

GENERAL NOTES

1. FURNISH AND INSTALL ALL ITEMS OF WORK AND SPECIFICATIONS SHOWN ON DRAWINGS IN COMPLIANCE WITH 2020 PLUMBING CODE OF NYS.
2. PLUMBING TRADE CONTRACTOR SHALL PROVIDE MATERIAL, EQUIPMENT, FIXTURES AND ACCESSORIES FOR THE COMPLETION OF THE WORK, TO MAKE THE SYSTEM READY FOR NORMAL AND PROPER OPERATION. CONTRACTOR SHALL ALSO INCLUDE ALL WORK OR MATERIALS NOT DIRECTLY SHOWN ON THE DRAWINGS OR IN THE SPECIFICATION BUT NECESSARY FOR THE PROPER OPERATION OF THE SYSTEM.
3. ALL WORK SHALL BE PERFORMED TO THE SATISFACTION OF THE ARCHITECT, ENGINEER, OWNER AND AGENCIES HAVING JURISDICTION.
4. PERMITS AND FEES: THE CONTRACTOR WILL OBTAIN ALL PERMITS AND ARRANGE FOR PAYMENT OF PERMIT AND FILING FEES WITH OWNER. TRADE CONTRACTORS SHALL SIGN AND SEAL PERMIT APPLICATIONS, ARRANGE FOR INSPECTIONS AND COORDINATE ANY OTHER REQUIREMENTS OF FEDERAL, STATE, COUNTY AND LOCAL AUTHORITIES HAVING JURISDICTION OVER THIS WORK AS WELL AS WITH INSURANCE AND LOCAL UTILITY COMPANIES IF THEIR APPROVAL IS REQUIRED. THE CONTRACTOR SHALL DELIVER ALL PERMITS, APPROVALS, AND CERTIFICATES OF INSPECTION FOR HIS WORK TO THE OWNER, WITHOUT ADDITIONAL COST, BEFORE REQUESTING FINAL PAYMENT FOR THE WORK.
5. PLANS AND SPECIFICATIONS SHOWN HEREIN ARE INTENDED FOR A COMPLETE PROJECT, "EXTRA COSTS" RESULTING FROM THIS WORK SHALL INVOLVE THE OWNER, ARCHITECT OR OTHER CONTRACTORS.
6. THE PLUMBING TRADE CONTRACTOR SHALL CONFIRM ALL UTILITY COMPANY REQUIREMENTS AND CONNECTION POINTS IN FIELD PRIOR TO STARTING WORK.
7. THE PLUMBING TRADE CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR TOWN PERMITS AND ANY SERVICE REQUIRED UNDER THIS CONTRACT.
8. THE PLUMBING TRADE CONTRACTOR SHALL SUBMIT COPIES OF SHOP DRAWINGS WITH DIMENSIONS, CAPACITIES AND MANUFACTURER REQUIREMENTS. SHOP DRAWINGS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING ITEMS AND EQUIPMENT:
- * PLUMBING FIXTURES AND TRIM
 - * CLEANOUTS
 - * PIPING MATERIALS
 - * PIPING INSULATION
 - * FLOOR DRAINS/TRAPS
9. ALL SHOP DRAWINGS, PRODUCT DATA AND SAMPLES SUBMITTED BY THE PLUMBING TRADE CONTRACTOR SHALL ILLUSTRATE DETAILS OF WORK, EQUIPMENT, MATERIALS, PRODUCTS, SYSTEMS, DESIGN OR WORKMANSHIP THAT THE CONTRACTOR INTENDS TO USE IN ORDER TO COMPLY WITH THE DESIGN ESTABLISHED IN THE CONTRACT DOCUMENTS.
10. PRIOR TO SUBMITTING A BID, PLUMBING TRADE CONTRACTORS ARE REQUIRED TO VISIT THE SITE, TAKE MEASUREMENTS, DETERMINE EXACT INVERT ELEVATIONS, SIZE, DEPTH AND LOCATION OF ALL EXISTING UTILITIES WHERE CONNECTIONS ARE TO BE MADE OR INTERSECTIONS OCCUR. WORK BACK TOWARD FIXTURE FROM UTILITY CONNECTION FOR ALL PIPING SYSTEMS. AND INSPECT EXISTING CONDITIONS AND LIMITATIONS. NO ADDITIONAL ALLOWANCE WILL BE MADE BECAUSE OF MISUNDERSTANDING AS TO THE WORK INVOLVED UNDER THIS PROJECT.
11. THE PLUMBING TRADE CONTRACTOR SHALL FOLLOW DRAWINGS IN LAYOUT OF WORK AND COORDINATE LAYOUT WITH OTHER TRADES BEFORE PROCEEDING WITH CONSTRUCTION.
12. ALL CHANGES FROM THE PLANS NECESSARY TO MAKE THE WORK OF THIS PROJECT CONFORM TO THE BUILDING AS CONSTRUCTED AND TO FIT THE WORK OF OTHER TRADES SHALL BE MADE WITHOUT EXTRA COST.
13. THE DRAWINGS SHALL NOT BE SCALED. REFER TO THE ARCHITECTURAL DRAWINGS AND DETAILS FOR ALL DIMENSIONS AND DETAILS, LOCATIONS OF PARTITIONS, PARTITION CONSTRUCTION AND LOCATIONS OF PLUMBING FIXTURES.
14. PROTECT ALL EQUIPMENT, MATERIALS AND WORK PERFORMED UNDER THIS PROJECT FROM DAMAGE THAT MAY BE CAUSED BY OTHER WORKMEN.
15. THE PLUMBING TRADE CONTRACTOR SHALL KEEP ALL PIPING AND EQUIPMENT CAPPED, PLUGGED, DRAINED OR OTHERWISE PROTECTED INCLUDING PROTECTION FROM FREEZING AND ENTRANCE OF BUILDING MATERIALS, SAND, DIRT, MORTAR, CONCRETE, ETC. AND MAINTAIN THE INTEGRITY OF ALL EXISTING PIPING SYSTEMS. PRIOR TO CONNECTING NEW WORK TO ANY EXISTING SYSTEM, CONFIRM SYSTEM IDENTIFICATION AND DIRECTION OF FLOW. VERIFY THAT EXISTING PIPING IDENTIFICATION LABELS ARE CORRECT, AND PROVIDE ALL INSTALLATION REQUIREMENTS FOR PROPER CONNECTION TO THE EXISTING SYSTEMS.
16. AT THE COMPLETION OF EACH WORKING DAY, THE OPEN ENDS OF ALL PIPES SHALL BE PROVIDED WITH TEMPORARY PLUGS TO PREVENT THE ENTRANCE OF FOREIGN MATTER.
17. THE PLUMBING TRADE CONTRACTOR SHALL PROVIDE THEIR OWN CLEAN UP, REMOVAL AND LEGAL DISPOSAL OF ALL RUBBISH ON A DAILY BASIS.
18. IT IS THE INTENT OF THE DRAWINGS TO SHOW THE UTILITIES AS ACCURATELY AS POSSIBLE. HOWEVER, THE PLUMBING TRADE CONTRACTOR SHALL VERIFY ACTUAL FIELD LOCATIONS AND INVERT ELEVATIONS BY DIGGING TEST HOLES PRIOR TO ANY CONSTRUCTION. IT IS THEREFORE THE PLUMBING CONTRACTOR'S RESPONSIBILITY TO DETERMINE TO THEIR OWN SATISFACTION THE LOCATION OF SUCH UTILITIES. THIS INCLUDES LOCATION OF VENT AND SANITARY RISERS LOCATED IN CHASE LOCATIONS.
19. TESTING OF COMPLETE SYSTEM SHALL BE MADE IN THE PRESENCE OF OWNER AND AUTHORITY HAVING JURISDICTION, AS REQUIRED BY LOCAL CODES.
20. THE PLUMBING TRADE CONTRACTOR SHALL REPLACE OR REPAIR AT THEIR OWN EXPENSE ANY PIECE OF EQUIPMENT AND/OR MATERIAL WHICH IS FOUND TO BE DEFECTIVE DURING INSPECTION OR TEST. INSPECTION AND TEST SHALL BE REPEATED FOR THE REPLACED AND REPAIRED EQUIPMENT OR MATERIALS.
21. THE PLUMBING TRADE CONTRACTOR SHALL ALSO REPAIR ALL DAMAGE TO SURROUNDING AREAS CAUSED BY FAILURE OR REPAIR OF DEFECTIVE EQUIPMENT OR MATERIAL.
22. ALL WORK SHALL BE SCHEDULED IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS FOR THE USE OF EXISTING FACILITIES. ANY INTERRUPTION IN PRIMARY SERVICES MUST BE KEPT TO AN ABSOLUTE MINIMUM.
23. THE PLUMBING TRADE CONTRACTOR SHALL REPLACE ALL EXISTING CONSTRUCTION BEING REMOVED TO MATCH EXISTING FACILITIES.
24. ALL PIPING SUPPORTS SHALL BE FURNISHED AND INSTALLED BY THE PLUMBING TRADE CONTRACTOR.
25. FOR ADDITIONAL NOTES SEE DRAWING T02.
26. ALL ABANDONED PIPE AND EQUIPMENT SHALL BE REMOVED UNLESS OTHERWISE INDICATED.

UTILITY SERVICE PIPING NOTES

SANITARY/PROCESS

WASTE AND VENT PIPING

1. THE PLUMBING CONTRACTOR SHALL PROVIDE CLEANOUTS WHERE INDICATED ON DRAWINGS AND WHERE REQUIRED BY CODE. CLEANOUTS ON LINES UP TO 4" SHALL BE FULL PIPE SIZE.
2. ALL ABOVE GROUND PIPING SHALL BE RUN STRAIGHT AND PLUMB, AS DIRECT AS POSSIBLE, PARALLEL TO SLAB, AND AS CLOSE AS POSSIBLE TO THE STRUCTURAL MEMBERS.
3. MAKE CHANGES IN DIRECTION OF WASTE DRAINAGE AND VENT PIPING USING APPROPRIATE BRANCHES, BENDS AND LONG SWEEP BENDS. TEES AND SHORT-SWEEP 1/4 BENDS MAY BE USED ON VERTICAL STACKS. DO NOT CHANGE DIRECTION OF FLOW MORE THAN 90° . USE PROPER SIZE OF STANDARD INCREASERS AND REDUCERS IF PIPES OF DIFFERENT SIZES ARE CONNECTED. REDUCING SIZE OF DRAINAGE PIPING IN DIRECTION OF FLOW IS PROHIBITED.
4. THE PLUMBING CONTRACTOR SHALL FURNISH ALL NEW PIPING.
5. ALL TESTING SHALL BE MADE IN THE PRESENCE OF THE OWNER AND PLUMBING INSPECTOR HAVING JURISDICTION AND IN ACCORDANCE WITH THE 2020 PLUMBING CODE OF NYS.

DCW AND DHW WATER PIPING

6. CONNECTION BETWEEN COPPER OR BRONZE AND STEEL PIPING SHALL BE MADE WITH DIELECTRIC UNIONS.
7. ALL PIPING SYSTEM SHALL BE PRESSURE TESTED FOR LEAKS IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST STANDARD SPECIFICATION OF ANSI B31.9
8. TESTING SHALL BE CONDUCTED BEFORE FINAL CONNECTIONS TO EQUIPMENT AND FIXTURES AND BEFORE APPLYING INSULATION.
9. PLUMBING CONTRACTOR SHALL FURNISH ALL TEMPORARY PIPE CONNECTIONS, PUMPS, COMPRESSORS AND INSTRUMENT TO PERFORM AND COMPLETE ALL TESTING.
10. TESTING OF COMPLETED SYSTEM SHALL BE CONDUCTED IN THE PRESENCE OF THE OWNER AND THE AUTHORITY HAVING JURISDICTION. REPAIR PIPING SECTIONS, WHICH FAIL REQUIRED PIPING TEST, BY DISASSEMBLY AND RE-INSTALLATION, USING NEW MATERIALS TO EXTENT REQUIRED TO OVERCOME LEAKAGE. DO NOT USE CHEMICALS, STOP-LEAK COMPOUNDS, MASTIC OR OTHER TEMPORARY REPAIR METHODS.

