation. Reworking of completed items due to improper field coordination shall be at the contractor's expense.
- H. Provide sufficient access and clearance for all items of equipment requiring servicing and maintenance, such as valves, drains, vents, filters, traps, etc. and major items of equipment.
- I. The contractor shall perform all necessary cutting and patching as required to complete the installation of the all plumbing work. Patching of walls, floors, ceilings, roof, etc. shall match the adjacent surfaces.
- J. The contractor shall prepare three (3) copies of a record and information booklet. The booklet shall be bound in a three ring loose-leaf binder. Provide the following data in the booklet:
- 1) Catalog data on each piece of equipment furnished
  - 2) Approved shop drawings on each piece of equipment furnished
  - 3) Maintenance, operation and lubrication instruction on each piece of equipment furnished
  - 4) Manufacturer's and contractor's guarantees
  - 5) Water balancing reports
  - 6) Commissioning reports as required
  - 7) Schedule/description of all service work/maintenance inspections required by the paragraphs of this section
- K. The entire new and existing piping/plumbing system shall be tested hydrostatically before insulation covering is applied and proved tight under the following gauge pressures:
- |   |                    |
|---|--------------------|
| Sanitary piping .....                         | as specified below |
| Domestic water piping .....                   | 100 psig           |
| Natural gas piping .....                      | mercury gauge      |
| Refrigeration liquid and suction piping ..... | 225/400 psig       |
| Fire protection piping .....                  | Per NFPA           |
| Storm water piping .....                      | as specified below |
- Contractor shall also inspect and verify all existing piping located within the project area which listed to remain, for leaks, defects, etc. and repair as required.
- L. All soil, waste and vent piping shall be tested by the contractor. The entire new drainage system and venting system shall have all necessary openings plugged and filled with water to the level of ten (10) feet above the main or branch being tested. The system shall hold this water for thirty (30) minutes without showing a drop greater than four (4) inches.
- Note: If any code or authority requires testing which is different than the test listed above, the more stringent test shall be performed.
- M. Upon completion of the plumbing installations, the contractor shall provide a complete set of prints of the contract drawings which shall be legibly marked in red pencil to show all changes and departures of the installation as compared with the original design. They shall be suitable for use in preparation of as-built drawings.
- N. All piping and valve systems shall be identified with labels and tags. Materials shall be as manufactured by Seton name plate corporation. Color coding for piping shall be as follows:
- O. All new installations, including all materials and labor shall be guaranteed for a period of one (1) year from date of owner acceptance. The above shall not in any way void or abrogate equipment manufacturer's guarantee or warranty. Certificates of guarantee shall be delivered to the owner.
- P. Contractor shall also provide one (1) year free service to keep the equipment in operating condition. This service shall be provided and rendered upon request when notified of any equipment malfunction.
- Q. In addition to the first year warranty period, the contractor shall provide, at no additional cost to the owner, a minimum of four (4) service calls and maintenance inspections. A complete outline of the required maintenance and the proposed schedule shall be included in a "record and information booklet" for review and acceptance by the owner/representative and engineer. The inspections are to be performed at three (3) month intervals for a total of four (4) service calls and inspections during the first year warranty period plus the original system start-up commissioning. Upon completion of each scheduled inspection, the contractor shall deliver to the building owner or owners representative, within (48) hours of completion, two (2) copies of the completed inspection report for record purposes.
- R. The service contractor shall, at the ninth month, advise the owner of the termination date of the above services. This contractor shall also provide the owner with a detailed proposal, reflecting annual escalation, for the continuation of the services and inspections described above.

