

PLUMBING CONNECTION SCHEDULE										
SYMBOL MARK	FIXTURE TYPE	DESCRIPTION	MANUFACTURER (NOTE 1)	MODEL (NOTE 1)	TRIM / FITTINGS	W	V	CW	HW	COMMENTS
WC-1	WATER CLOSET	FLUSH VALVE, WALL HUNG	AMERICAN STANDARD	2257.001 "AFWALL"	FLUSH VALVE: SLOAN ROYAL #111, 1.28 GPF SEAT: OLSONITE #95 - SOLID WHITE PLASTIC, OPEN FRONT, WITHOUT COVER CARRIER: ASME A112.6.1; ADJUSTABLE, EPOXY COATED, CAST IRON FRAME, INTEGRAL DRAIN HUB AND VENT	3	2	1	-	
LV-1	LAVATORY	WALL HUNG, RECTANGULAR	AMERICAN STANDARD	0355.012 "LUCERNE"	TRIM: DELTA MODEL 523LF-HDF (OR EQUIVALENT BY SYMMONS, MOEN OR CHICAGO), SINGLE HANDLE, 4" CENTER SET, 0.5 GPM CARRIER: ASME A112.6.1, CAST IRON AND STEEL FRAME WITH TUBULAR LEGS, CONCEALED ARM SUPPORT MIXING VALVE: SYMMONS 8210-CK, THERMOSTATIC, ASSE 1070 (OR EQUIVALENT BY DELTA, ACORN, SLOAN OR SPEAKMAN) LAVATORY INSULATION KIT: TRUEBRO LAVGUARD 2 ACCESSORIES: CHROME PLATED BRASS OPEN GRID DRAIN, TAILPIECE, P-TRAP AND ANGLE STOPS. RIGID SUPPLIES	1 1/2	1 1/4	1/2	1/2	
S-1	SINK	SINGLE COMPARTMENT, ADA	JUST	SERIES SL-ADA, "STYLIST GROUP"	BOWL: 22 X 22 X 6-1/2 INCH, 18 GA. THICK, TYPE 304 STAINLESS STEEL TRIM: DELTA MODEL 100LF-WF (OR EQUIVALENT BY MOEN, CHICAGO OR SPEAKMAN), SINGLE HANDLE, 8" SWING SPOUT, 2.2 GPM ACCESSORIES: CHROME PLATED BRASS P-TRAP WITH CLEANOUT PLUG, ESCUTCHEON, SCREWDRIVER STOP AND RIGID SUPPLIES	2	1 1/2	1/2	1/2	
MS-1	MOP SINK	CORNER MOUNT	STERN-WILLIAMS	SBC-1700 "CORLOW"	TRIM: CAMBRIDGE/DELTA MODEL 28T9 (OR EQUIVALENT BY MOEN, CHICAGO OR SPEAKMAN), EXPOSED WITH CROSS HANDLES ACCESSORIES: VACUUM BREAKER, HOSE END SPOUT, INTEGRAL SCREWDRIVER STOPS, 5 FEET OF RUBBER HOSE WITH HOSE CLAMP HANGER AND MOP HANGER	3	2	1/2	1/2	
DF-1	FOUNTAIN AND BOTTLE FILLER	WALL MOUNTED, ADA	HAWS	MODEL 1107PCH	CABINET: 18 GA. THICK, TYPE 304 STAINLESS STEEL WITH NO. 4 SATIN FINISH TRIM: MOUNTING PLATE HAWES 6700.4 AND MOUNTING BOLTS	1 1/2	1 1/4	1/2	-	
H-1	WALL HYDRANT	RECESSED BOX TYPE, FREEZE PROOF	WOODFORD	MODEL B67C	PROVIDE WITH INTEGRAL BACKFLOW PREVENTER PROVIDE LOCKING BOX/DOOR ASSEMBLY	-	-	3/4	-	
WB-1	WASHING MACHINE WALL BOX	PLASTIC ROUGH-IN BOX FOR DRAIN AND SUPPLY	SIOUX CHIEF	696 SERIES "OXBOX"	TRIM: 1/4 TURN HANDLES, ARRESTORS, FRAME AND MOUNTING BRACKET	2	2	1/2	1/2	
FD-1	FLOOR DRAIN	FINISHED FLOOR	JAY R. SMITH	2005-A / 2005-B	ADJUSTABLE NICKEL BRONZE STRAINER TRAP PRIMER CONNECTION (PROVIDE TRAP PRIMER)	2	2	-	-	
CO-1	CLEANOUT	EXTERIOR, TO GRADE	JAY R. SMITH	4250	ROUND CAST NICKEL BRONZE ACCESS FRAME AND NON-SKID COVER	-	-	-	-	
CO-2	CLEANOUT	INTERIOR, TO FINISHED FLOOR	JAY R. SMITH	4000 SERIES	PROVIDE WITH ROUND GASKETED SCORED COVER IN SERVICE AREAS PROVIDE WITH ROUND GASKETED DEPRESSED COVER TO ACCEPT FLOOR FINISH IN FINISHED FLOOR AREAS	-	-	-	-	
CO-3	CLEANOUT	WALL TYPE	JAY R. SMITH	4000 SERIES	LAQUERED CAST IRON BODY AND ROUND EPOXY COATED GASKETED COVER STAINLESS STEEL ACCESS COVER SECURED WITH MACHINE SCREW	-	-	-	-	
NOTES: 1 EQUIVALENT MODELS BY ALTERNATE MANUFACTURERS ARE ALSO ACCEPTABLE. APPROVED MANUFACTURERS: AMERICAN STANDARD, KOHLER, TOTO, JUST, ELKAY, MOEN, FIBER-FAB, AQUAGLASS, LASCO, ELJER, STERN-WILLIAMS, HAWS, JAY R. SMITH, MIFAB, SIOUX CHIEF AND ZURN.										

PIPING SPECIFICATIONS						
PIPING ABBREVIATION	PIPING SYSTEM	MATERIALS	FITTINGS	JOINTS	INSULATION	COMMENTS
W	SANITARY-BELOW GRADE	CAST IRON PIPE: CISPI 301, HUBLESS	CAST IRON	HEAVY DUTY HUBLESS COUPLINGS CISPI 310, ASTM C 1540	-	NOTE 1, 4
W	SANITARY-ABOVE GRADE	PVC (SOLID WALL)	NOTE 3	(PER MANUFACTURERS RECOMMENDATIONS)	-	NOTE 6
V	VENT-BELOW GRADE	CAST IRON PIPE: CISPI 301, HUBLESS	CAST IRON	HUBLESS COUPLINGS CISPI 310, ASTM C 1277	-	NOTE 2, 4
V	VENT-ABOVE GRADE	ABS/PVC	NOTE 3	(PER MANUFACTURERS RECOMMENDATIONS)	-	NOTE 6
CW	COLD WATER	COPPER TUBE, ASTM B88, TYPE L	NOTE 5	ASTME B32, ALLOY Sn95 SOLDER	NOTE 8	
HW	HOT WATER	COPPER TUBE, ASTM B88, TYPE L	NOTE 5	ASTME B32, ALLOY Sn95 SOLDER	NOTE 9	
SD	STORM DRAIN	CAST IRON PIPE: CISPI 301, HUBLESS	CAST IRON	HUBLESS COUPLINGS CISPI 310, ASTM C 1277	NOTE 10	NOTE 1, 4
GW	SANITARY GREASE - BELOW GRADE	CAST IRON PIPE: CISPI 301, HUBLESS	CAST IRON	HEAVY DUTY HUBLESS COUPLINGS CISPI 310, ASTM C 1540	-	NOTE1, 4, 7
GV	GREASE VENT	CAST IRON PIPE: CISPI 301, HUBLESS	CAST IRON	HEAVY DUTY HUBLESS COUPLINGS CISPI 310, ASTM C 1540	-	
NOTES: 1. NEOPRENE GASKET AND STAINLESS STEEL CLAMP-AND-SHIELD ASSEMBLIES. - HEAVY DUTY. 2. CISPI 310, NEOPRENE GASKET AND STAINLESS STEEL CLAMP AND SHIELD ASSEMBLIES. 3. SAME AS PIPE MATERIAL. 4. WHEN HEAVY DUTY COUPLINGS ARE USED, GRIND DOWN FITTING GASKET POSITIONING LUG AND RE-SEAL PIPE PRIOR TO INSTALLATION. 5. ASME B16.18, CAST COPPER ALLOY OR ASME B16.22, WROUGHT COPPER AND BRONZE. 6. ABS TO BE ASTM D2661 OR ASTM D2751 (SOLID WALL). PVC TO BE ASTM D2665 (SOLID WALL). 7. CAST IRON PIPES RUN FROM KITCHEN TO GREASE INTERCEPTOR. 8. PROVIDE GLASS FIBER INSULATION ON PIPE AND FITTINGS. 1/2 INCH THICK FOR PIPING 1 INCH AND UNDER. 1 INCH THICK FOR PIPING OVER 1 INCH. 9. PROVIDE GLASS FIBER INSULATION ON PIPE AND FITTINGS. 1 INCH THICK FOR PIPING UNDER 2 INCH. 1-1/2 INCH THICK FOR PIPING 2 INCH AND OVER. 10. PROVIDE GLASS FIBER INSULATION ON PIPE AND FITTINGS WITHIN 10 FEET OF EXTERIOR. 1 INCH THICK. INSULATE ROOF DRAIN BODIES WITH 1 INCH FLEXIBLE DUCT WRAP WITH FOIL JACKET. SECURE IN PLACE WITH TIE WIRE.						