NATURAL GAS PIPING

1. NATURAL GAS PIPING SHALL BE STANDARD WEIGHT SCHEDULE 40 BLACK STEEL PIPE ASTM-A106 (SEAMLESS), THREADED WITH MALLEABLE IRON FITTINGS FOR PIPING 2-1/2" AND SMALLER. ALL NATURAL GAS PIPING RUNNING AT ELEVATED PRESSURES OR GREATER THAN 2-1/2" SHALL BE WELDED CONSTRUCTION AND COMPLY WITH AMERICAN WELDING SOCIETY (AWS) THE AMERICAN SOCIETY OF MECHANICAL ENGINEERING (ASME) AND THE 2020 NEW YORK STATE FUEL GAS CODE / (NFFA 54) STANDARDS FOR INSTALLATION AND TESTING.
2. NATURAL GAS SYSTEM VALVING SHALL BE PLUG VALVES, 175 LBS CLASS B IRON LUBRICATED, 2 BOLT COVER TYPE SHORT PATTERN, WRENCH OPERATED WITH THREADED ENDS.
3. NATURAL GAS PIPING SHALL BE INSTALLED AND TESTED IN COMPLIANCE WITH THE REQUIREMENTS OF THE 2020 NEW YORK STATE FUEL GAS CODE, NFFA 54 AND ALL AUTHORITIES AND AGENCIES HAVING JURISDICTION.
4. TESTING OF COMPLETED SYSTEM SHALL BE CONDUCTED IN THE PRESENCE OF THE OWNER AND THE AUTHORITY HAVING JURISDICTION. REPAIR PIPING SECTIONS, WHICH FAIL REQUIRED PIPING TEST, BY DISASSEMBLY AND RE-INSTALLATION, USING NEW MATERIALS TO EXTENT REQUIRED TO OVERCOME LEAKAGE. DO NOT USE CHEMICALS, STOP-LEAK COMPOUNDS, MASTIC OR OTHER TEMPORARY REPAIR METHODS.
5. ALL NEW GAS FIRED EQUIPMENT HAS BEEN SELECTED WITH AN OPERATING PRESSURE RANGE OF 4.0" TO 14.0" OF W.C. PLUMBING CONTRACTOR SHALL FIELD VERIFY INCOMING GAS PRESSURE AT THE MAIN AS WELL AS THE OPERATING PRESSURE OF THE MAIN AND ALL EQUIPMENT WITHIN THE BUILDING. WHERE GAS OPERATING PRESSURES WITHIN THE MAINS OR BRANCH PIPING SERVING GAS FIRED EQUIPMENT EXCEEDS ½ PSIG (14.0IN W.C.) THE INSTALLING CONTRACTOR SHALL PROVIDE A LOCK-UP STYLE LINE REGULATOR (SIMILAR TO MAXITROL 325 SERIES) TO BE VENTED TO ATMOSPHERE. REGULATORS SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR EACH PIECE OF EQUIPMENT AND INSTALLED AS PER MANUFACTURERS AND LOCAL UTILITY COMPANIES GUIDELINES.
6. ALL MODIFICATIONS TO THE EXISTING NATURAL GAS SYSTEM AND/OR TIE IN TO THE METER SET SHALL BE REVIEWED AND APPROVED BY THE LOCAL GAS UTILITY COMPANY. THE PLUMBER SHALL COORDINATE ALL NEW PIPING AND/OR SYSTEM MODIFICATIONS WITH THE UTILITY COMPANY AND MODIFY PIPING AS REQUIRED AT THE INCOMING SERVICE TO ACCOMMODATE ANY METER MODIFICATIONS.

PIPE INSULATION


11. ALL WATER PIPING SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH ALL SERVICE JACKET. THE THICKNESS OF INSULATION SHALL NOT BE LESS THAN 1".
12. INSULATION SHALL BE INSTALLED IN A SMOOTH, CLEAN, WORKMANLIKE MANNER. JOINTS SHALL BE TIGHT AND FINISHED SMOOTH, WITH A CONTINUOUS UNBROKEN VAPOR SEAL.
13. ALL SURFACES TO BE INSULATED SHALL BE DRY AND FREE OF LOOSE SCALE, DIRT, AND OIL OR WATER WHEN INSULATION IS APPLIED.
14. INSTALLATION OF INSULATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH RECOGNIZED INDUSTRIAL PRACTICES TO ENSURE THAT INSULATION SERVES THE INTENDED PURPOSE.

ABBREVIATIONS

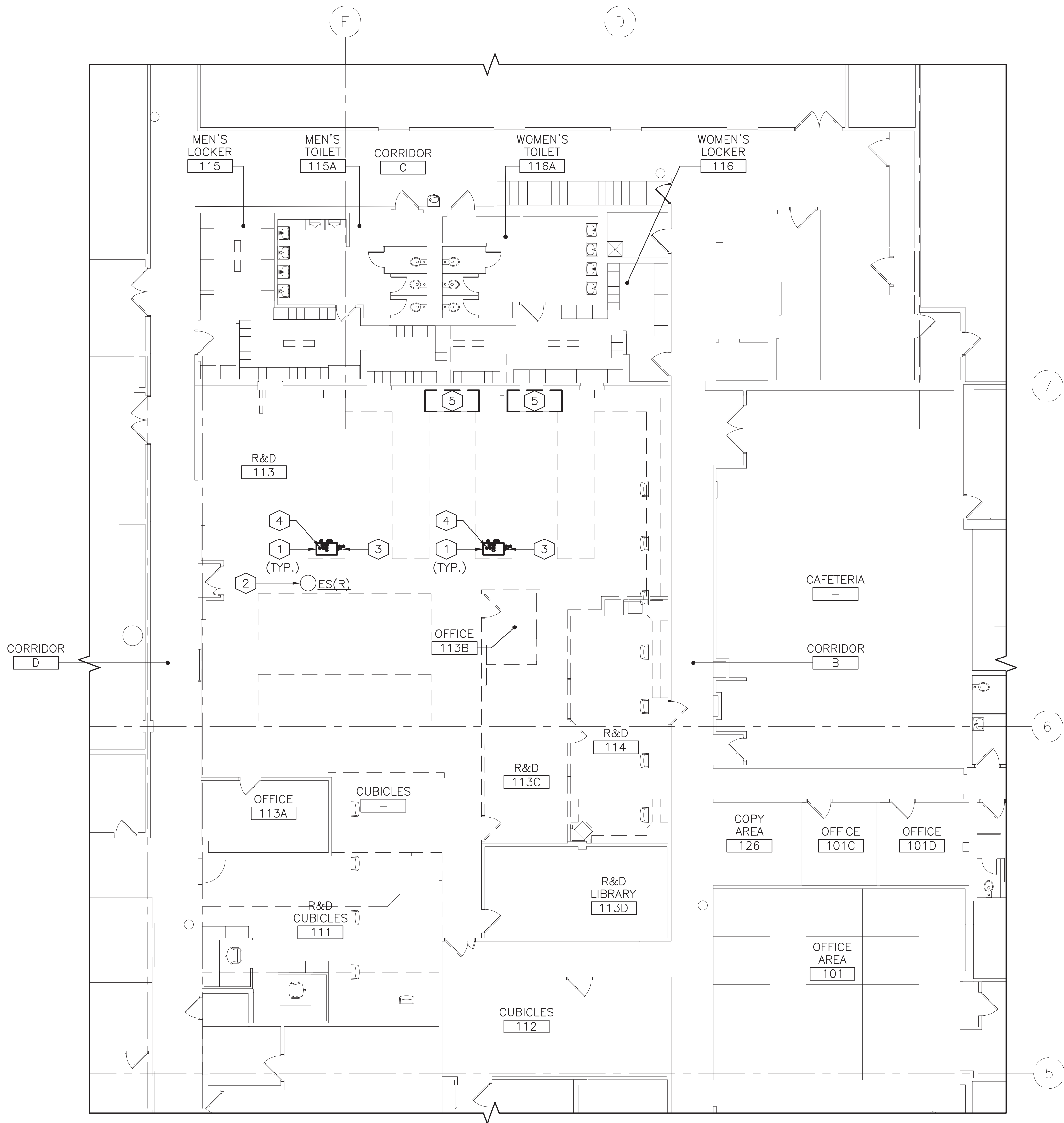
AFF	ABOVE FINISHED FLOOR
BF	BELOW FLOOR
CA	COMPRESSED AIR
CFH	CUBIC FEET PER HOUR
CI	CAST IRON
CL	CENTER LINE
CLG	CEILING
CO	CLEAN OUT
CONN	CONNECTION
CONT.	CONTINUED
CU	COPPER
CUL	COPPER TYPE L
DCW	DOMESTIC COLD WATER
DFU	DRAINAGE FIXTURE UNIT
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RETURN
DI	DEIONIZED/PURIFIED WATER
DIR	DEIONIZED/PURIFIED WATER RETURN
DIA	DIAMETER
DN	DOWN
DWG	DRAWING
(E)	EXISTING TO REMAIN
FCO	FLOOR CLEANOUT
FIN. FLR.	FINISHED FLOOR
FT.	FEET
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GPF	GALLONS PER FOOT
GPH	GALLONS PER HOUR
IN	INCH
IN WG	INCHES WATER GAUGE
LAV	LAVATORY
MC	MECHANICAL CONTRACTOR
MFR	MANUFACTURER
NIC	NOT IN CONTRACT
No.	NUMBER
NTS	NOT TO SCALE
PC	PLUMBING CONTRACTOR
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
(R)	REMOVE AND REPLACE
SAN	SANITARY LINE
SQ. FT.	SQUARE FOOT
ST	STORM
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UR	URINAL
V	VENT
V.I.F.	VERIFY IN FIELD
VTR	VENT THROUGH (THRU) ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WHA	WATER HAMMER ARRESTOR
WSFU	WATER SUPPLY FIXTURE UNITS

LEGEND

	SANITARY LINE ABOVE FLOOR
	SANITARY LINE BELOW FLOOR
	VENT LINE
	VALVE
	CHECK VALVE
	GLOBE VALVE
	UNION
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING
	DOMESTIC HOT WATER RETURN PIPING
	DEIONIZED WATER PIPING
	DEIONIZED WATER RETURN PIPING
	COMPRESSED AIR PIPING
	NATURAL GAS PIPING
	PIPE RISE
	PIPE DROP
	LUBRICATED PLUG VALVE
	SOLENOID VALVE
	UNION
	TYPE OF EQUIPMENT & EQUIPMENT DESIGNATION NUMBER
	POINT OF CONNECTION (NEW TO EXISTING)
	POINT OF DISCONNECTION & REMOVAL (DEMOLITION)
	SHEET NOTES
	DEMOLITION NOTES
	REVISION
	ITEMS INCLUDED UNDER REVISION

0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21
REV	REVISION DESCRIPTION	BY	DATE
 EI Associates ARCHITECTURE ENGINEERING PLANNING 8 RIDGEDALE AVENUE•CEDAR KNOLLS NJ 07927•973.775.7777			
GAETANO P. CIPRIANO, P.E.		PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1	PLUMBING
SCALE	AS NOTED	PROJECT	EIA DRAWING NO.
DRAWN BY:	PROJECT	INSTRUMENTATION LABORATORY LOCKER ROOM EXPANSION ORANGEBURG NEW YORK	P00
DESIGNED BY:	PROJECT		
CHECKED BY:	PROJECT		
APPROVED BY:		TITLE	CLIENT DWG. NO. - - - - -
PROJECT MANAGER:		GENERAL NOTES, LEGEND, AND ABBREVIATIONS	EIA PROJECT NO. EG8577.03

PLAN
NORTH



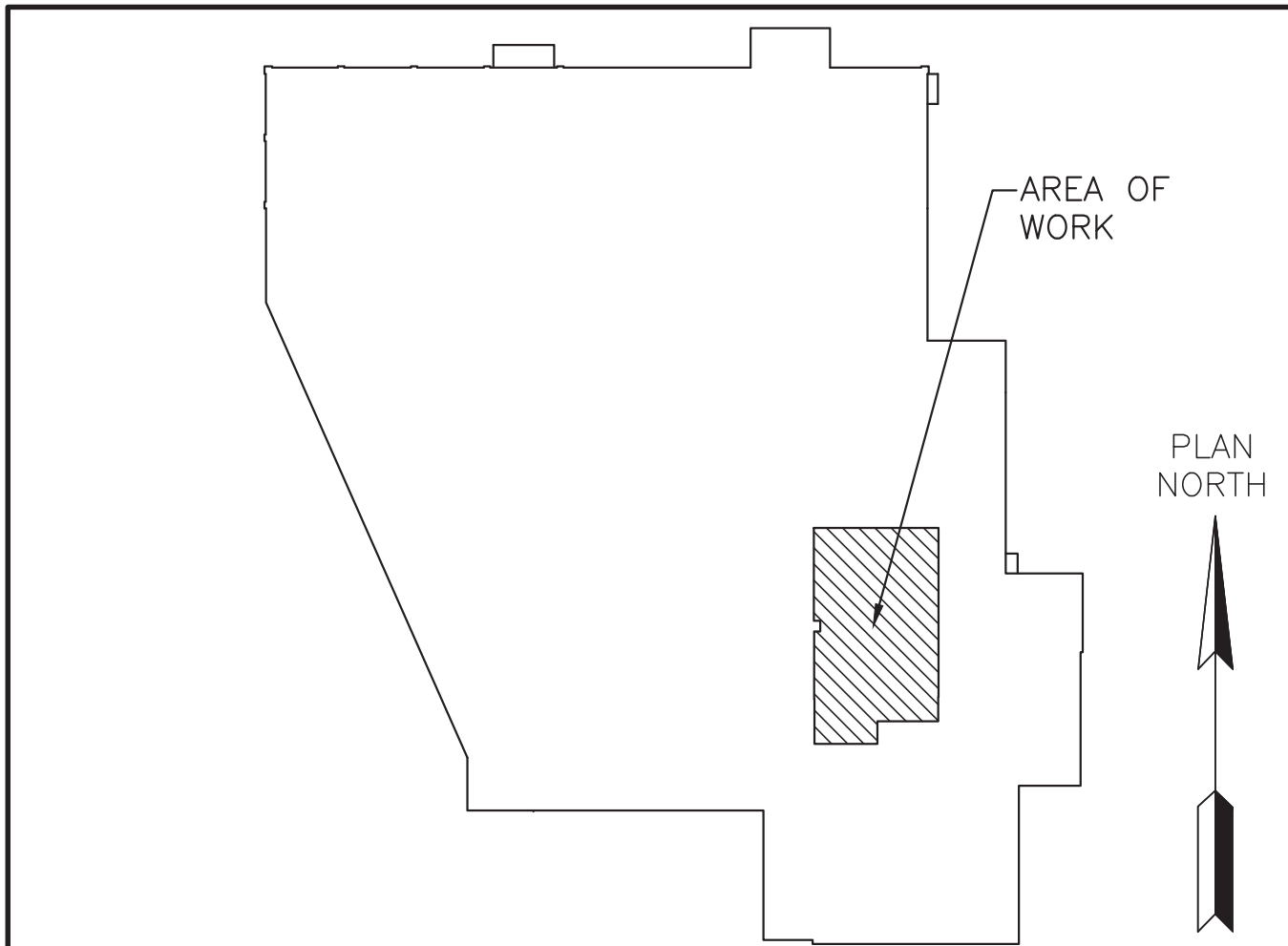
FIRST FLOOR DEMOLITION PLAN
1/8"=1'-0" (1 PD11)