## 2. SECTION 15090 - BASIC PIPING/PLUMBING MATERIAL & METHODS

- A. Provide all labor and materials necessary to furnish and install all piping systems on this project, including interior storm, sanitary, sanitary vent, domestic water, condensate drainage, natural gas and refrigerant piping systems.
- B. Piping and valves shall be as follows:
- 1) **Storm and sanitary drains below floor slab/grade:**  
Piping: Schedule 40 PVC DWV pipe.  
Fittings: Solvent weld joints.
  - 2) **Storm and sanitary drains and sanitary vents above floor inside building:**  
\* Piping located in return air plenums  
Piping: Cast iron no-hub soil pipe  
Fittings: Cast iron no-hub soil pipe fittings  
Joints: No-hub stainless steel gasketed fittings  
\* Piping located in open areas (ie: shop, drains, or non-return air plenums)  
Piping: Schedule 40 PVC DWV pipe.  
Fittings: Solvent weld joints.
  - 3) **Domestic hot and cold water piping inside building:**  
Piping: All water pipings shall be hard copper, type L above ground, type K below ground.  
Fittings: Lead free solder type wrought copper.  
Gate Valves: 2-1/2" or 3"= 150 psi, union bonnet, rising stem, solid wedge, bronze body, bonnet and stem. Nibco S-134.  
Ball Valves: 2" or smaller= 150 psi, two piece body, full port, blowout-proof stem, chrome plated ball, bronze body and stem, reinforced TFE seat ring. Nibco S-585-70.  
Unions: 125 psi., wrought copper, ground joint solder ends.
  - 4) **Water heater T&P relief piping:**  
Piping: type DWV seamless copper tubing  
Fittings: wrought copper solder drainage fittings
  - 5) **Atmospheric condensate drainage piping:**  
Piping: type DWV seamless copper tubing  
Fittings: copper solder drainage fittings
  - 6) **Natural gas piping:**  
Piping: schedule 40 black steel  
Fittings: 2" or smaller, threaded. 2-1/2" or larger long radius welding.  
Gate Valves: 1", 1-1/2" or 2"= union bonnet, rising stem, solid wedge, bronze body, bonnet and stem, threaded ends. Nibco #T-174-A. 2-1/2" or larger= 300 psi, iron body, bolted bonnet, OS&Y, solid wedge, bronze mounted. Nibco #F-667-C.  
Ball Valves: 1/2" or 3/4"= forged brass alloy, aluminum tee handle, threaded ends. Nibco GB30 rated at 1/2 psi for indoor appliance connections.
  - 7) **Refrigerant piping:**  
Piping: Type L hard copper refrigerant tube, dehydrated and sealed.  
Fittings: wrought copper solder type with slits.
  - 8) **Fire protection:**  
Piping and fittings as required by N.F.P.A. regulations and as hereinafter specified.
- C. Copper pipe shall be reverse, anaconda, or chase types "L" and "K" hard drawn, with approved solder fittings.
- D. Cast iron piping shall be service weight drainage piping and shall conform to the requirements of the C.I.S.P.I.. Each length of pipe and each fitting shall be clearly marked with the manufacturer's initials and pipe classifications.
- E. Steel piping shall be similar and equal to National Tube Company, Republic or Bethlehem black or zinc-coated (galvanized) steel as hereinbefore specified. Pipe shall be free from all defects which may affect the durability of the intended use. Each length of pipe shall be stamped with the manufacturer's name.
- F. All hangers for copper piping shall be copper clad, split ring swivel type, having rods with machine threads and threaded copper clad ceiling flange. Cast iron and steel piping supports shall be similar without copper clad and prime paint finish. Maximum horizontal distance between pipe hangers shall be as follows:
- |                                |
|--------------------------------|
| Cast Iron Piping = 6'          |
| Copper Piping (<=1-1/4") = 12' |
| Copper Tubing (<=1-1/4") = 6'  |
| Copper Piping (>=1-1/2" = 10'  |
| PVC Piping = 4'                |
| Steel Piping = 12'             |
- G. Provide dielectric couplings where non-ferrous metal piping is joined to ferrous metal piping. The gasket material shall be capable of withstanding the temperatures and pressures within the piping system in which installed. Submit dielectric coupling and gasket material for approval.