09-14-2026



6915 SW MACADAM AVE
SUITE #200
PORTLAND, OREGON 97219
PHONE: (503) 892-1188
ENGINEERING@MKE-INC.COM

WATER HEATER												
SYMBOL MARK	DESCRIPTION	SERVICE	INPUT	VOLTAGE	PH.	MOC (Kw)	OUTPUT (Kw)	NUMBER OF ELEMENTS	STORAGE CAPACITY (GAL)	RECOVERY RATE AT 100° F (GPH)	OPERATING WEIGHT (LBS)	COMMENTS
EWH-1	ELECTRIC HEATPUMP WH	BUILDING		208	1	67.0	12.0	2	119	49	1,490	NOTE 1
EWH-2	ELECTRIC HEATPUMP WH	KITCHEN		208	1	67.0	12.0	2	119	49	1,490	NOTE 1
NOTES:												
1	DESIGN BASIS: AO SMIT											

DOMESTIC HOT WATER CIRCULATOR PUMP												
SYMBOL MARK	DESCRIPTION	SERVICE	GPM	HEAD (FT)	VOLTAGE	PH.	HP	MCA	FLA	RPM	WEIGHT (LBS)	COMMENTS
CP-1	DOMESTIC HOT WATER RECIRC	BUILDING HOT WATER	1.9	6	120	1	1/12	-	-	-	-	NOTE 1,2
CP-2	DOMESTIC HOT WATER RECIRC	BUILDING HOT WATER	1.9	6	120	1	1/12	-	-	-	-	NOTE 1,2
NOTES:												
1. DESIGN BASIS: B&G												
2. PROVIDE WITH LINE VOLTAGE, TIME CLOCK, AND AQUASTAT WITH REMOTE SENSOR, INSTALL PER MANUFACTURER'S INSTRUCTION.												

GREASE INTERCEPTOR								
SYMBOL MARK	DESCRIPTION	SERVICE	CAPACITY (GAL)	INLET SIZE (IN)	OUTLET SIZE (IN)	EXTENSION	OPERATING WEIGHT (LBS)	COMMENTS
GI-1	POLYETHYLENE, GRAVITY	KITCHEN	125	4	4	YES, AS REQUIRED	1,163	NOTE 1,2,3
NOTES:								
1	DESIGN BASIS: SCHIER GB-75							
2	PROVIDE BAFFLE WITH FLOW HOLES, WET DUCTLER DIFFUSER WITH INSPECTION PORTS.							
3	PROVIDE PUMPOUT PORT KIT.							

GREASE INTERCEPTOR CALCULATIONS						Quote: 8F9663X7
Reference No. 105310						Project Name: KC-6860
Step 1: Flow rate to grease interceptor						
Fixture flow rate: (cu in / 231) = gal x 0.75 / 2 min = 2 min flow rate						
NAME	TYPE	DIMENSIONS	QTY	CU IN	FLOW RATE	
3 Compartment Sink	3 Compartment Sink	21" x 21" x 14" (3)	1	18,522	30.07 GPM	
Dishwasher	Dishwasher (Conveyor)	25 gal.	1	5,775	12.5 GPM	
Floor Sink	Floor Sink	N/A	1	N/A	0 GPM	
Hand Sink	Hand Sink	10" x 14" x 5"	1	700	1.14 GPM	
Prep Sink One Bowl	Prep Sink One Bowl	21" x 21" x 14"	1	6,174	10.02 GPM	
Total						53.73 GPM
Step 2: Grease Production						
Servings per day x Grease production value x Days between pump-outs = Grease output						
Servings per day: 200						
Grease production value: 0.0325 lbs per serving (Cafeteria - Heat & Serve: Medium / Flatware)						
Days between pump-outs: 90 days						
200 x 0.0325 x 90 = 585 lbs of FOG						
SCHIER MODEL						Description: GREASE INTERCEPTOR 75 GPM, 4" PLAIN/FPT CONNECTIONS
GB-75						Dimensions: Length: 47", Width: 33", Height: 39.75" Flow Rate/Grease Capacity: 75 GPM / 861 lbs Liquid Capacity: 125 gal
Specification Note: This Great Basin model has been sized to the flow rate and grease production requirements of the application and may not be substituted by liquid capacity alone. Any substitution requests must be approved by the specifying engineer and the authority having jurisdiction.						
Please contact support@schierproducts.com for technical and procurement support for the specified Great Basin model.						

WATER SERVICE CALCULATION - APPENDIX A									
FIXTURE	PUBLIC USE - EXISTING		PUBLIC USE - NEW		TOTAL WSFU (EXIST.)	HOT WATER (EXIST.)	TOTAL WSFU (NEW)	HOT WATER (NEW)	COMMENTS
	QUANTITY	FIXTURE UNITS (WSFU)	QUANTITY	FIXTURE UNITS (WSFU)					
WATER CLOSET (FLUSH VALVE)	5	5	12	5	25	0	60	0	
WATER CLOSET (FLUSH TANK)		2.5			0	0	0	0	
DISHWASHER		3	1	3	0	0	3	3	
DRINKING FOUNTAIN		0.5	0.5	0.5	0	0	1	0.75	
HOSE BIBB		2.5	3	2.5	0	0	7.5	0	
LAVATORY	4	1	1	1	4	3	12	9	
SINK		1.5	7	1.5	0	0	10.5	7.875	
MOP SINK		1.5	1	1.5	0	0	1.5	1.125	
SINK HS		1		1	0	0	0	0	
SINK 3-COMP		4	1	4	0	0	4	3	
URINAL (FLUSH VALVE)	1	2		2	2	0	0	0	
WALL BOX (CLOTHES WASHER)		4	1	4	0	0	4	0	
TOTAL WSFU					29	3	99.5	24.75	
TOTAL GPM					41	3	65	18	
PRESSURE CALCULATIONS:			DISTANCE (FT)	PRESSURE (PSIG)	COMMENTS				
A. MINIMUM STATIC WATER PRESSURE AT STREET			-	100	1				
B. PRESSURE LOSS AT METER			-	5	ESTIMATED				
C. PRESSURE LOSS AT BACKFLOW PREVENTER			-	7	ESTIMATED				
D. PIPE DISTANCE FROM STREET TO RISER			150	-	2				
E. FRICTION LOSS IN PIPING (6"/100' X .434 X D = PSIG)			-	6	3				
F. ELEVATION PRESSURE LOSS FROM STREET TO RISER			3	1	4				
G. PRESSURE AT RISER (A - B - C - E - F.)			-	81					
H. PRESSURE AFTER PRV			-	65	-16 = PRV				
I. PIPE LENGTH FROM RISER TO REMOTE FIXTURE			100	-	3				
J FRICTION LOSS IN PIPING (6"/100' X .434 X H = PSIG)			-	4	3				
K. ELEVATION PRESSURE LOSS FROM RISER TO REMOTE FIXTURE			11	5	4				
L. PRESSURE AVAILABLE AT REMOTE FIXTURE (G. - I. - J.)			-	56					
M. MINIMUM PRESSURE AT REMOTE FIXTURE			-	40					
SERVICE SIZE (INCHES) = 2									
NOTES:									
1 ASSUMED SITE WATER PRESSURE AT STREET LEVEL. PLUMBING CONTRACTOR TO VERIFY AND NOTIFY ENGINEER OF DISCREPANCIES PRIOR TO START OF WORK.									
2 ASSUMED PIPE DISTANCE FROM THE STREET. PLUMBING CONTRACTOR TO VERIFY AND NOTIFY ENGINEER OF DISCREPANCIES PRIOR OT START OF WORK.									
3 TOTAL EQUIVALENT PIPE LENGTH = PIPE LENGTH X 1.5. ASSUME LOSS IN PIPE TO BE 6' OF HEAD PER 100' OF PIPE.									
4 FT X .434 = PSIG									