GENERAL NOTES:

1. SEE SHEET T02 FOR ADDITIONAL GENERAL NOTES.
2. SEE GENERAL NOTES #19,20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
3. SEE SHEET A000 FOR GENERAL, TYPICAL, ELECTRICAL, STRUCTURAL AND ALL OTHER TRADE DEMOLITION NOTES.
4. SEE P00 SERIES DWGS FOR GENERAL NOTES, ABBREVIATIONS, & LEGEND.
5. SEE P40 SERIES DWGS FOR DETAILS.
1. SEE P50 SERIES DRAWINGS FOR FIXTURE CONNECTIONS.
2. SEE P60 SERIES DWGS FOR SCHEDULES.
3. PLUMBING CONTRACTOR SHALL CONFIRM EXISTING PIPE LOCATIONS AND INVERT ELEVATIONS PRIOR TO DEMOLITION/CONSTRUCTION.
4. FLOOR WORK BY OWNER.

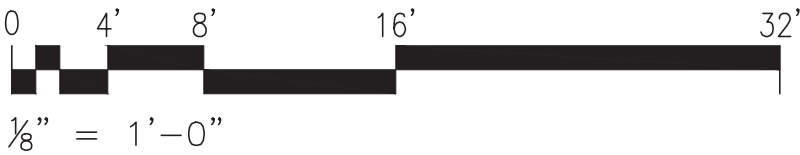
DEMOLITION NOTES:

1. EXISTING LAB WORK STATIONS AND ALL ASSOCIATED PLUMBING FIXTURES AND PIPING TO BE REMOVED AND DISCARDED. THIS SHALL INCLUDE BUT IS NOT LIMITED TO ALL WASTE, VENT, HWS, HWR, LAB/ACID WASTE, DEIONIZED WATER AND NATURAL GAS PIPING. PLUMBER SHALL CUT BACK AND CAP PIPING AT MAINS. PLUMBER SHALL FIELD VERIFY EXACT PIPE ROUTING AND CUT BACK AND TEMPORARILY CAP PIPING FOR FUTURE CONNECTION. REMOVE ALL HANGERS AND SUPPORTS AND PATCH EXISTING SURFACES AS TO ALLOW FOR A CLEAN WORK ARES. SEE DRAWING P11 FOR NEW CONNECTIONS.
2. APPROXIMATE LOCATION OF EXISTING EMERGENCY SHOWER AND ALL ASSOCIATED PIPING TO REMAIN. PLUMBER SHALL SHUT-OFF WATER SUPPLY TO FIXTURE AND PROVIDE TEMPORARY PROTECTION OF FIXTURE DURING DEMOLITION AND NEW WORK PHASES OF CONSTRUCTION. PROTECTION SHALL INCLUDE TEMPORARY PLYWOOD WALLS AND/OR PLASTIC SHEETING. NOTE: IN THE CASE THAT THE EXISTING SHUT-OFF VALVES ARE SIEZED THE PLUMBER SHALL PROVIDE NEW BALL VALVES OF SIZE AND QUANTITY TO MATCH EXISTING INSTALLATION. PLUMBER SHALL TEST EXISTING MIXING VALVE TO ASSURE THE PROPER TEMPERATURE TEPID WATER IS BEING DELIVERED TO THE EMERGENCY FIXTURES AS PER OSHA STANDARDS.
3. EXISTING EMERGENCY EYEWASH AND ALL ASSOCIATED APPURTANCES TO BE REMOVED AND DISCARDED. TEMPORARILY CUT BACK AND CAP PIPING AT THE MAIN FOR FUTURE RECONNECTION TO PIPING.
4. EXISTING DEIONIZED WATER FAUCET TO BE REMOVED AND DISCARDED, CUT BACK AND TEMPORARILY CAP DEIONIZED WATER SUPPLY AND RETURN PIPING AT THE MAIN FOR RECONNECTION.
5. EXISTING FUME HOOD IS TO BE REMOVED AND ALL ASSOCIATED PLUMBING FIXTURES AND PIPING TO BE REMOVED AND TURNED OVER TO BUILDING MANAGEMENT FOR SALVAGE/STORAGE. PIPING DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO ALL WASTE, VENT, HWS, HWR, LAB/ACID WASTE, COMPRESSED AIR, DEIONIZED WATER, NATURAL GAS PIPING, ETC. PLUMBER SHALL CUT BACK AND CAP PIPING AT MAINS AND REMOVE ALL HANGERS/SUPPORTS. PATCH ALL EXISTING SURFACES TO MATCH EXISTING. VIF.

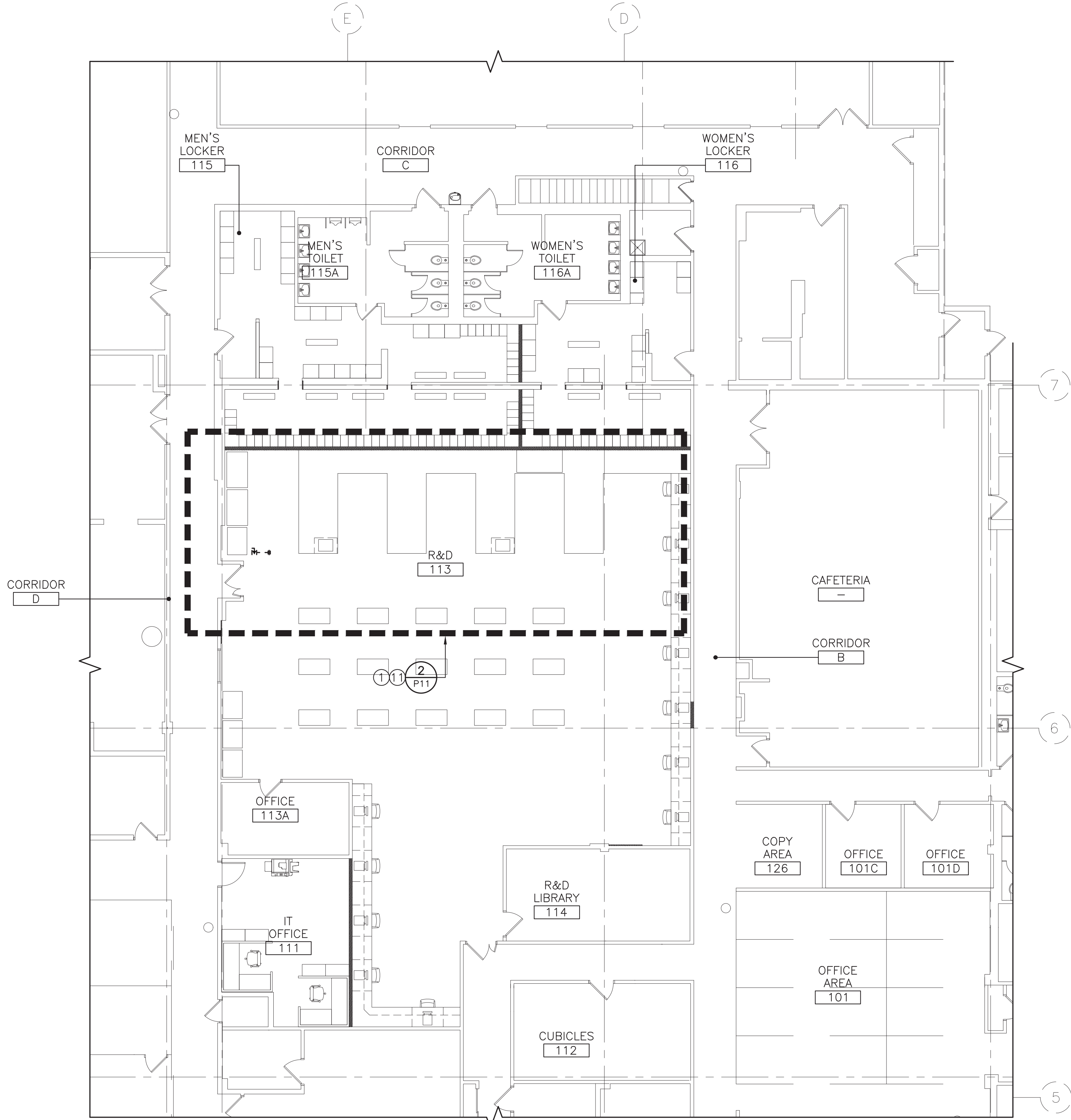


KEY PLAN - FIRST FLOOR
NTS

0	ISSUED FOR BID AND CONSTRUCTION		LG 24 SEPT 21
REV	REVISION DESCRIPTION		BY DATE
<div><div><div>EI</div><div>ARCHITECTURE ENGINEERING PLANNING</div></div><div><div>EI Associates</div><div>ARCHITECTS & ENGINEERS, PC</div><div>8 RIDGEDALE AVENUE CEDAR KNOLLS NJ 07927+973.775.7777</div></div></div>			
GAETANO P. CIPRIANO, P.E.		PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1	PLUMBING
SCALE AS NOTED		PROJECT	EIA DRAWING NO.
DRAWN BY: PIPER 28/09/21	INSTRUMENTATION LABORATORY		PD11
DESIGNED BY: PIPER 28/09/21	LOCKER ROOM EXPANSION		
CHECKED BY:	ORANGEBURG	NEW YORK	
APPROVED BY:	TITLE	FIRST FLOOR PLAN — DEMOLITION	CLIENT DWG. NO. — — — —
PROJECT MANAGER:			EIA PROJECT NO. EG8577.03



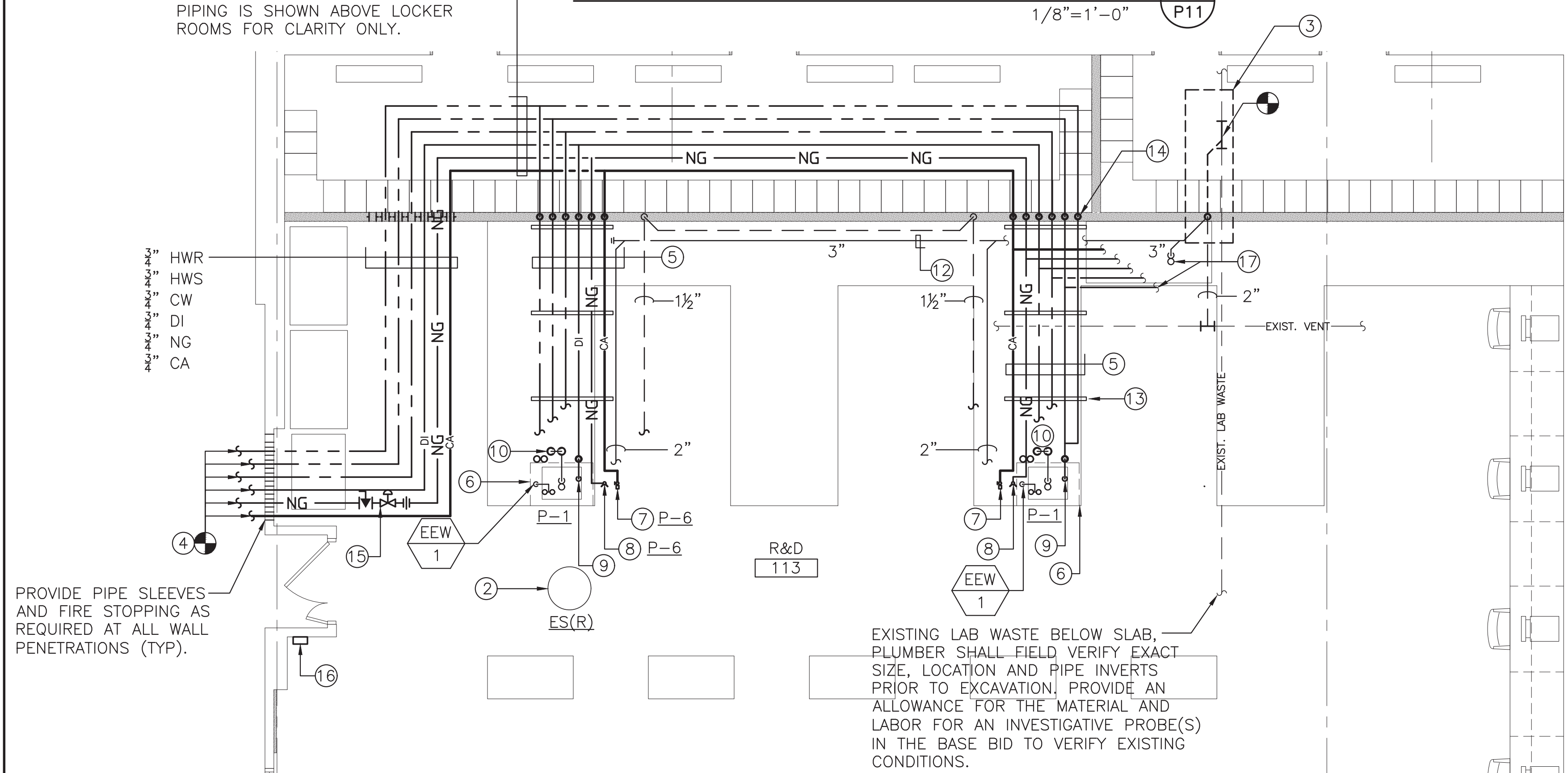
PLAN NORTH



NOTE: ALL NEW PIPING SERVING LAB SINKS SHALL BE INSTALLED ABOVE FINISHED CEILING IN LAB AREA. PIPING IS SHOWN ABOVE LOCKER ROOMS FOR CLARITY ONLY.