## 3. SECTION 15250 - PIPING INSULATION

- A. All storm water, roof drain sumps, domestic water, chilled water and heating water piping systems shall be insulated with fiberglass insulation. All insulation shall be noncombustible or shall have a flame spread index of not more than 25 and a smoke-development index of not more than 50 when tested in accordance with ASTM E84.
- B. Pipe insulation shall be premoiled fiberglass insulation with an all service jacket, Owens Corning fiberglass SS-11. Fittings shall be insulated and covered with PVC covers. All domestic hot water piping smaller than 1-1/2" shall have 1" of insulation and all domestic hot water piping between 1-1/2" and 4" shall have 1-1/2" of insulation. All domestic cold water and storm water piping shall have 1" of insulation.
- 4. SECTION 15300 - FIRE PROTECTION (Performance Spec Only)**
- A. All work, materials, equipment and accessories shall comply with the standards of the National Fire Protection Association and all state and local regulations.
- B. Modify the existing wet pipe sprinkler system to properly cover and protect the new project area. System shall generally be light hazard, except ordinary hazard in all storage rooms, electrical rooms, etc. The fire protection contractor shall determine final classifications of all spaces.
- C. The modifications shall include, but are not limited to valves, flow switches, sprinkler heads and escutcheons, piping, fittings, hangers, signs and other identification markings, as required.
- D. The sprinkler contractor shall carefully examine all documents during the bidding period and familiarize himself with project conditions such as building construction, pipe and ductwork locations and elevations.
- E. Existing sprinkler heads that are removed may not be reused. Provide new sprinkler heads as required to meet the new layout and classification. All new sprinkler heads must match the existing head types. Any sprinkler heads installed in finished ceilings shall be brushed chrome semi recessed type. All heads in open structure or bay areas with no ceiling shall be bronze upright type. Sprinkler coverage required underneath roof overhangs/canopy areas outside of the building envelope may be accomplished using dry pendent or dry sidewall sprinklers.
- F. The sprinkler contractor shall arrange for approval of the revised sprinkler systems and conduct tests in accordance with NFPA 13.
- G. The sprinkler contractor shall provide a detailed shop drawing showing piping layout, head locations, elevations and coordination with all building structure, electrical and plumbing trades. The contractor shall submit detailed sprinkler shop drawings with actual heads for architect approval prior to any fabrication.
- H. The sprinkler contractor must submit one set of sprinkler shop drawings and hydraulic calculations to the local county fire marshal and/or fire department.
- 4. SECTION 15300 - FIRE PROTECTION (Performance Spec Only) (new/shift)**
- A. All work, materials, equipment, and accessories shall comply with the standards of the national fire protection association and all state and local regulations. System shall be in accordance with NFPA 13 for sprinkler design, NFPA 13 for general storage protection and NFPA 13 for rack storage.
- B. Under the new building design, the plumbing contractor shall coordinate the incoming combination fire/domestic cold water system and split inside the sprinkler room. The plumbing contractor shall then install the OS&Y valves and a double U.L. double check valve/backflow preventer in the fire protection system. The final rough in from the plumber for the sprinkler contractor shall be a flanged/coupled connection in the sprinkler room. The plumber shall also install the required valves, fitting, devices, etc. in the domestic water system such as: main shut-off valve, pressure reducing valve, water meter, backflow preventor, etc.. Refer to the drawings for exact arrangement.
- C. The sprinkler contractor shall extend the wet pipe sprinkler system from stub, to properly cover/protect the new building. System shall generally be light hazard, except ordinary hazard in all service shops, storage rooms, electrical rooms, etc. Final density flow per square foot and classification of all spaces shall be determined by the fire protection contractor.
- D. The installation shall include, but are not limited to valves, flow switches, sprinkler heads and escutcheons, piping, fittings, hangers and signs and other identification markings, as required.
- E. The sprinkler contractor shall carefully examine all documents during the bidding period. He shall familiarize himself with project conditions such as building construction and pipe and ductwork locations and elevations.
- F. Sprinkler heads shall be installed to properly cover and protect the new building. Sprinkler heads shall be installed to protect the entire structure. Any sprinkler heads installed in finished ceilings shall be brushed chrome semi recessed type. All heads in open structure or bay areas with no ceiling shall be bronze upright type.
- Sprinkler coverage required underneath roof overhangs/canopy areas outside of the building envelope may be accomplished using dry pendent or dry sidewall sprinklers.
- G. The sprinkler contractor shall arrange for approval of the sprinkler systems, and conduct tests in accordance with NFPA 13.
- H. The sprinkler contractor shall provide a detailed shop drawing showing piping layout, head locations, elevations and coordination with all building structure, electrical and plumbing trades. The contractor shall submit detailed sprinkler shop drawings with actual heads for architect approval prior to any fabrication.
- I. The sprinkler contractor must submit one set of sprinkler shop drawings and hydraulic calculations to the local county fire marshal and/or fire department.
- J. The sprinkler contractor shall apply for and obtain a county permit for the work. The permit submittals usually include three copies of shop drawings, hydraulic calculations and catalog documentation of sprinklers and other system components.
- K. Sprinkler spacing should be limited to a maximum of 100 ft per head. The construction detail and locations of the smoke draft curtain boards and roof vents should be explicitly called out to the sprinkler contractor, as they will affect the placement and coverage of the sprinklers.