BRANCH PIPE SIZING CHART			
WATER PIPE SIZE	MAX SUPPLY FIXTURE UNITS PER 2023 OPSC - NO FLUSH VALVES	MAX SUPPLY FIXTURE UNITS PER 2023 OPSC- WITH FLUSH VALVES	MAX GPM
1/2"	2	-	2
3/4"	7.5	-	6
1"	15	-	12
1-1/4"	33	6	22
1-1/2"	55	15	32
2"	215	95	65
SIZING PER 2023 OPSC APPENDIX A TABLE 103.1, CHARTS 103.1(1), 103.1(2), AND 105.1(1) AND THE BUILDING SUPPLY PRESSURE OF 80 PSIG AND PIPING MATERIALS OF TYPE L COPPER AND SMOOTH PIPE. A MAXIMUM PRESSURE DROP OF 4.0 PSI PER 100FT. A MAX VELOCITY OF 7FT/SEC.			

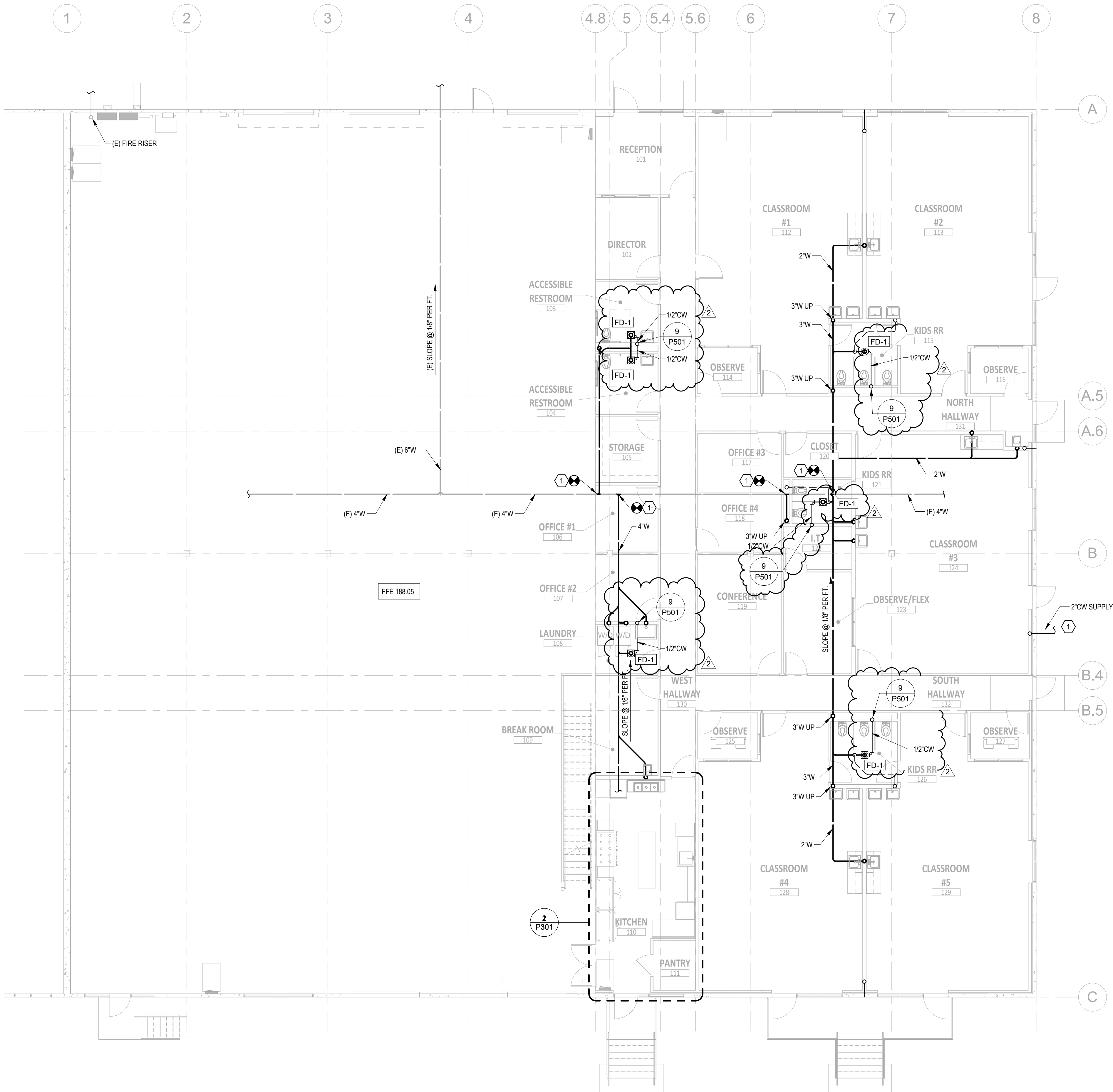
WASTE SERVICE CALCULATION							
FIXTURE	PUBLIC USE - EXISTING		PUBLIC USE - NEW		TOTAL DFU (EXIST.)	TOTAL DFU (NEW)	COMMENTS
	QUANTITY	FIXTURE UNITS (DFU)	QUANTITY	FIXTURE UNITS (DFU)			
WATER CLOSET (FLUSH VALVE)	5	4	10	4	20	40	
WATER CLOSET (FLUSH TANK)		4		4	0	0	
DISHWASHER		2	1	2	0	2	
DRINKING FOUNTAIN		0.5	2	0.5	0	1	
FLOOR DRAIN	2	2	4	2	4	8	
LAVATORY	4	1	12	1	4	12	
SINK		2	7	2	0	14	
MOP SINK		2	1	3	0	3	
SINK HS		1	2	1	0	2	
SINK 3-COMP		4	1	4	0	4	
URINAL (FLUSH VALVE)	1	2		2	2	0	
WALL BOX (CLOTHES WASHER)		2	1	2	0	2	
TOTAL DRAINAGE FIXTURE UNITS					30	88	
PIPE SLOPE (%)	1% ASSUMED		1% NEW				
MAIN SIZE (IN)	4" EXISTING INSTALLED		4"...				
NOTES:							
1 SIZING PER CURRENT UPC TABLE 7-3 AND TABLE 7-5.							
2 PER TABLE 7-5 ALLOWABLE DRAINAGE FIXTURE UNIT ON HORIZONTAL SEWER LINE WITH 4"W IS 216 F.U.							