FIRST FLOOR PLAN — NEW WORK

1/8"=1'-0"



PROVIDE PIPE SLEEVES AND FIRE STOPPING AS REQUIRED AT ALL WALL PENETRATIONS (TYP).

EXISTING LAB WASTE BELOW SLAB. PLUMBER SHALL FIELD VERIFY EXACT SIZE, LOCATION AND PIPE INVERTS PRIOR TO EXCAVATION. PROVIDE AN ALLOWANCE FOR THE MATERIAL AND LABOR FOR AN INVESTIGATIVE PROBE(S) IN THE BASE BID TO VERIFY EXISTING CONDITIONS.

ENLARGED PART PLAN — NEW WORK

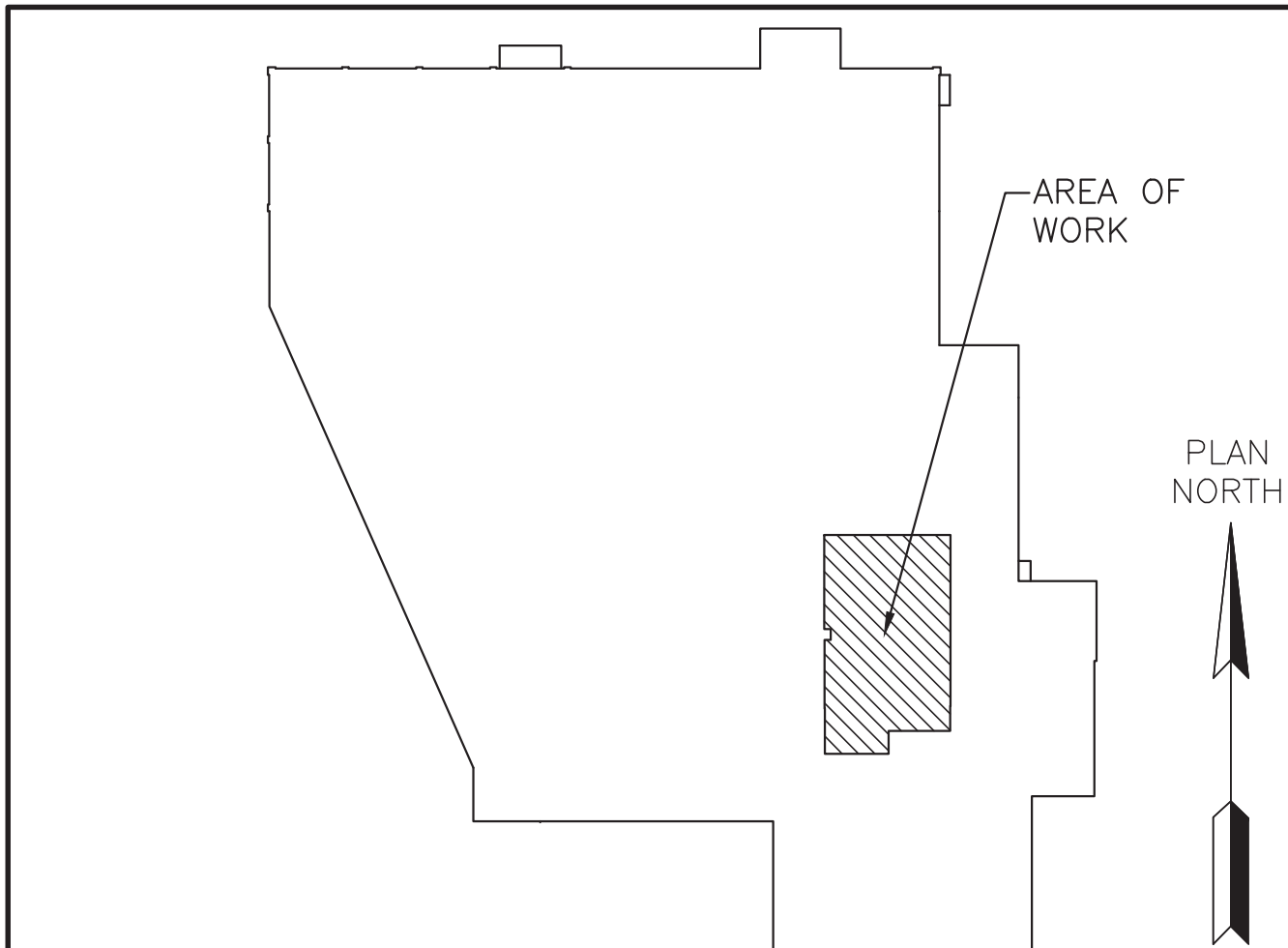
1/4"=1'-0"

GENERAL NOTES:

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- SEE GENERAL NOTES #19,20 AND 21 ON T02 FOR MANDATORY SUBCONTRACTOR REQUIREMENTS.
- SEE SHEET A000 FOR GENERAL, TYPICAL, ELECTRICAL, STRUCTURAL AND ALL OTHER TRADE DEMOLITION NOTES.
- SEE P00 SERIES DWGS FOR GENERAL NOTES, ABBREVIATIONS, & LEGEND.
- SEE P40 SERIES DWGS FOR DETAILS.
- SEE P50 SERIES DRAWINGS FOR FIXTURE CONNECTIONS.
- SEE P60 SERIES DWGS FOR SCHEDULES.
- PLUMBING CONTRACTOR SHALL CONFIRM EXISTING PIPE LOCATIONS AND INVERT ELEVATIONS PRIOR TO DEMOLITION/CONSTRUCTION.
- PLUMBING CONTRACTOR SHALL SNAKE AND FLUSH ALL EXISTING SANITARY/LAB WASTE LINES PRIOR TO NEW CONNECTION TO EXISTING MAINS.

SHEET NOTES:

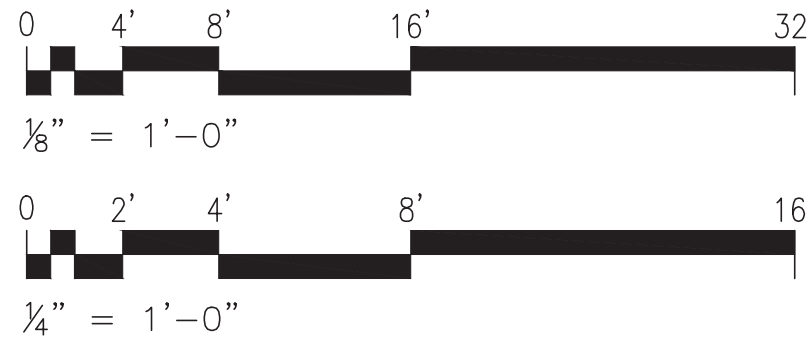
- REFER TO ENLARGED PART PLAN 2 ON DRAWING P-11 FOR WORK IN THIS AREA.
- EXISTING EMERGENCY SHOWER TO REMAIN. PLUMBER SHALL CLEAN AND FLUSH EXISTING FIXTURE PRIOR TO PLACING IT BACK INTO SERVICE. COORDINATE NEW SIGNAGE WITH ARCHITECT UPON INSTALLATION OF CEILING.
- APPROXIMATE LOCATION OF SLAB CUTTING AND EXCAVATION TO ALLOW FOR CONNECTION OF NEW 3" LAB WASTE PIPING TO EXISTING MAIN BELOW FINISHED FLOOR. PLUMBER SHALL FIELD VERIFY EXACT LOCATION AND INVERT ELEVATION PRIOR TO DEMOLITION. UPON INSTALLATION AND SUCCESSFUL PRESSURE TEST OF PIPING THE TRENCH CAN BE BACKFILLED, COMPACTED AND PATCHED TO MATCH EXISTING SUBFLOOR.
- NEW 3/4" HWR; 3/4" HWS; 3/4" CW; 3/4" DI; 3/4" DIR; 3/4" NATURAL GAS AND 3/4" COMPRESSED AIR PIPING. CONNECT NEW PIPING TO EXISTING MAINS ABOVE FINISHED CEILING. FIELD VERIFY EXACT CONNECTION POINTS AND PIPE LENGTHS PRIOR TO INSTALLATION. PLUMBER SHALL PROVIDE FOR ALL NEW PIPING, VALVES, FITTINGS, INSULATION, HANGERS, SUPPORTS, SYSTEM SHUT-DOWNS, TESTING, ETC. AS REQUIRED FOR COMPLETE INSTALLATIONS AND CODE COMPLIANT SYSTEMS.
- NEW 3/4" HWR; 3/4" HWS; 3/4" CW; 3/4" DI; 3/4" NATURAL GAS AND 3/4" COMPRESSED AIR PIPING. RUN PIPING IN CASEWORK AND SUPPORT FROM STRUCTURE IN A STACKED CONFIGURATION WITH 2" UNISTRUT SPACED A MAXIMUM OF 6'-0" ON CENTER. COORDINATE PIPE ROUTING WITH CASEWORK SHOP DRAWINGS PRIOR TO RELEASE FOR FABRICATION. REFER TO ARCHITECTURAL DETAIL D ON DRAWING A73 FOR PROPOSED LAYOUT.
- 3" WASTE DN., 2" VENT RISE, 1/2" H&CW TO LAB SINK; 1/2" DE-IONIZED (DI) H&CW WATER TO DEDICATED DI FAUCET; 1/2" TEPID WATER TO COUNTER MOUNTED EMERGENCY EYEWASH; 1/2" NATURAL GAS UP TO GAS TURRET AND 3/4" COMPRESSED AIR UP TO CA OUTLET. PLUMBER SHALL PROVIDE AND INSTALL ALL PIPE, FITTINGS, VALVES, INSULATION, SEDIMENT TRAP, SUPPLIES, 1/2 TURN BALL VALVE TYPE STOPS, ESCUTCHEONS, MIXING VALVES, ETC. AS REQUIRED FOR A COMPLETE AND CODE COMPLIANT INSTALLATION. REFER TO P50 AND P60 FOR PLUMBING FIXTURES AND PIPING CONNECTIONS.
- 1/2" COMPRESSED AIR UP TO COMPRESSED AIR OUTLET. PROVIDE 1/2" BALL VALVE, WATER SEPARATOR/REGULATOR ASSEMBLY WITH PRESSURE GAUGE AND 3/8" QUICK CONNECT FITTING. ALL PIPING AND ESCUTCHEON ABOVE COUNTER SHALL BE CHROME PLATED.
- 1/2" NATURAL GAS UP TO NEW GAS TURRET. PLUMBER SHALL INSTALL A PLUG VALVE AND CHECK VALVE BELOW CASEWORK (TYPICAL FOR ALL).
- PROVIDE 1/2" DI WATER CONNECTION TO DEDICATED FAUCET.
- REFER TO ISLAND SINK DETAIL ON P41 FOR DRAINAGE PIPING TO LAB WORK STATIONS. COORDINATE ALL PIPING REQUIREMENTS WITH MILLWORK AND PROVIDE DIMENSIONED SHOP DRAWINGS INDICATING PIPE CHASES, CONDUIT RUNS, ACCESS PANELS FOR VALVES, ETC. SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY ENGINEER AND OWNER PRIOR TO RELEASE FOR FABRICATION.
- PLUMBER SHALL PROVIDE ALL PIPE, FITTINGS, VALVES, INSULATION, ESCUTCHEONS, FIXTURES, CARRIERS, HANGERS SUPPORTS, CORE DRILLING, PIPE SLEEVES, FIRE STOPS, PERMITS, ETC. AS NECESSARY FOR A COMPLETE AND CODE COMPLIANT ROUGH-IN AND FINISH. PLUMBER SHALL CONNECT TO EXISTING MAINS WITHIN THE LAB SERVING PREVIOUS FIXTURES IN THIS AREA. MODIFY EXISTING PIPING AS REQUIRED TO ACCOMMODATE NEW INSTALLATION (TYPICAL FOR ALL LAB FIXTURES).
- NEW 3" LAB WASTE PIPING TO BE RUN IN 6" FALSE BACK BEHIND CABINETS. LAB WASTE SHALL BE INSTALLED TIGHT TO WALL AND PITCHED AT 1/8" PER LINEAR FOOT. COORDINATE INSTALLATION WITH MILLWORK SHOP DRAWINGS PRIOR TO RELEASE FOR FABRICATION TO ALLOW FOR ADEQUATE CLEARANCE AND PIPE PITCH.
- PROVIDE PIPE SUPPORT IN FALSE BACK/VOID SPACE WITHIN CASEWORK. NOTE, PIPING SHALL BE RUN IN A VERTICAL/STACKED CONFIGURATION AND IS INDICATED AS HORIZONTAL FOR CLARIFICATION ONLY. COORDINATE EXACT DETAIL AND DIMENSIONS WITH MILLWORK SHOP DRAWINGS PRIOR TO RELEASE FOR FABRICATION (TYPICAL).
- PROVIDE PIPE SLEEVES AND FIRE STOPPING AS REQUIRED AT ALL WALL PENETRATIONS (TYP).
- PROVIDE NEW ASCO 3/4" GAS SOLENOID VALVE AND ASCO MODEL# 108D90C MASTER CONTROL STATION. SEE ELECTRICAL FLOOR PLANS FOR PROPOSED LOCATION OF EPO SWITCH AND COORDINATE ALL POWER REQUIREMENTS AND CONTROL WIRING. PLUMBER SHALL FIELD VERIFY PIPE SIZE AT CONNECTION TO MAIN PRIOR TO PURCHASE OF VALVE AND CONTROL PANEL.
- PROVIDE NEW BREAK GLASS TYPE EMERGENCY POWER GAS SHUT-OFF/MANUAL PULL STATION TO BE INSTALLED AT THE LAB EGRESS AND WIRED TO THE MASTER GAS CONTROL STATION ASCO MODEL 216C89 AND EXISTING BUILDING FIRE ALARM SYSTEM. PLUMBING CONTRACTOR SHALL COORDINATE ALL DEVICES, JUNCTION BOXES, CONDUITS, WIRING, RELAYS, EXTENSION PANELS, REMOTE ANNUNCIATOR PANELS, ETC. WITH FIRE ALARM VENDOR PRIOR TO BID.
- 2" WASTE, 2" ISLAND VENT, 1/2" H&CW TO CUP SINK; 1/2" DE-IONIZED WATER ; 1/2" NATURAL GAS UP TO GAS TURRET AND 3/4" COMPRESSED AIR UP TO CA OUTLET SERVING LAB EXHAUST HOOD UTILITIES. PLUMBER SHALL RUN PIPING BELOW COUNTER AND CONNECT TO HOOD OUTLETS. PLUMBER SHALL PROVIDE AND INSTALL ALL PIPE, FITTINGS, VALVES, INSULATION, SEDIMENT TRAP, SUPPLIES, 1/2 TURN BALL VALVE TYPE STOPS, ESCUTCHEONS, MIXING VALVES, ETC. AS REQUIRED FOR A COMPLETE AND CODE COMPLIANT INSTALLATION. MODIFY PIPING AS REQUIRED TO ACCOMMODATE INSTALLATION.