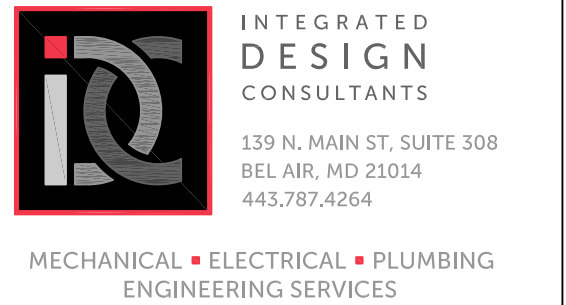
## 5. SECTION 15400 - PLUMBING

- A. The work covered by this section of the specifications consists of furnishing all labor, equipment and materials in connection with the rough-in, final setting and connections to all plumbing fixtures. The contractor shall carefully review the conditions at the site and all of the contract drawings to determine the extent of the new and renovation plumbing work required.
- B. All plumbing fixtures shall be complete in every detail with all trimmings and connections. All fixtures shall be designed to prevent the backflow of polluted water or waste into the water supply system. Fixtures shall be as listed below or approved equal:
- P-1 Flush Valve Water Closet (handicapped):** Toto #CT705ELN, floor mounted, bottom outlet, elongated rim bowl, 17-1/2" high, 1.28 GPF with vitreous china construction, 1-7/8" trap diameter, 1-1/2" top spud, 12" rough-in, bolt caps, wall support and Toto #534 heavy duty white plastic seat with open front and check hinge. Provide Toto #TE11GA, 1.28 GPF EcoPower self-generating, sensor activated electronic flush valve with manual override button, chrome finish and vacuum breaker. ADA compliant.
- P-2 Tech Urinal (handicapped):** Toto #UT447E, 0.5 GPF, vitreous china, wall hung, washout flush action with Integral trap with 3/4" top inlet spud and J.R. Smith fig. 0635 urinal support. Provide Toto #TEU1LA hydropower self-generating, sensor activated electronic flush valve with manual override button, chrome finish and vacuum breaker. ADA compliant.
- P-3 Tech Wall Hung Lavatory (handicapped):** Toto #LT367 with vitreous china construction, faucet ledge, grid drain, tailpiece, cast brass 1" trap, tubing to wall with escutcheon, key operated supply valves with rigid supplies and chair carrier. Provide Sloan #EBF-650, 4" center set lavatory faucet, battery powered, sensor activated, chrome plated with 0.5 gpm spray head. All exposed waste piping and hot and cold water piping shall be insulated with Truebro Handi Lav-Guard model 103 insulation kit with white finish. ADA compliant.
- P-4 Tech Wash Sink:** Advance Tabco single compartment 400 series, 16 gauge, type 430 stainless steel sink with back splash and galvanized tubular legs. Provide Elkay #LK940GN05T4H chrome plated mixing faucet with wrist blade handles, 5" high gooseneck swing spout, anti-hose aerator and Elkay #LK18B stainless steel perforated strainer grid.
- P-4A Tech Wash Sink (handicapped):** Advance Tabco single compartment 400 series, 16 gauge, type 430 stainless steel sink with back splash and galvanized tubular legs. Provide Elkay #LK940GN05T4H chrome plated mixing faucet with wrist blade handles, 5" high gooseneck swing spout, anti-hose aerator and Elkay #LK18B stainless steel perforated strainer grid. ADA compliant.
- P-5 Tech Break Room Sink (handicapped):** Elkay #GECR2521 "Celebrity" single compartment sink with 20 gauge, type 304 nickel bearing stainless steel, drop-in, 25"X21-1/4"X5-3/8" overall size. Provide Delta #9159-DST gooseneck faucet with ADA single lever handle, swing spout and 2-function pull down sprayer. Sink shall be complete with crumb cup strainer, rigid supplies with loose key stops, cast brass clean out, tubing to wall and escutcheons. All exposed waste piping and hot and cold water piping shall be insulated with Truebro Handi Lav-Guard model 102 insulation kit with white finish. ADA compliant.
- P-6 Tech Electric Water Cooler w/bottle filler (ADA):** Elkay #LZ5TL8WSSK, air cooled, wall-hung, bi-level with stainless steel construction, hands-free, visual filter monitor, filtered, laminar flow, antimicrobial, flex-guard safety bubbler and front/side push pads. Unit shall have electronic bottle filler sensor and lead-free design. Unit shall deliver a minimum of 8.0 gph of 50 degree F, drinking water with 90 degree F, water inlet at room temperature. Compressor shall be 260 watts, 120V, using R-134A refrigerant. ADA compliant.
- P-7 Emergency Eyewash:** Bradley #S19-220-ADA, chrome plated brass with twin soft-flow eyewash heads and protective sprayhead covers. Push handle, 16" diameter yellow impact-resistant plastic bowl, stay open ball valve and in-line strainer. Unit shall comply with ANSI Z358.1 with minimum 3 gpm eyewash/face flow.
- P-8 Shop Work Sink:** American Standard #7695.008, enameled cast iron, 24"x20-1/2"x11-1/4" overall size with 8" faucet centers, hanger, rim guard and 3" outlet. Fixture shall be fitted with #830AA faucet with wall to spout end, 10-1/2" spout, hose end connection, integral vacuum breaker, spout brace, adjustable union couplings and stop shanks.