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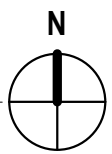


GENERAL NOTES:

- A. INFORMATION PERTAINING TO EXISTING PLUMBING PIPING, FIXTURES, ITEMS, ETC., SHOWN ON THESE DRAWINGS HAVE BEEN TAKEN FROM VARIOUS RECORD DRAWINGS WITH LIMITED INVESTIGATION. SOME, BUT NOT ALL, INFORMATION HAS BEEN VERIFIED AT THE SIRE. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS RELATIVE TO SCOPE OF WORK. SOME PIPING, EQUIPMENT AND OTHER ITEMS HAVE BEEN SHOWN IN AN ASSUMED LOCATION, BUT NOT VERIFIED CONTRACTOR SHALL VERIFY.
- B. THE CONTRACTOR SHALL PROVIDE FULL SIZE CW AND HW PIPING TO EACH PLUMBING FIXTURE, SEE PLUMBING CONNECTION SCHEDULE.
- C. PROVIDE SEISMIC RESTRAINT BRACING OF ALL PIPING SYSTEMS AND PLUMBING EQUIPMENT PER SPECIFICATION.
- D. THE ROUTING OF ALL PIPING IS DIAGRAMMATIC AND DOES NOT SHOW EVERY OFFSET. CONTRACTOR SHALL COORDINATE WITH HVAC AND ALL OTHER TRADES.
- E. PROVIDE ISOLATION VALVES ON ALL BRANCH PIPING. TYPICAL. PROVIDE VALVES IN ACCESSIBLE LOCATIONS, AND ACCESS PANELS REQUIRED FOR HARD CEILINGS. COORDINATE EXACT LOCATION AND TYPE WITH OTHER TRADES.
- F. COORDINATE LOCATION OF ALL BELOW-GRADE PIPING PENETRATIONS THRU FOUNDATION AND FLOOR.
- G. SEAL ALL PIPING PENETRATIONS THROUGH FLOOR AND WALLS WATER TIGHT. COORDINATE LOCATIONS WITH GENERAL CONTRACTOR AND OTHER TRADES.
- H. PROVIDE DIELECTRIC COUPLINGS FOR ALL DISSIMILAR METAL PIPING CONNECTIONS, TYPICAL.
- I. CONTRACTOR SHALL PROVIDE FIRE RATED SLEEVES ON PENETRATIONS THROUGH OCCUPANCY SEPARATIONS.
- J. PLUMBING CONTRACTOR SHALL PROVIDE CLEANOUTS ON ALL WASTE PIPING ON BENDS OR CHANGES OF DIRECTION OF 135 DEGREES OR GREATER. MORE THAN 5 FEET FROM MAIN AND WHERE REQUIRED BY LOCAL CODES. WHETHER OR NOT SHOWN. COORDINATE WITH FINISHED FLOOR AND WALL LOCATIONS AND TYPES.
- K. PLUMBING CONTRACTOR SHALL PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS, FLOOR SINKS AND HUB DRAINS.
- L. CONTRACTOR SHALL PROVIDE APPROVED FIRE STOP SYSTEMS FOR ALL MATERIALS PENETRATING FIRE RATED ASSEMBLIES.
- M. THE FIRE SPRINKLER CONTRACTOR SHALL COORDINATE AND PROVIDE FOR THE LOCATION OF ALL FIRE SPRINKLER DRAIN PIPING RECEPTOR PIPING, WEATHER OR NOT INDICATED ON THE CONTRACT DOCUMENTS. THE ROUTING OF LOW POINT DRAINS TO ANY LOCATION WHERE THERE IS NO DRAIN RECEPTOR IS NOT ACCEPTABLE.
- N. COORDINATE BELOW-GRADE PIPING WITH EXISTING STRUCTURE PRIOR TO PERFORMING WORK. VERIFY EXISTING FOOTING SIZES AND LOCATIONS IN THE FIELD. PROVIDE SLEEVES AND BLOCK-OUTS WHERE PIPING PENETRATES EXISTING SLABS, FOUNDATIONS, OR FOOTINGS.

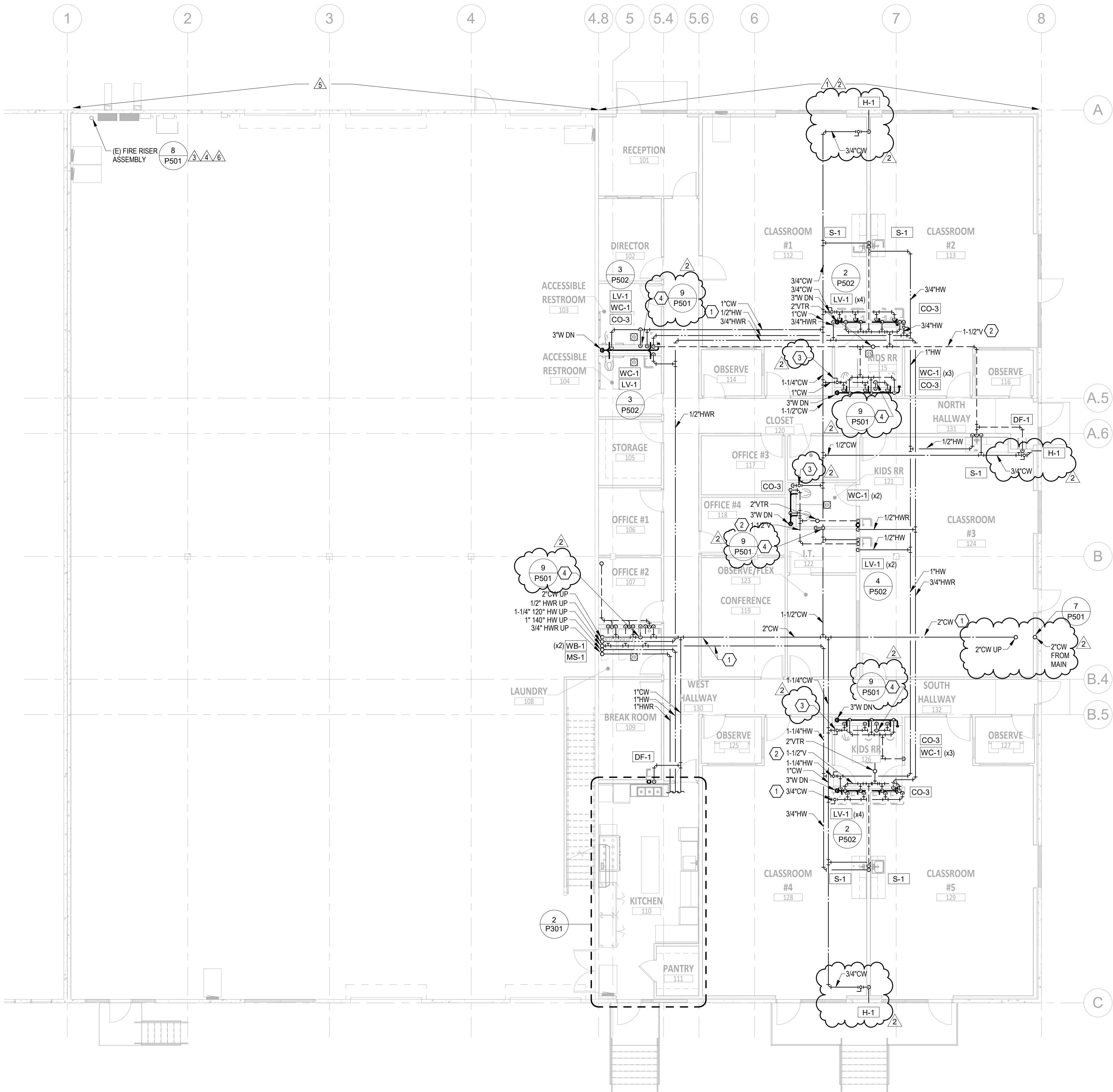
KEYED NOTES:

- 1 FIELD VERIFY THE LOCATION, INVERT, AND MATERIAL OF (E) 4\"/>



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GENERAL NOTES:

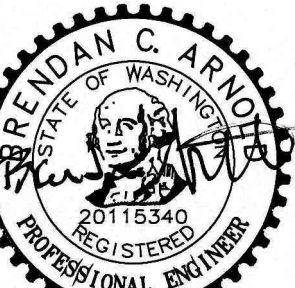
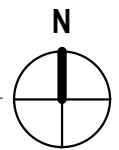
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FIRE SPRINKLER NOTES: △