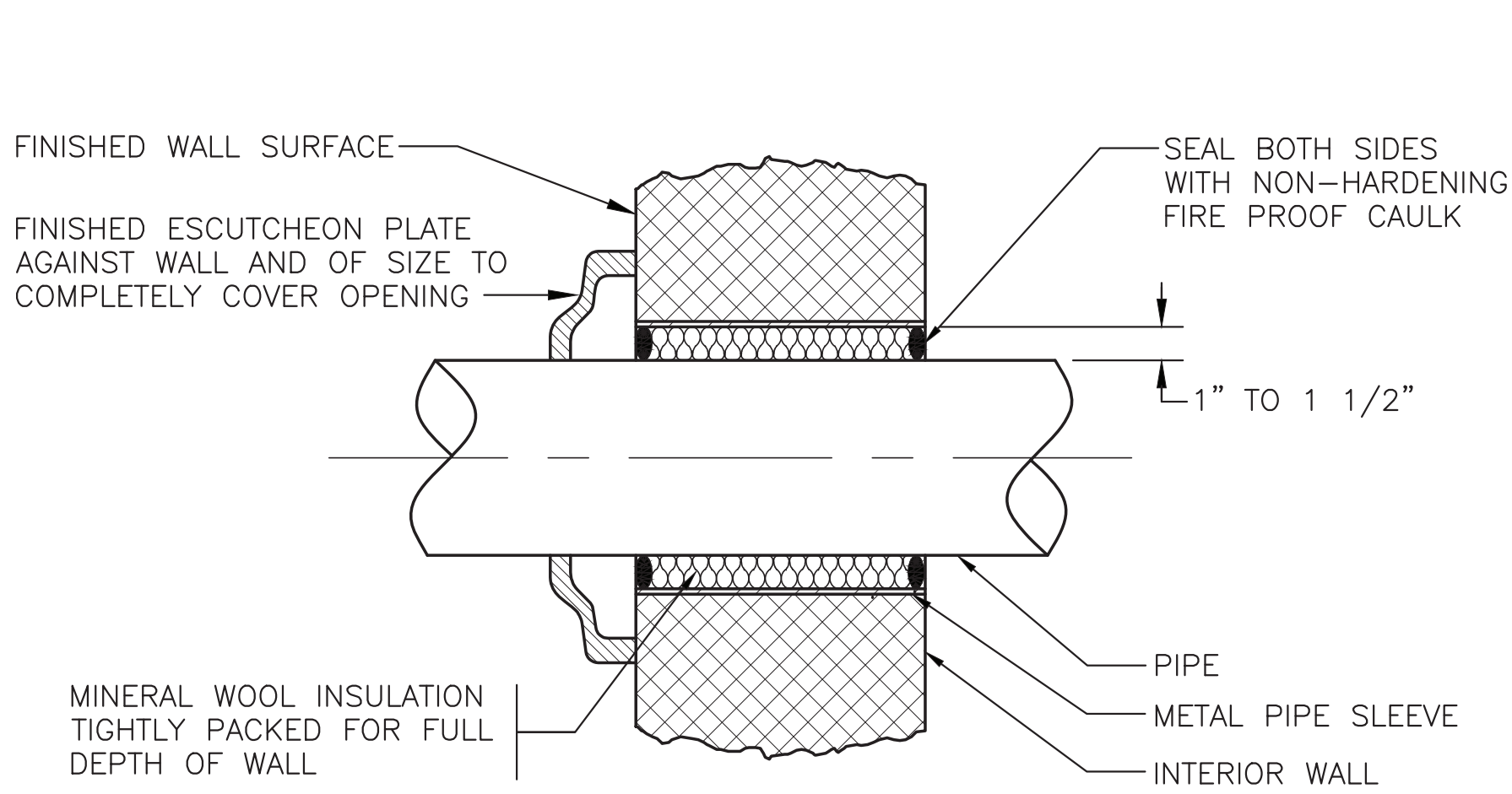


KEY PLAN — FIRST FLOOR

NTS

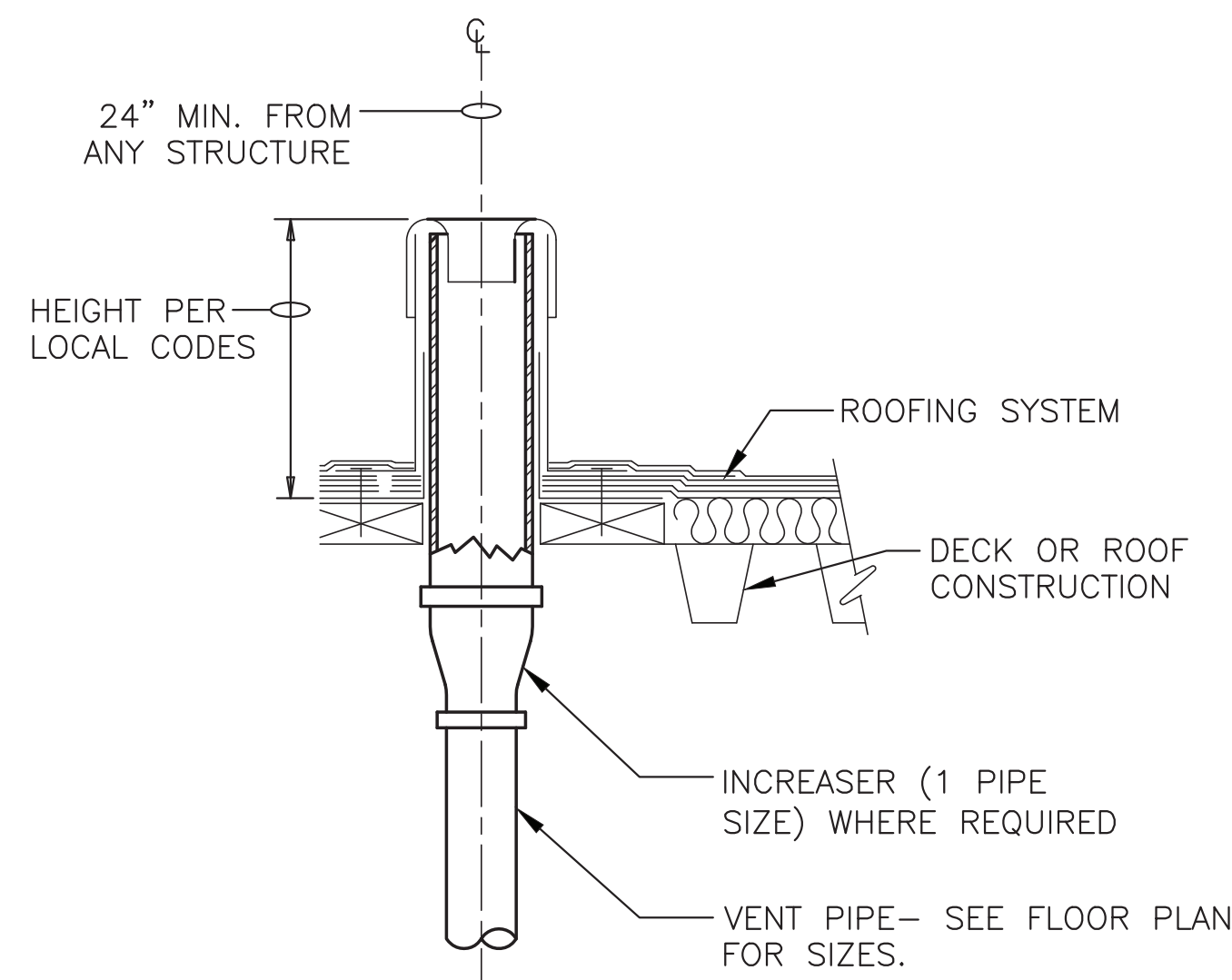
0	ISSUED FOR BID AND CONSTRUCTION	LG	24 SEPT 21
REV	REVISION DESCRIPTION	BY	DATE
EI Associates ARCHITECTS & ENGINEERS, P.C. 8 RIDGEDALE AVENUE • CEDAR KNOLLS NJ 07927 • 973.775.7777		PLUMBING	
GAETANO P. CIPRIANO, P.E.		PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1	
SCALE AS NOTED		PROJECT	
DRAWN BY: PIPER		EIA DRAWING NO.	
DESIGNED BY: PIPER		P11	
CHECKED BY: ORANBURG		CLIENT DWG. NO.	
APPROVED BY: TITLE		EIA PROJECT NO.	
PROJECT MANAGER:		EG8577.03	