- C. Sanitary vents thru roof shall be flashed with seamless lead flashing assemblies. Flashing shall have a conical steel reinforced boot and shall be complete with a top cast iron counter flashing.
- D. Sanitary vents thru roof shall be one-piece PVC/rubber boot assembly with pipe clamp flashed and sealed into existing roofing system.
- E. The Electric Water Heater shall be State or an approved equal. Heater shall be rated at volts and phase as indicated on drawings and be listed by Underwriters' Laboratories. Tank shall be factory fired with glass lining with 150 psi working pressure and equipped with extruded high density magnesium anode at T&P relief valve. Electric heating element shall be medium watt density with zinc plated copper sheath. The controls shall include a thermostat with each element and a high temperature cutoff. The jacket shall provide full size control compartments for performance of service and maintenance thru front panel openings and enclose the tank with insulation. The drain valve shall be located in the front for ease of servicing. Outer jacket shall be baked enamel finish. Heater shall have a three (3) year limited warranty for commercial installation, as outlined in the written warranty. Fully illustrated instruction manual shall be included. Insulation must meet ashrae standard 90a-1980 for energy efficiencies.
- F. The "Teplid" water (for eyewash/shower) Electric Water Heater shall be Hubbell or an approved equal. Packaged heater shall be rated at volts and phase as indicated on drawings, factory fired with 150 psi working pressure and be listed by Underwriters' Laboratories and in accordance with ANSI Z358.1-2009. Packaged system shall consist of integrally mounted factory supplied, calibrated and performance tested, triple redundant thermostatic pressure balanced mixing valve system. Carbon steel tank shall be lined with 1/2" thick hydrastone cement and not required any anodic protection. Tank shall be covered with 3" thick polyurethane foam insulation. Outer protective jacket shall be dent resistant composite to resist rust and corrosion. Delivery water temperature shall be set at 80°F. The system shall be supplied complete with all electrical operating controls and safety devices. The drain valve shall be located in the front for ease of servicing. Heater shall have a standard (1) year workmanship and material warranty with a (5) year pressure vessel warranty. Fully illustrated instruction manual shall be included. Refer to drawings for size, capacity and voltage.
- I. Floor drains shall be Watts or approved equal. Drain shall be model FD-100, cast iron with anchor flange, reversible clamping collar, primary/secondary weepholes and adjustable round nickel-bronze strainer. Drain to be primed from nearest flush valve or where indicated on drawings.
- J. Service shop area drains shall be Watts or approved equal. Drain shall be 24"x24" model FD-530, steel body, epoxy coated with heavy-duty ductile iron grate and 4" outlet.
- K. Roof drains shall be J. R. Smith Series 1010 cast iron with extension sleeve, flashing clamp device, gravel stop, underdeck clamp, bolts, roof sump receiver and aluminum dome strainer.
- L. Overflow drains shall be J. R. Smith Series 1070 cast iron with flashing clamp device, gravel stop, polyethylene dome, PVC standpipe, underdeck clamp and bolts.
- M. Domestic water service lead free, double check valve assembly shall be Watts series LF007 or approved equal. Valve shall be ASSE1015 listed and AWWA C510 compliant with sizes 1/2"-3". Construction shall be bronze body and cover and a maximum working pressure of 175 psi.
- N. Undersink thermostatic mixing valve shall be Watts USC-B-M1 or approved equal with ASSE1070 listing. Valve shall have bronze body construction with tamper-proof locking cap, internal check valves, strainer and complete with 3/8" compression fittings. Temperature setting range shall be 80-120 degree F with a flow range of 0.5-2.5 gpm.
- O. Potable water systems shall be disinfected prior to use. The method to be followed shall be that prescribed by the health authority and code requirements.



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Plot Date:	-

Sheet Number  
**P-801**  
Sheet Title  
**PIPING/PLUMBING  
SPECIFICATIONS**

Project Number IDC #23-010	File Name
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