- 1. THE EXISTING BUILDING IS PROVIDED WITH A WET-PIPE FIRE SPRINKLER SYSTEM. MODIFY THE EXISTING SYSTEM AND PROVIDE FULL FIRE SPRINKLER COVERAGE FOR ALL AREAS WITHIN THE REMODELING AREA IN ACCORDANCE WITH NFPA 13. MODIFY EXISTING SPRINKLER PIPING AS REQUIRED TO SERVE THE NEW ROOM LAYOUT AND CEILING CONFIGURATION.
- 2. COORDINATE EXACT SPRINKLER PIPE ROUTING, SPRINKLER LOCATIONS, AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL CEILING PLANS AND ALL OTHER TRADES.
- 3. FIELD VERIFY EXISTING FIRE SPRINKLER SYSTEM CONDITIONS, INCLUDING EXISTING RISER, PIPING, AND AVAILABLE WATER SUPPLY, PRIOR TO COMMENCING WORK.
- 4. PROVIDE A NEW BACKFLOW PREVENTION DEVICE INSIDE THE BUILDING AT THE EXISTING FIRE RISER. MODIFY THE EXISTING FIRE RISER AS REQUIRED TO ACCOMMODATE THE NEW BACKFLOW PREVENTION DEVICE.
- 5. EXISTING WAREHOUSE FIRE SPRINKLER PIPING SYSTEM TO REMAIN AND CONTINUE TO SERVE ITS EXISTING PURPOSE. PROTECT EXISTING SPRINKLER PIPING DURING CONSTRUCTION.
- 6. REFER TO THE PROJECT SPECIFICATIONS FOR DETAILED FIRE SPRINKLER SYSTEM REQUIREMENTS, MATERIALS, INSTALLATION, TESTING, AND ACCEPTANCE CRITERIA.

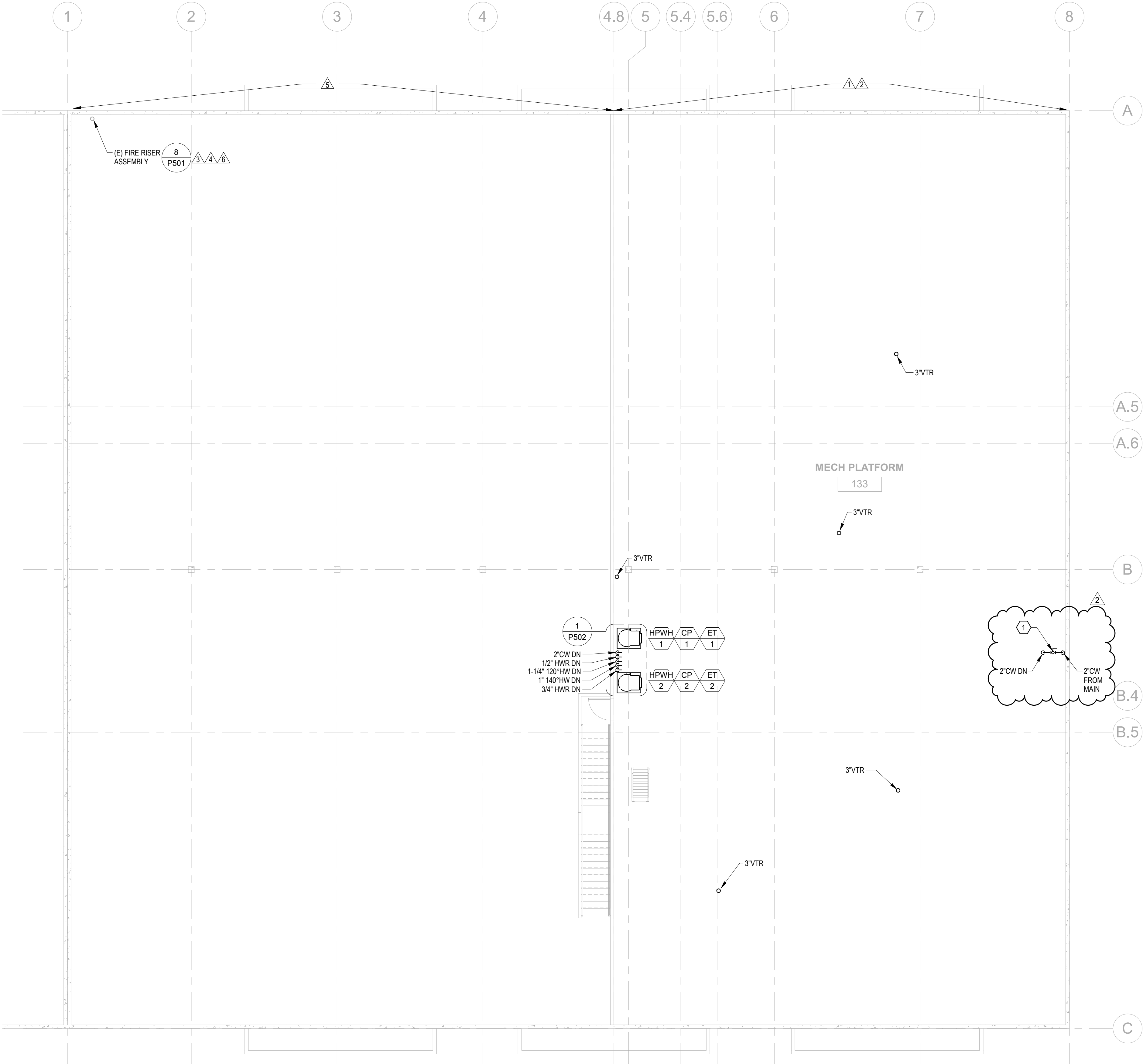
KEYED NOTES:

- 1 DOMESTIC PIPING TO BE ROUTED IN CEILING SPACE. TYPICAL OF ALL.
- 2 VENT PIPING TO BE ROUTED IN CEILING SPACE. TYPICAL OF ALL.
- 3 PROVIDE A WATER SHUTOFF BALL VALVE FOR EACH BATHROOM. ENCLOSED IN A LOCKING ACCESS HATCH LOCATED AT 6'-0" AFF AND CENTERED IN THE ROOM. PROVIDE SHUTOFFS IN THE KIDS' RESTROOMS AND OUTSIDE ABOVE THE KIDS' LAVATORIES. COORDINATE LOCATIONS TO ALLOW QUICK ACCESS FOR EMERGENCY WATER SHUTOFF WITHOUT HAVING TO ACCESS THE MEZZANINE.
- 4 1/2" CW TAKE OFF ABOVE SERVICE LINE DOWN TO TRAP PRIMER.



09-14-2026





GENERAL NOTES:

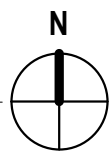
- A. INFORMATION PERTAINING TO EXISTING PLUMBING PIPING, FIXTURES, ITEMS, ETC., SHOWN ON THESE DRAWINGS HAVE BEEN TAKEN FROM VARIOUS RECORD DRAWINGS WITH LIMITED INVESTIGATION. SOME, BUT NOT ALL, INFORMATION HAS BEEN VERIFIED AT THE SIRE. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS RELATIVE TO SCOPE OF WORK. SOME PIPING, EQUIPMENT AND OTHER ITEMS HAVE BEEN SHOWN IN AN ASSUMED LOCATION, BUT NOT VERIFIED CONTRACTOR SHALL VERIFY.
- B. THE CONTRACTOR SHALL PROVIDE FULL SIZE CW AND HW PIPING TO EACH PLUMBING FIXTURE, SEE PLUMBING CONNECTION SCHEDULE.
- C. PROVIDE SEISMIC RESTRAINT BRACING OF ALL PIPING SYSTEMS AND PLUMBING EQUIPMENT PER SPECIFICATION.
- D. THE ROUTING OF ALL PIPING IS DIAGRAMMATIC AND DOES NOT SHOW EVERY OFFSET. CONTRACTOR SHALL COORDINATE WITH HVAC AND ALL OTHER TRADES.
- E. PROVIDE ISOLATION VALVES ON ALL BRANCH PIPING. TYPICAL. PROVIDE VALVES IN ACCESSIBLE LOCATIONS, AND ACCESS PANELS REQUIRED FOR HARD CEILINGS, COORDINATE EXACT LOCATION AND TYPE WITH OTHER TRADES.
- F. COORDINATE LOCATION OF ALL BELOW-GRADE PIPING PENETRATIONS THRU FOUNDATION AND FLOOR.
- G. SEAL ALL PIPING PENETRATIONS THROUGH FLOOR AND WALLS WATER TIGHT. COORDINATE LOCATIONS WITH GENERAL CONTRACTOR AND OTHER TRADES.
- H. PROVIDE DIELECTRIC COUPLINGS FOR ALL DISSIMILAR METAL PIPING CONNECTIONS, TYPICAL.
- I. CONTRACTOR SHALL PROVIDE FIRE RATED SLEEVES ON PENETRATIONS THROUGH OCCUPANCY SEPARATIONS.
- J. PLUMBING CONTRACTOR SHALL PROVIDE CLEANOUTS ON ALL WASTE PIPING ON BENDS OR CHANGES OF DIRECTION OF 135 DEGREES OR GREATER, MORE THAN 5 FEET FROM MAIN AND WHERE REQUIRED BY LOCAL CODES, WHETHER OR NOT SHOWN. COORDINATE WITH FINISHED FLOOR AND WALL LOCATIONS AND TYPES.
- K. PLUMBING CONTRACTOR SHALL PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS, FLOOR SINKS AND HUB DRAINS.
- L. CONTRACTOR SHALL PROVIDE APPROVED FIRE STOP SYSTEMS FOR ALL MATERIALS PENETRATING FIRE RATED ASSEMBLIES.
- M. THE FIRE SPRINKLER CONTRACTOR SHALL COORDINATE AND PROVIDE FOR THE LOCATION OF ALL FIRE SPRINKLER DRAIN PIPING RECEPTOR PIPING, WEATHER OR NOT INDICATED ON THE CONTRACT DOCUMENTS. THE ROUTING OF LOW POINT DRAINS TO ANY LOCATION WHERE THERE IS NO DRAIN RECEPTOR IS NOT ACCEPTABLE.
- N. COORDINATE BELOW-GRADE PIPING WITH EXISTING STRUCTURE PRIOR TO PERFORMING WORK. VERIFY EXISTING FOOTING SIZES AND LOCATIONS IN THE FIELD. PROVIDE SLEEVES AND BLOCK-OUTS WHERE PIPING PENETRATES EXISTING SLABS, FOUNDATIONS, OR FOOTINGS.

FIRE SPRINKLER NOTES: △

1. THE EXISTING BUILDING IS PROVIDED WITH A WET-PIPE FIRE SPRINKLER SYSTEM. MODIFY THE EXISTING SYSTEM AND PROVIDE FULL FIRE SPRINKLER COVERAGE FOR ALL AREAS WITHIN THE REMODELING AREA IN ACCORDANCE WITH NFPA 13. MODIFY EXISTING SPRINKLER PIPING AS REQUIRED TO SERVE THE NEW ROOM LAYOUT AND CEILING CONFIGURATION.
2. COORDINATE EXACT SPRINKLER PIPE ROUTING, SPRINKLER LOCATIONS, AND INSTALLATION REQUIREMENTS WITH ARCHITECTURAL CEILING PLANS AND ALL OTHER TRADES.
3. FIELD VERIFY EXISTING FIRE SPRINKLER SYSTEM CONDITIONS, INCLUDING EXISTING RISER, PIPING, AND AVAILABLE WATER SUPPLY, PRIOR TO COMMENCING WORK.
4. PROVIDE A NEW BACKFLOW PREVENTION DEVICE INSIDE THE BUILDING AT THE EXISTING FIRE RISER. MODIFY THE EXISTING FIRE RISER AS REQUIRED TO ACCOMMODATE THE NEW BACKFLOW PREVENTION DEVICE.
5. EXISTING WAREHOUSE FIRE SPRINKLER PIPING SYSTEM TO REMAIN AND CONTINUE TO SERVE ITS EXISTING PURPOSE. PROTECT EXISTING SPRINKLER PIPING DURING CONSTRUCTION.
6. REFER TO THE PROJECT SPECIFICATIONS FOR DETAILED FIRE SPRINKLER SYSTEM REQUIREMENTS, MATERIALS, INSTALLATION, TESTING, AND ACCEPTANCE CRITERIA.

KEYED NOTES:

- 1 PROVIDE SHUT-OFF VALVE AND PRESSURE GAGES.