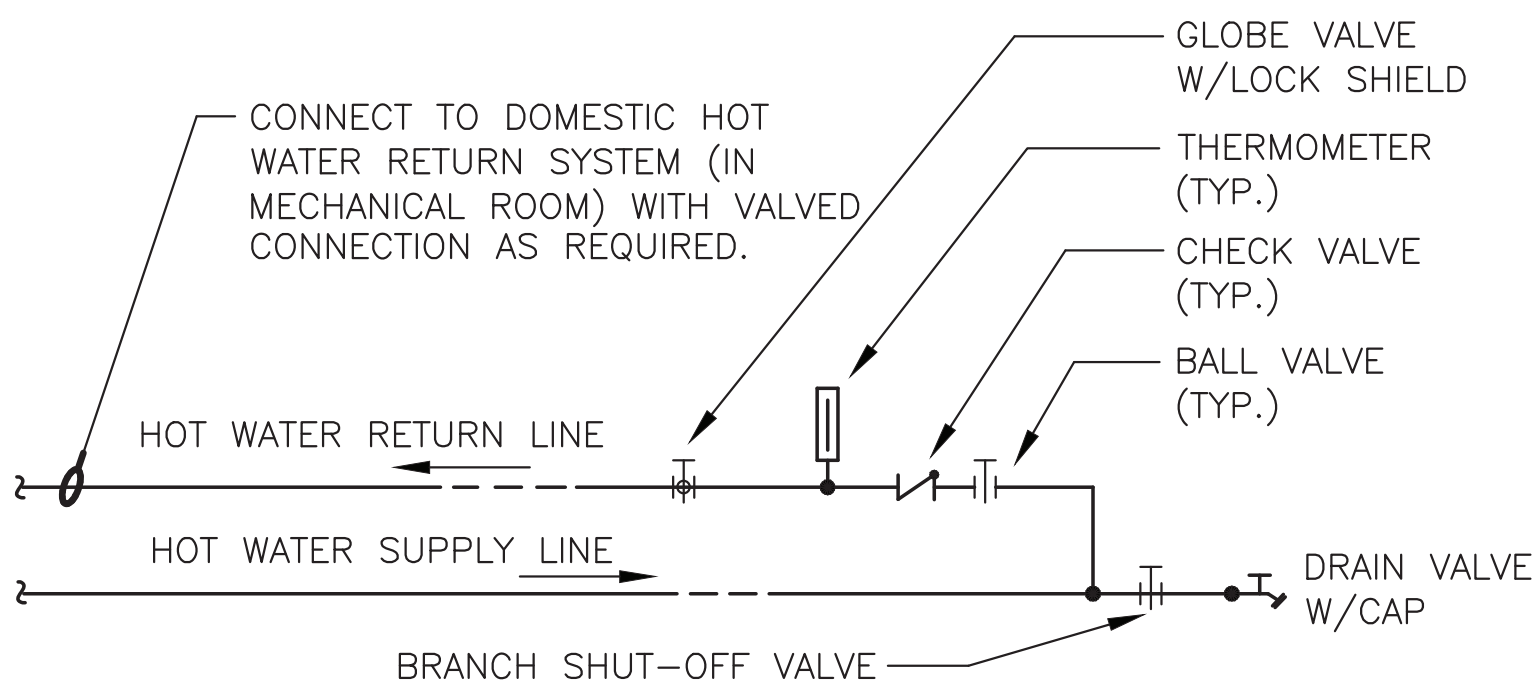
PIPE PENETRATION THROUGH
INTERIOR RATED WALL DETAIL

NOTE:
1. ALL PIPE PENETRATIONS THROUGH INTERIOR RATE RATED WALLS SHALL COMPLY WITH SECTION 713.3.1 AND 713.3.1.2 OF THE 2015 IBC.



PLUMBING
VENT THRU ROOF DETAIL

NOTE:
1. SEE DETAIL 3/A80 FOR ADDITIONAL INFORMATION.
2. SEE DETAIL 6/A80 FOR ADDITIONAL INFORMATION.
3. PLUMBING VENTS SHALL TERMINATE A MINIMUM OF 10'-0" AWAY FROM FRESH AIR INTAKES AND/OR OPERABLE WINDOWS.



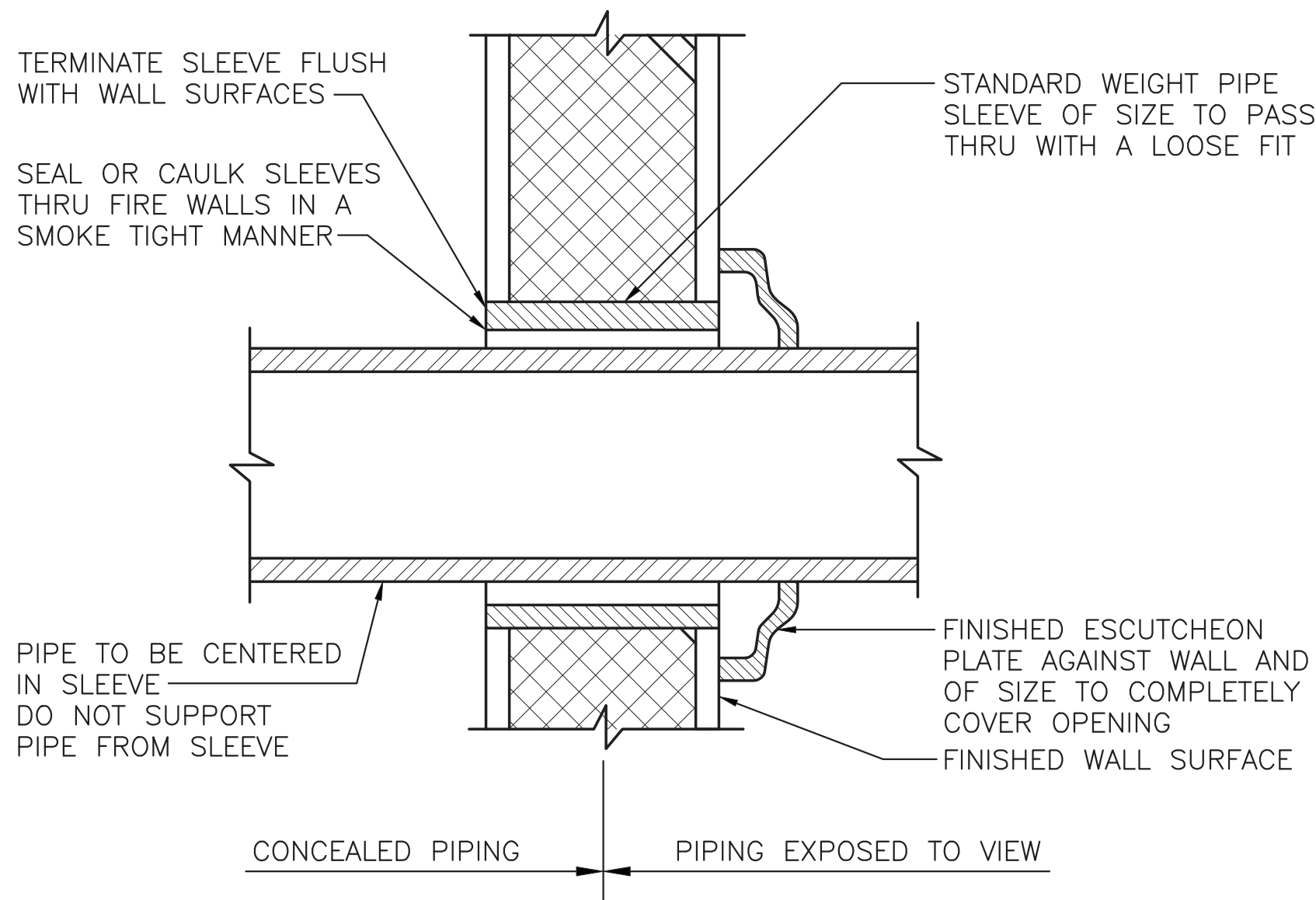
PROCEDURE FOR BALANCING HOT WATER RETURN PIPING

1. IN ORDER TO BALANCE HOT WATER RETURN TEMPERATURES IN THE RETURN PIPING THIS IS THE PROCEDURE TO BE FOLLOWED:

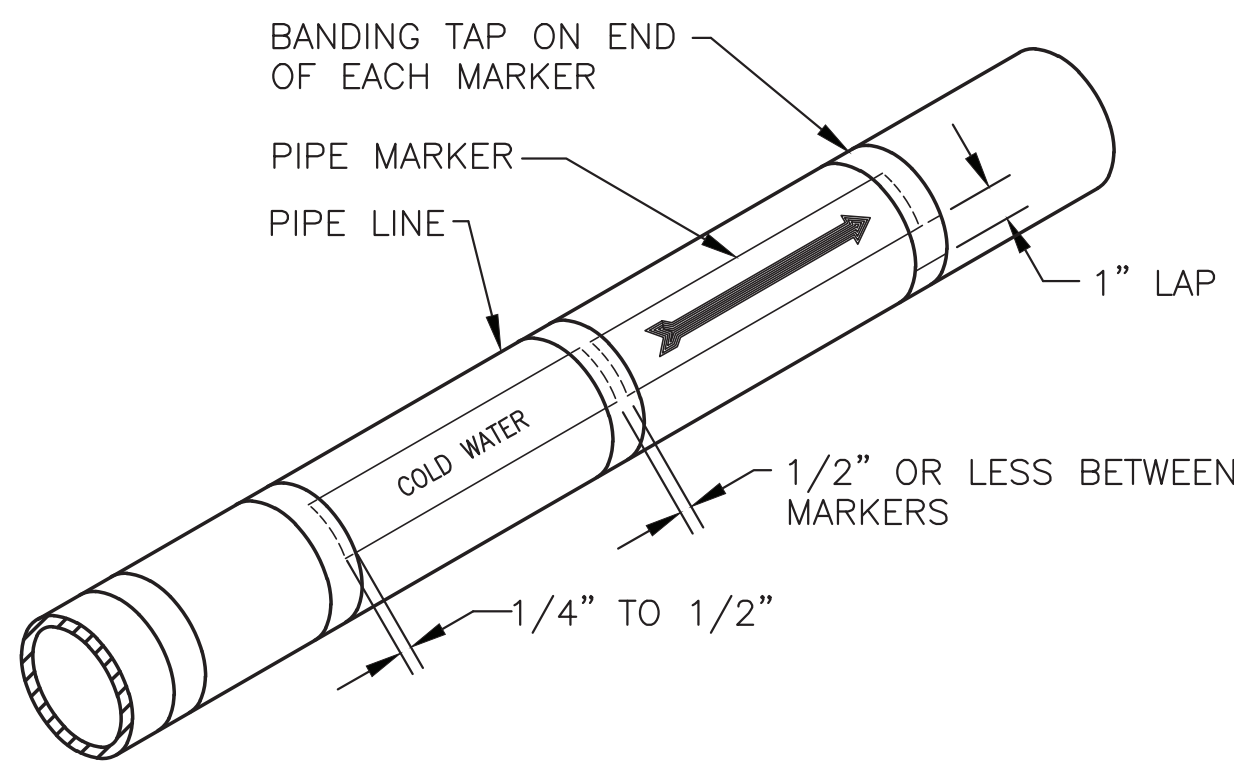
BEFORE A RETURN CIRCULATION SYSTEM IS PUT INTO SERVICE, IT SHOULD BE ADJUSTED FOR RETURN LINE TEMPERATURE BALANCE UNDER CONDITIONS WHEREBY NO WATER IS DRAWN AT FIXTURE OUTLETS. THE ADJUSTMENT PROCEDURE IS SIMPLE AND MAY BE ACCURATELY DONE USING THERMOMETERS. FIRST, CLOSE ALL BALANCING VALVES SO THAT ALL CIRCULATION GOES THROUGH BRANCH 1. THEN, OPEN THE BALANCING VALVE ON BRANCH 2 TO THE DEGREE NECESSARY SO THAT IT RETURNS WATER CONSTANTLY AT THE SAME TEMPERATURE AS BRANCH 1. SIMILARLY, ADJUSTMENT MAY BE MADE WITH BALANCING VALVE ON ANY OTHER RISERS OR BRANCHES SO THAT ALL RETURN WATER IS AT THE SAME TEMPERATURE.

2. CONTRACTOR, AT THE END OF THE PROJECT, TO SUBMIT A REPORT FOR RECORD TO THE ENGINEER THAT THE HOT WATER RETURN CIRCULATION SYSTEM HAS BEEN BALANCED PROPERLY.