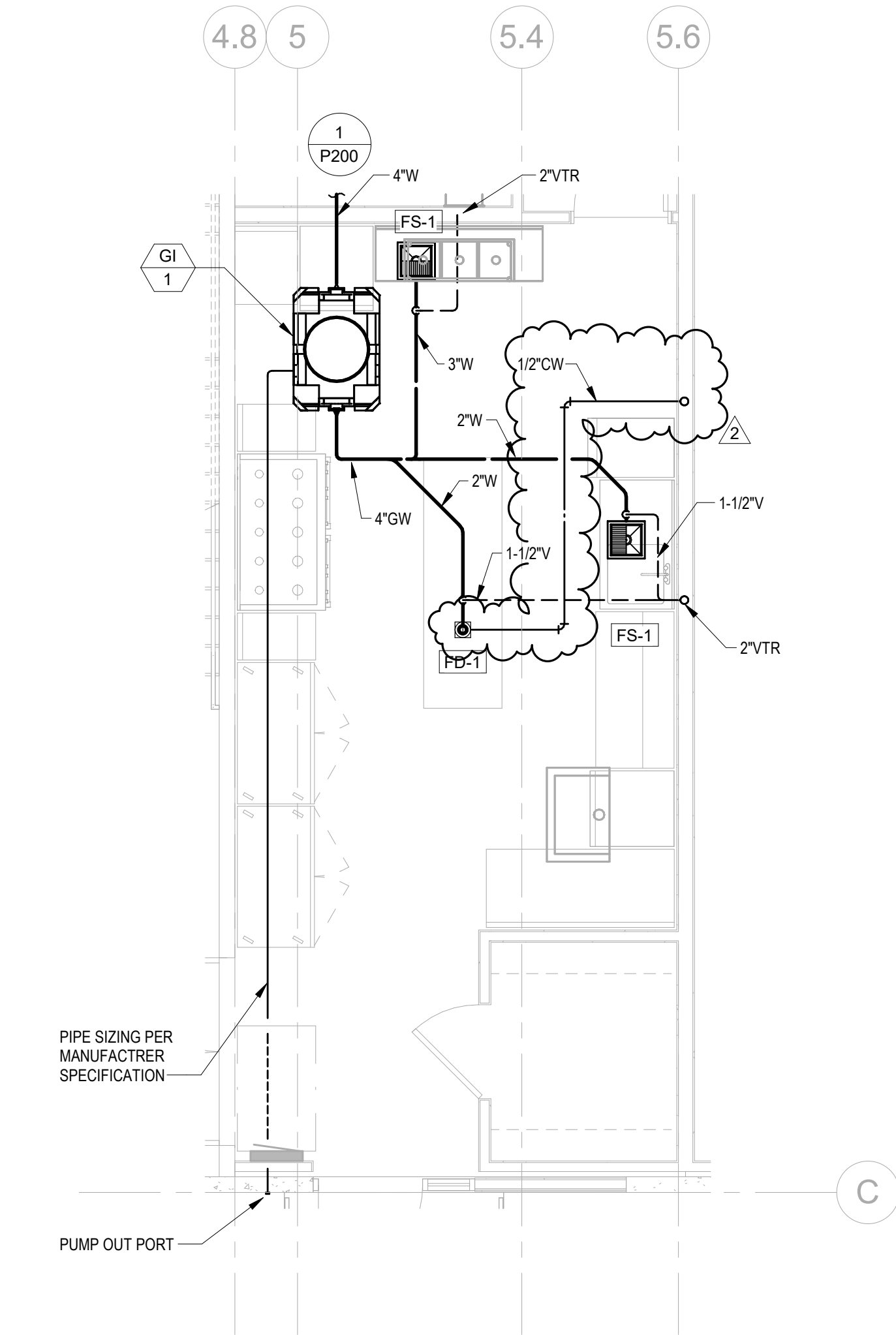


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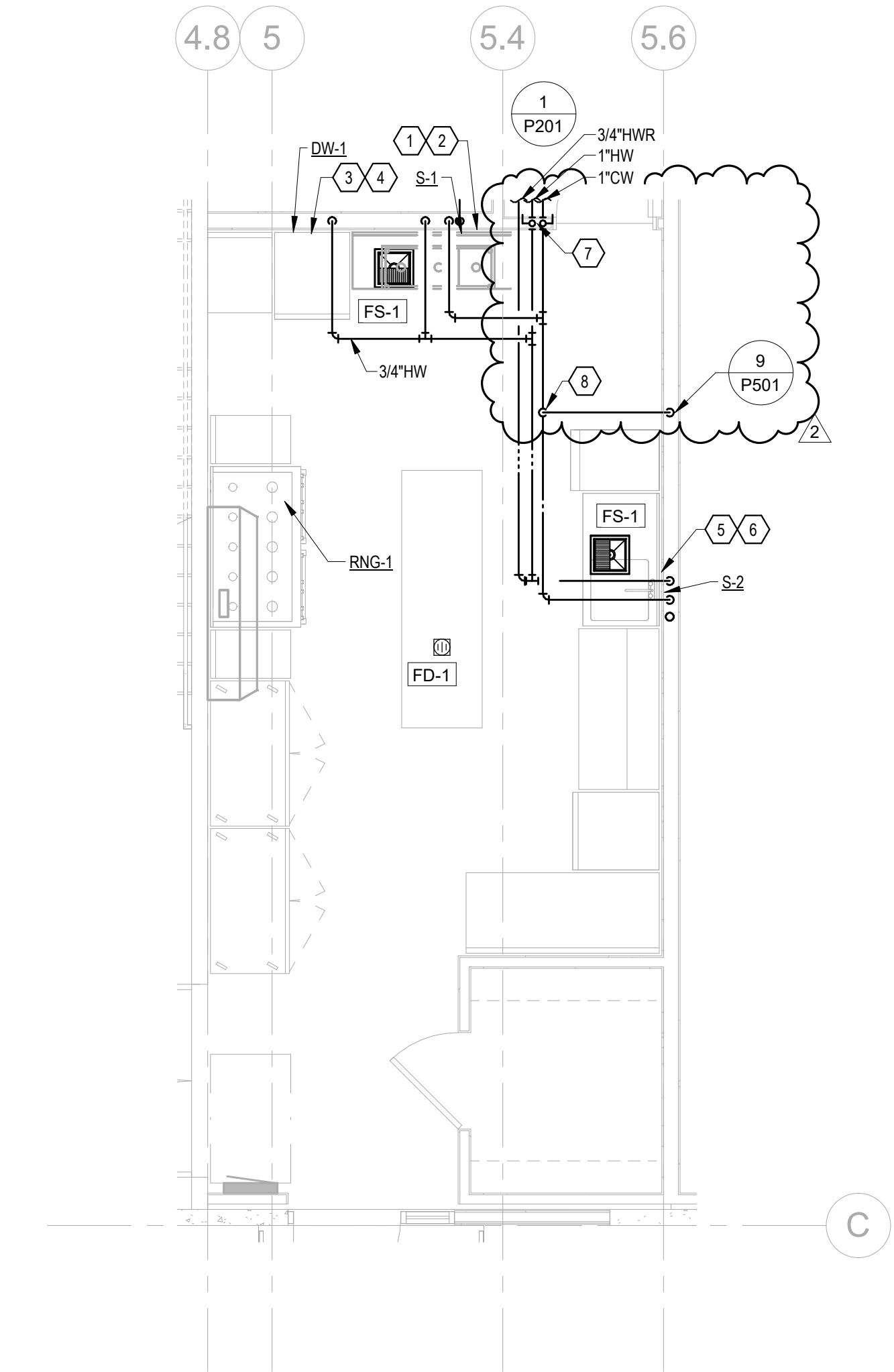


6915 SW MACADAM AVE
SUITE #200
PORTLAND, OREGON 97219
PHONE: (503) 882-1188
ENGINEERING@MKE-INC.COM

KITCHEN EQUIPMENT SCHEDULE (FOR REFERENCE ONLY)						
EQUIP... TAG	EQUIP NUMBER	DISCRITION	CW... SIZE (IN)	HW... SIZE (IN)	DIRECT WASTE (IN)	INDIRECT WASTE (IN)
RNG	1	RANGE	-	-	-	-
S	1	3-COMPARMENT SINK	1/2	1/2	-	1-1/2
S	2	SINGLE COMPARTMENT SINK	1/2	1/2	-	1-1/2
DW	1	DISHWASHER	-	3/4	-	1-1/2
NOTES:						



1 ENLARGMENT KITCHEN PLUMBING - BELOW GRADE
1/4" = 1'-0"



2 ENLARGMENT KITCHEN PLUMBING - LEVEL 1
1/4" = 1'-0"

KITCHEN GENERAL NOTES:

- THIS DRAWING IS NOT TO BE USED FOR ESTABLISHIN ROUGH-IN LOCATIONS. REFER TO DIMENSIONED DRAWINGS PREPARED BY ARCHITECT.
- UNDER PLUMBING WORK OF DIVISION 22, MAKE ALL ROUGH-INS AND FINAL CONNECTIONS IN CONFORMANCE OF ALL LOCAL CODES. PROVIDE SHUTOFF VALVES WITH PERMANENT NAME TAGS IDENTIFYING SUPPLY LINES TO EACH INDIVIDUAL PIEC OF EQUIPMENT. INCLUDE TRAPS, TAIL PIECES AND LIN STRAINERS AS REQUIRED.
- UNDER PLUMBING WORK OF DIVISION 22, FURNISH AN INSTALL ALL FLOOR SINKS AND AREA DRAINS FLUSH WITH FINISHED FLOOR IF CODE ALLOWS.
- UNDER PLUMBING WORK OF DIVISION 22, FURNISH AN INSTALL GREASE TRAP OR INTERCEPTOR AS REQUIRED.
- UNDER PLUMBING WORK OF DIVISION 22, FURNISH AN INSTALL SINK WASTE LINES, USE COPPER TUBING UNEXPOSED AND PAINTED WHERE LINES ARE VISIBLE NO PVC PIPING IS ACCEPTABLE.
- UNDER KITCHEN EQUIPMENT WORK OF DIVISION 11, FURNISH AND INSTALL ALL INDIRECT WASTE LINES FROM EQUIPMENT LOCATED AT CUSTOM COUNTERS. USE COPPER TUBING AND POINT VISIBLE LINES. NO P PIPING IS ACCEPTABLE.
- PROVIDE TRAP PRIMER FOR ALL FLOOR DRAINS, WITH ACCESS PANEL, IN WALL. INSTALL PER MANUFACTURER'S RECOMMENDATION IN APPROVED LOCATION BY SONSHINE ARCHITECT AND/OR OWNER CONFORM TO UPC AND LOCAL CODES.
- UNDER KITCHEN EQUIPMENT WORK OF DIVISION 11, PROVIDE FAUCETS AT EQUIPMENT. UNDER PLUMBING WORK OF DIVISION 22, INSTALL AND CONNECT FAUCETS.
- UNDER PLUMBING WORK OF DIVISION 22, FURNISH AN INSTALL CHROME PLATED VACUUM BREAKERS OR BACKSYPHONING DEVICES ON SUPPLY LINES TO EQUIPMENT AS REQUIRED BY CODE.
- UNDER PLUMBING WORK OF DIVISION 22, FURNISH AN INSTALL STAINLESS STEEL OR CHROME PLATED ESCUTCHEON PLATES FOR ALL WATER LINES PENETRATING COUNTER TOPS AND BACK SPLASHES.
- SEE PLUMBING AND MECHANICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