HOT WATER RETURN
LINE PIPING DETAIL

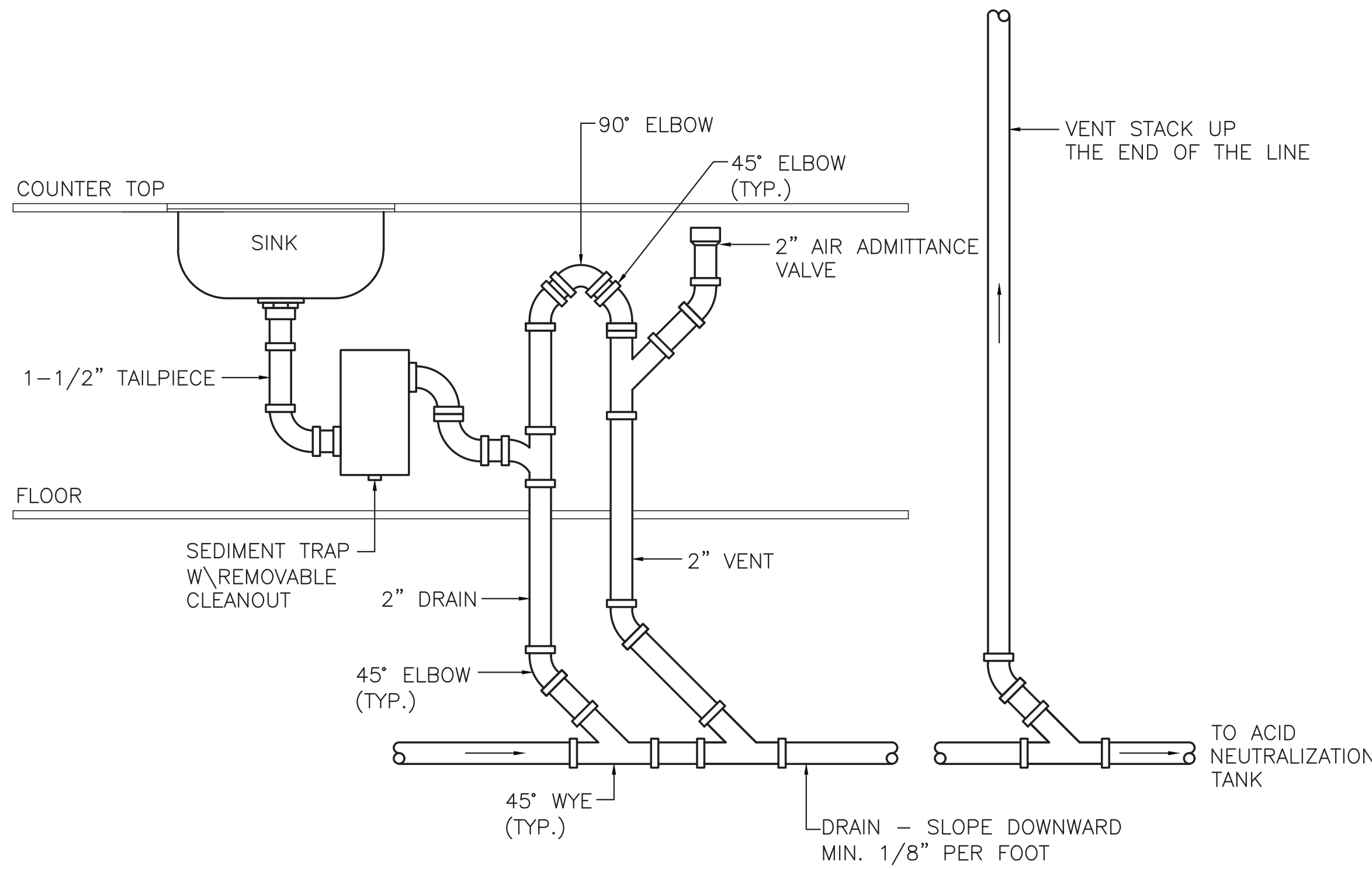


PIPE PENETRATION THROUGH
INTERIOR NON-RATED WALL DETAIL



HORIZONTAL PIPE
LABELING LOCATION DETAIL

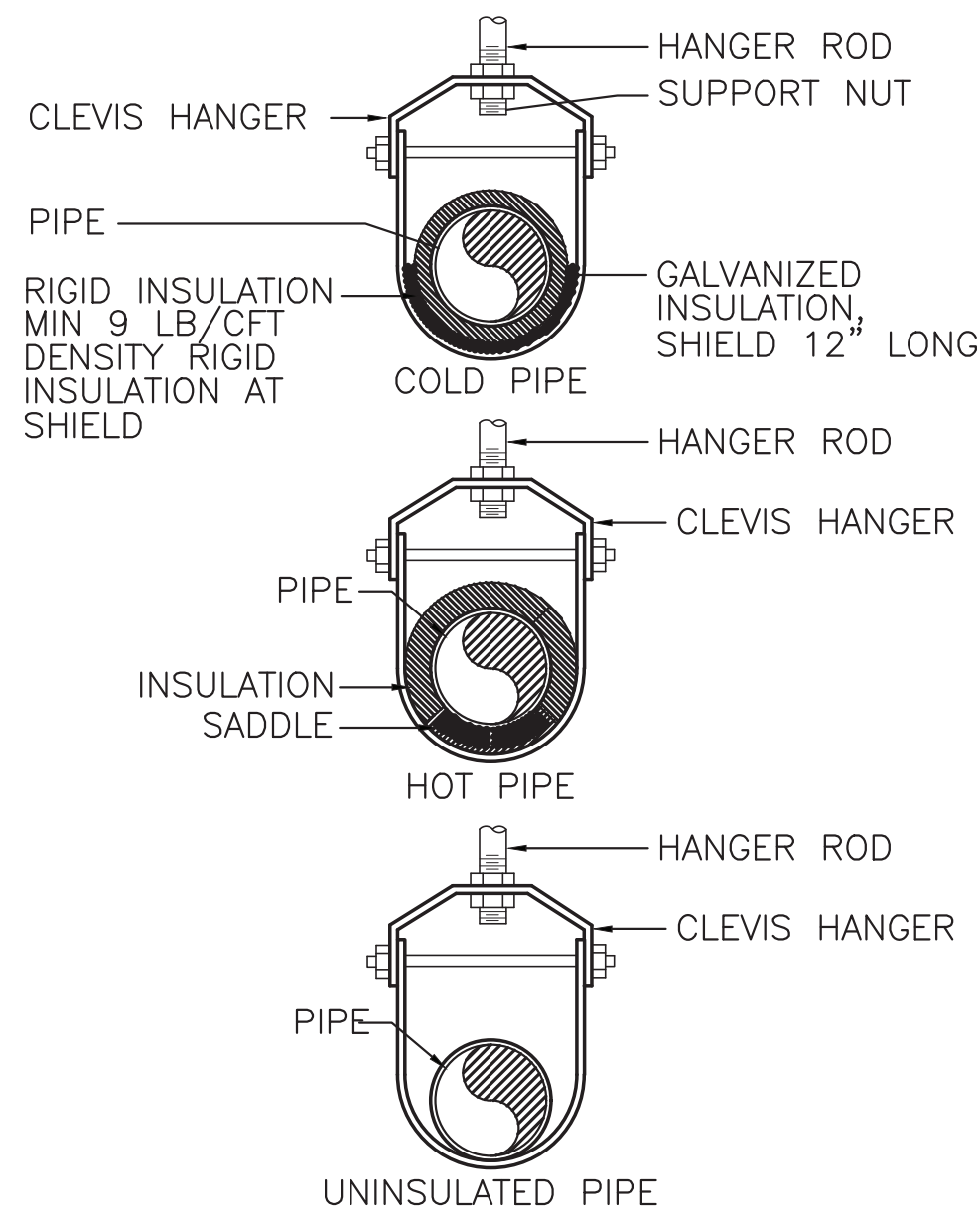
NOTES:
1. USE DOUBLE HEADED ARROWS WHERE FLOW CAN BE IN BOTH DIRECTIONS.



NOTES:

1. COORDINATE EXACT ROUTING AND LOCATIONS WITH FIELD CONDITIONS, MILLWORK/CABINETY AND PLANS.
2. REFER TO FLOOR PLANS AND RISER DIAGRAMS FOR PROPOSED PIPE ROUTING AND SIZES.

ISLAND LAB SINK ACID WASTE
& VENT PIPING DETAIL

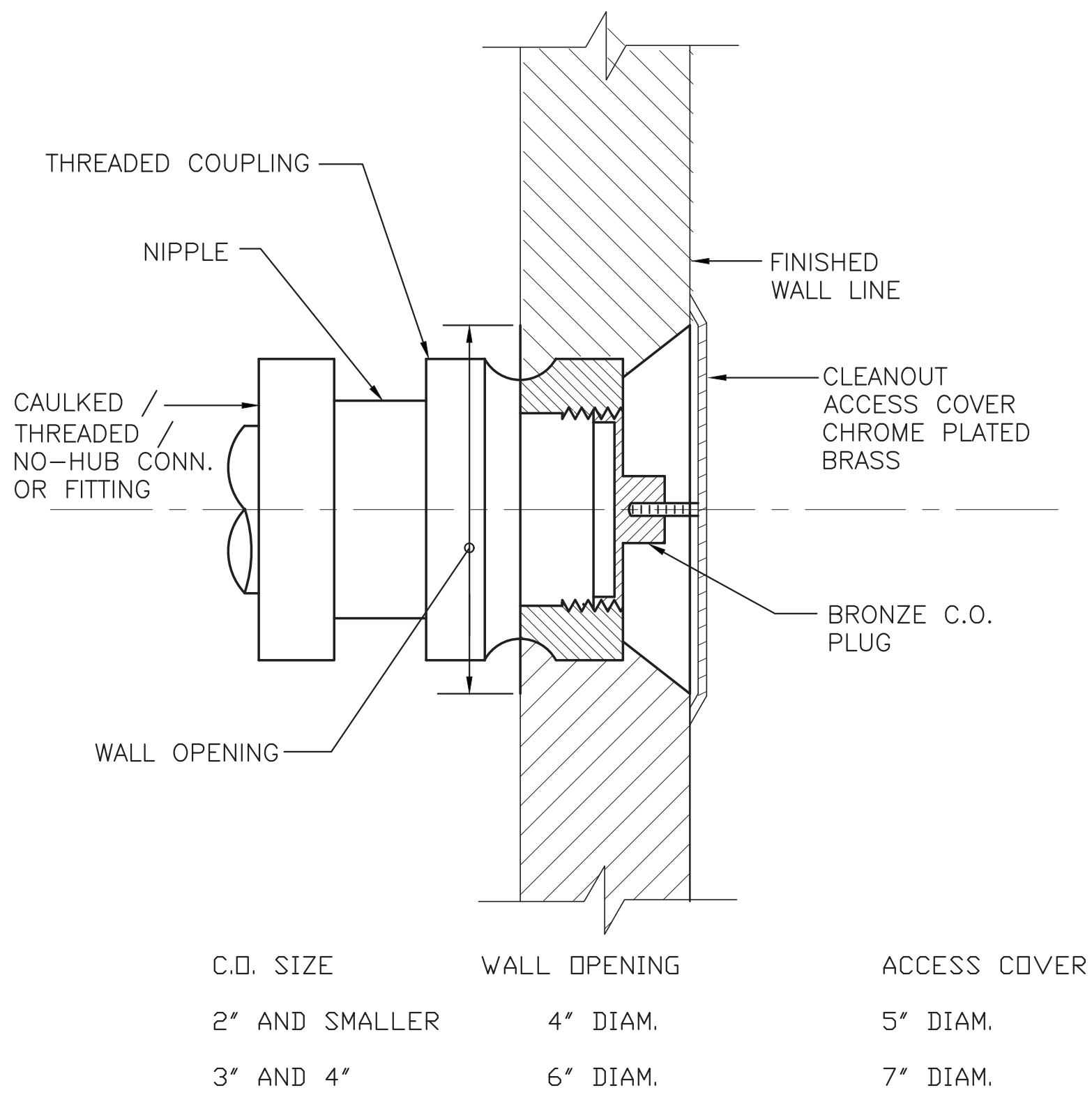


HANGER ROD SIZE/SPACING SCHEDULE			
PIPE SIZE	MINIMUM HANGER ROD SIZE	COPPER PIPE	
		HORIZ.	VERT.
1/2"	1/4"	6'	10'
3/4"	1/4"	6'	10'
1"	1/4"	6'	10'
1-1/4"	3/8"	6'	10'
1-1/2"	3/8"	10'	10'

NOTES:

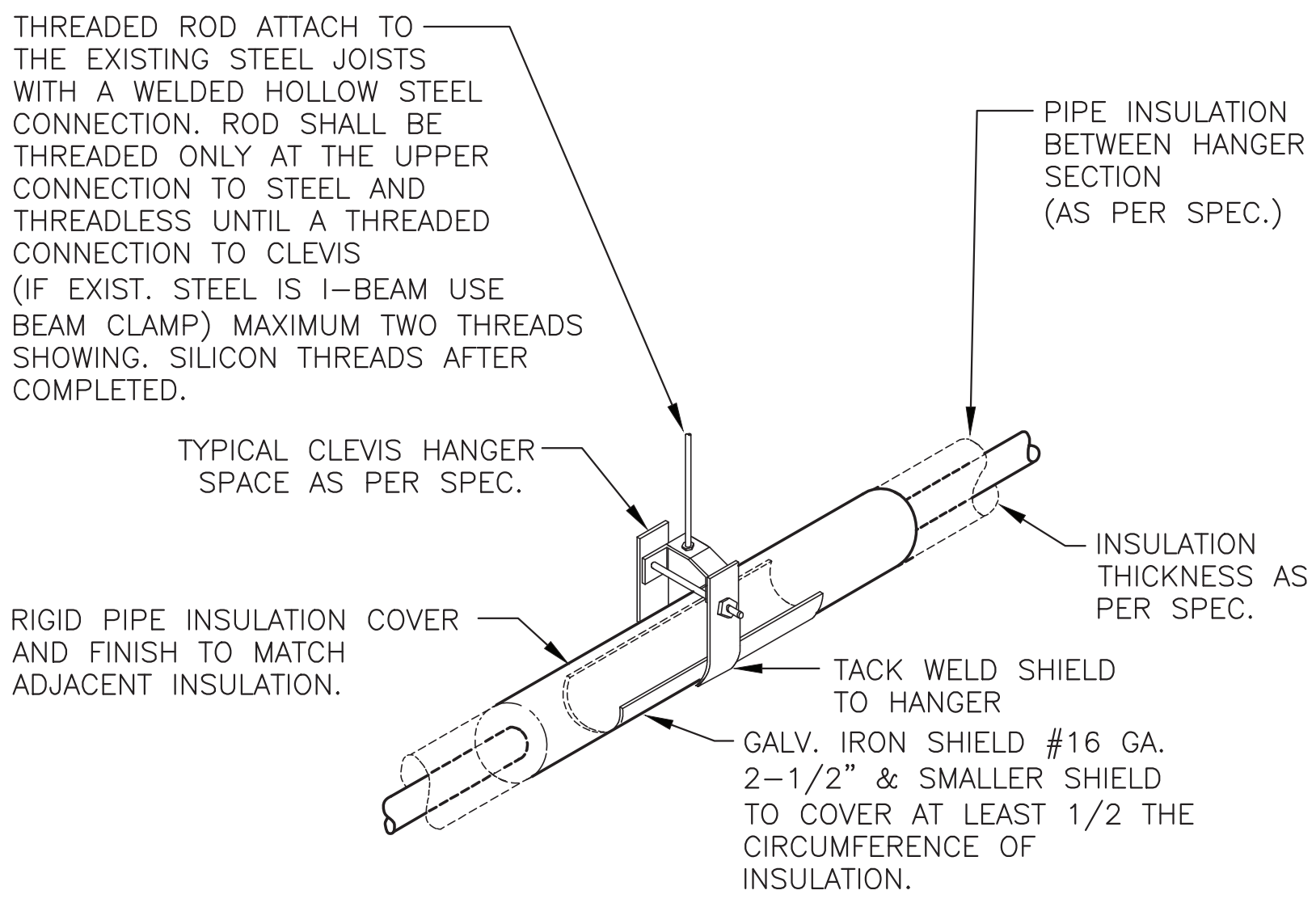
1. HANGERS AND COMPONENTS SHALL BE COATED WITH RUST RESISTANT PRIMER (SEE SPEC.).
2. THREADED HANGER ROD SHALL BE FASTENED TO THE EXISTING STRUCTURE WITH APPLICABLE CLAMP OR FASTENER.

PIPING SUPPORT DETAILS



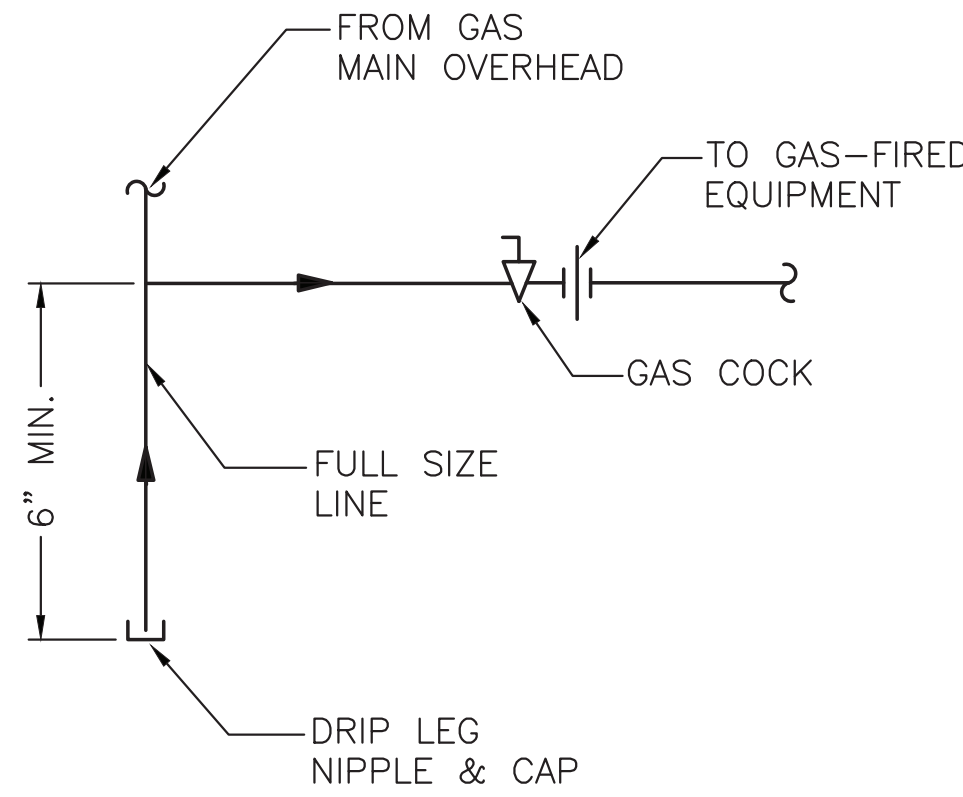
C.O. SIZE	WALL OPENING	ACCESS COVER
2" AND SMALLER	4" DIAM.	5" DIAM.
3" AND 4"	6" DIAM.	7" DIAM.

WALL CLEANOUT
INSTALLATION DETAIL



TYPICAL INSULATED
PIPE HANGER DETAIL

NOTE:
1. HANGERS AND COMPONENTS SHALL BE COATED WITH RUST RESISTANT PRIMER (SEE SPEC.).



NOTE: REFER TO PLANS FOR LINE SIZES.

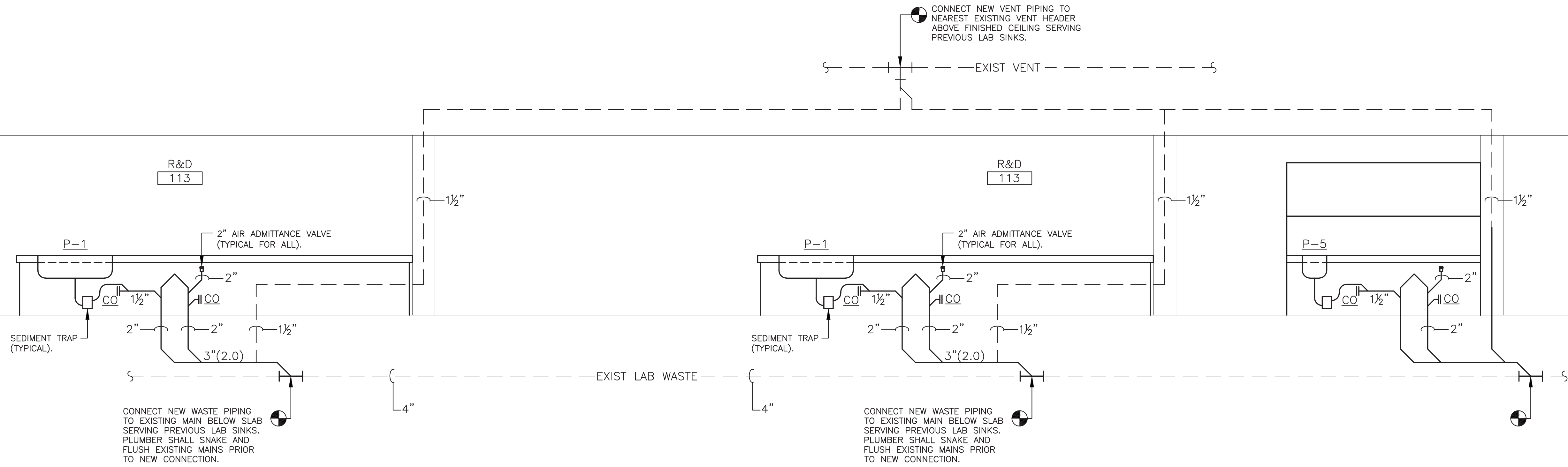
GAS PIPING
DRIP LEG DETAIL

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GAETANO P. CIPRIANO, P.E.		PROFESSIONAL ENGINEER LICENSE NO. NY 064215-1	
SCALE	AS NOTED	PROJECT	EIA DRAWING NO.
DRAWN BY:	UC 08/01/21	INSTRUMENTATION LABORATORY LOCKER ROOM EXPANSION ORANGEBURG NEW YORK	P40
DESIGNED BY:	UC 08/01/21		
CHECKED BY:	UC 08/01/21		
APPROVED BY:		TITLE	CLIENT DWG. NO.
PROJECT MANAGER:		DETAILS	EIA PROJECT NO. EG8577.03

ROOF

CEILING

FIRST FLOOR



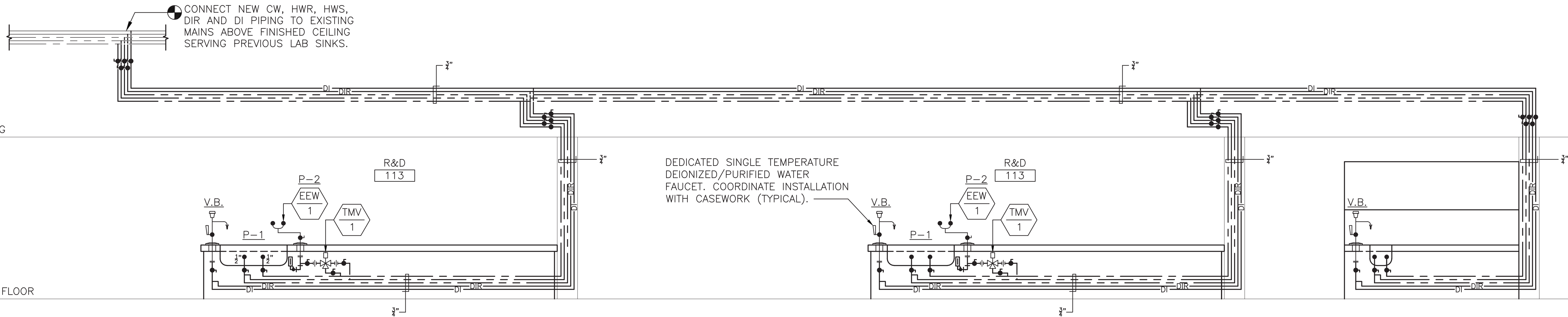
PARTIAL SANITARY/VENT RISER DIAGRAM

1
P50

ROOF

CEILING

FIRST FLOOR



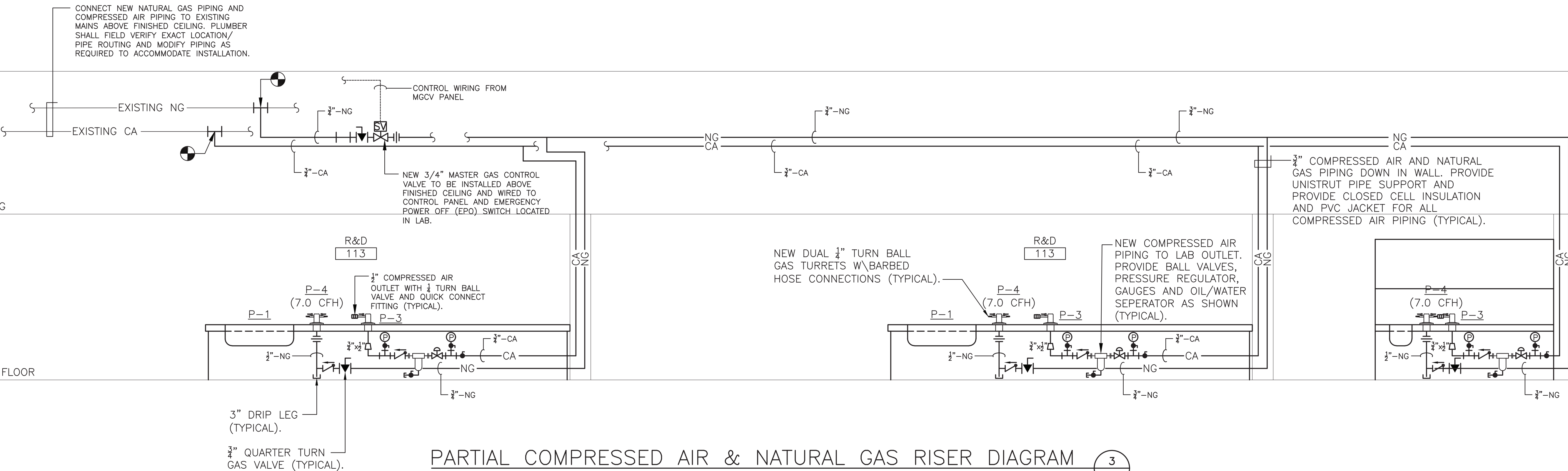
PARTIAL DOMESTIC & DEIONIZED WATER RISER DIAGRAM

2
P50

ROOF

CEILING

FIRST FLOOR



PARTIAL COMPRESSED AIR & NATURAL GAS RISER DIAGRAM

3
P50

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DRAWN BY:	PTC	INSTRUMENTATION LABORATORY LOCKER ROOM EXPANSION ORANGEBURG NEW YORK	P50
DESIGNED BY:	UC		
CHECKED BY:	UC		
APPROVED BY:			
PROJECT MANAGER:		TITLE	CLIENT DWG. NO. EIA PROJECT NO. EG8577.03
		RISER DIAGRAMS	