KEYED NOTES:

- PROVIDE 3/4" CW AND 3/4" HW DOWN IN WALL TO SERVE 3-COMPARTMENT SINK FAUCETS. PROVIDE BRANCH PIPING TO EACH FAUCET PER FOOD SERVICE FIXTURE CONNECTION SCHEDULE.
- PROVIDE INDIRECT WASTE FROM 3-COMPARTMENT SINK AND ROUTE TO OVER FLOOR SINK.
- PROVIDE 1/2" HW DOWN IN WALL TO SERVE DISH WASHER.
- PROVIDE INDIRECT WASTE FROM DISHWASHER AND ROUTE TO OVER FLOOR SINK.
- PROVIDE 1/2" CW AND HW DOWN IN WALL TO SERVE 1-COMPARTMENT SINK FAUCET. PROVIDE BRANCH PIPING TO FAUCET PER FOOD SERVICE FIXTURE CONNECTION SCHEDULE.
- PROVIDE INDIRECT WASTE FROM 1-COMPARTMENT SINK AND ROUTE TO OVER FLOOR SINK.
- PROVIDE A WATER SHUTOFF BALL VALVE FOR KITCHEN, ENCLOSED IN A LOCKING ACCESS HATCH LOCATED AT 6'-0" AFF. COORDINATE LOCATIONS TO ALLOW QUICK ACCESS FOR EMERGENCY WATER SHUTOFF WITHOUT HAVING TO ACCESS THE MEZZANINE.
- 1/2" CW TAKE OFF ABOVE SERVICE LINE DOWN TO TRAP PRIMER.

/kōbiə/CRĒATIVE



09-14-2026



6915 SW MACADAM AVE
SUITE #200
PORTLAND, OREGON 97219
PHONE: (503) 892-1188
ENGINEERING@MK&E-INC.COM

ESD 112 - 2200 Building
Education Facility Renovation

2200 NE 65th Ave.
Vancouver, WA 98661

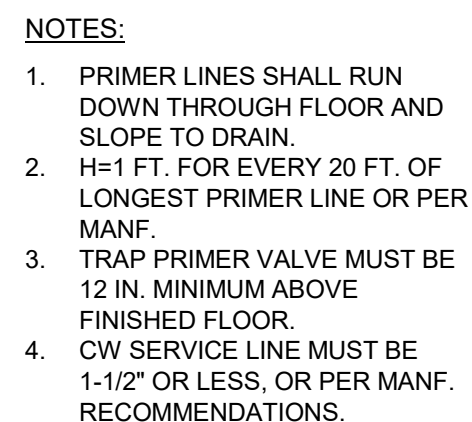
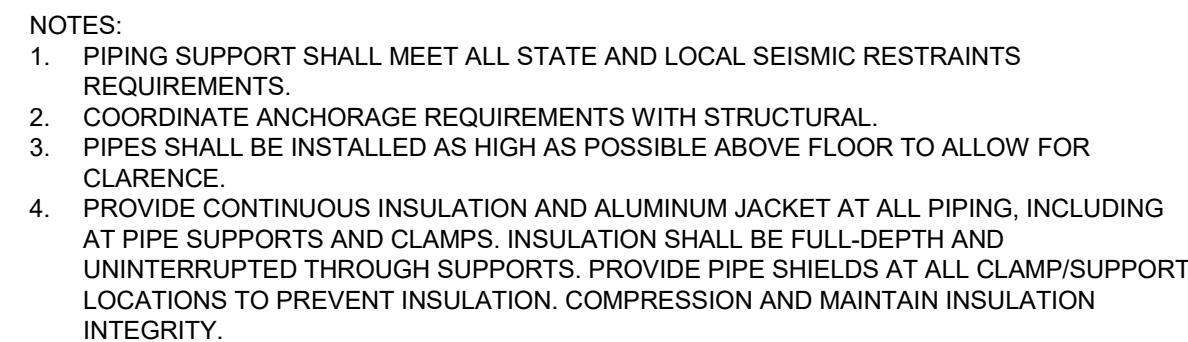
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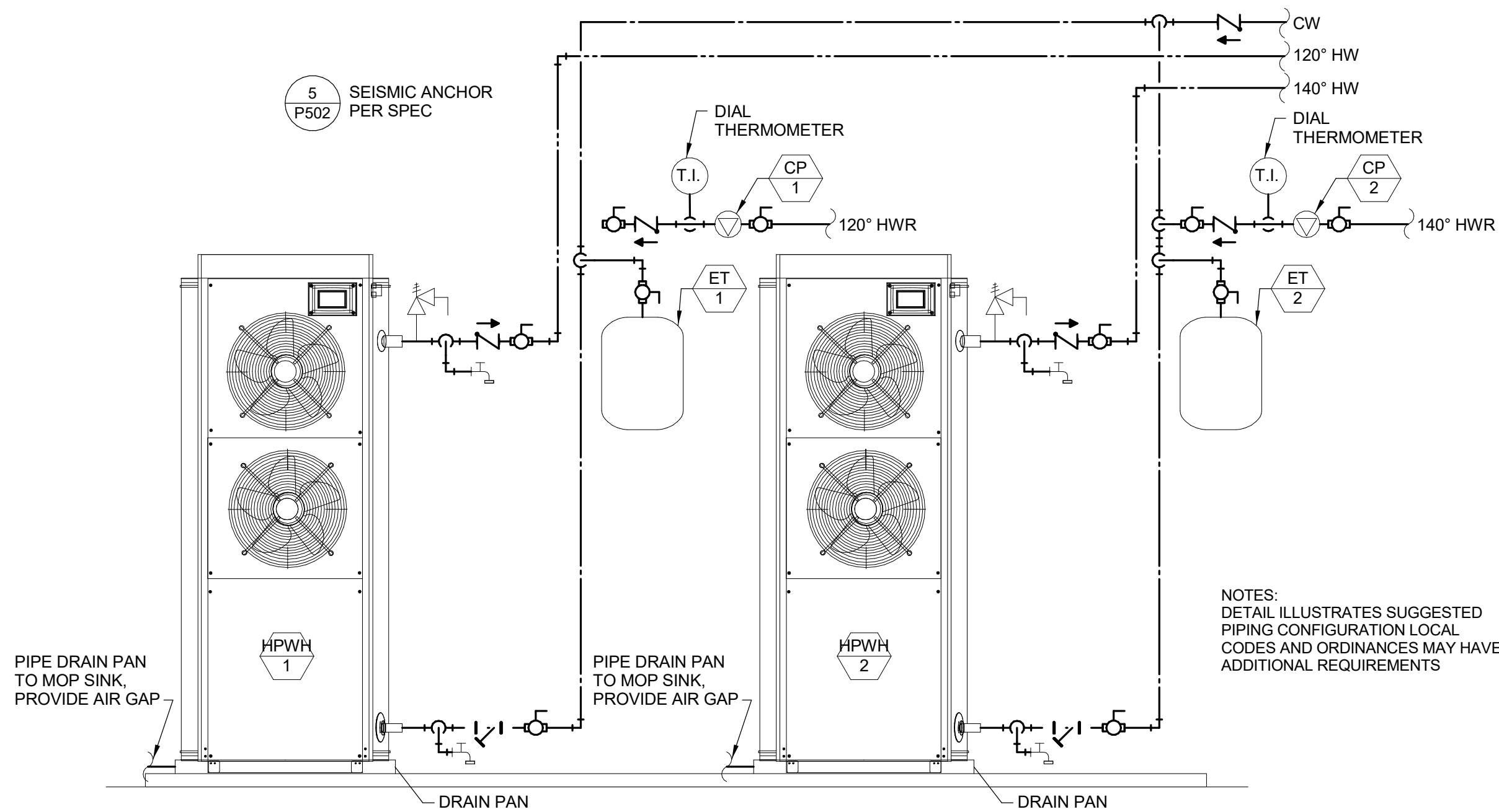
PLUMBING -
ENLARGMENTS

P301

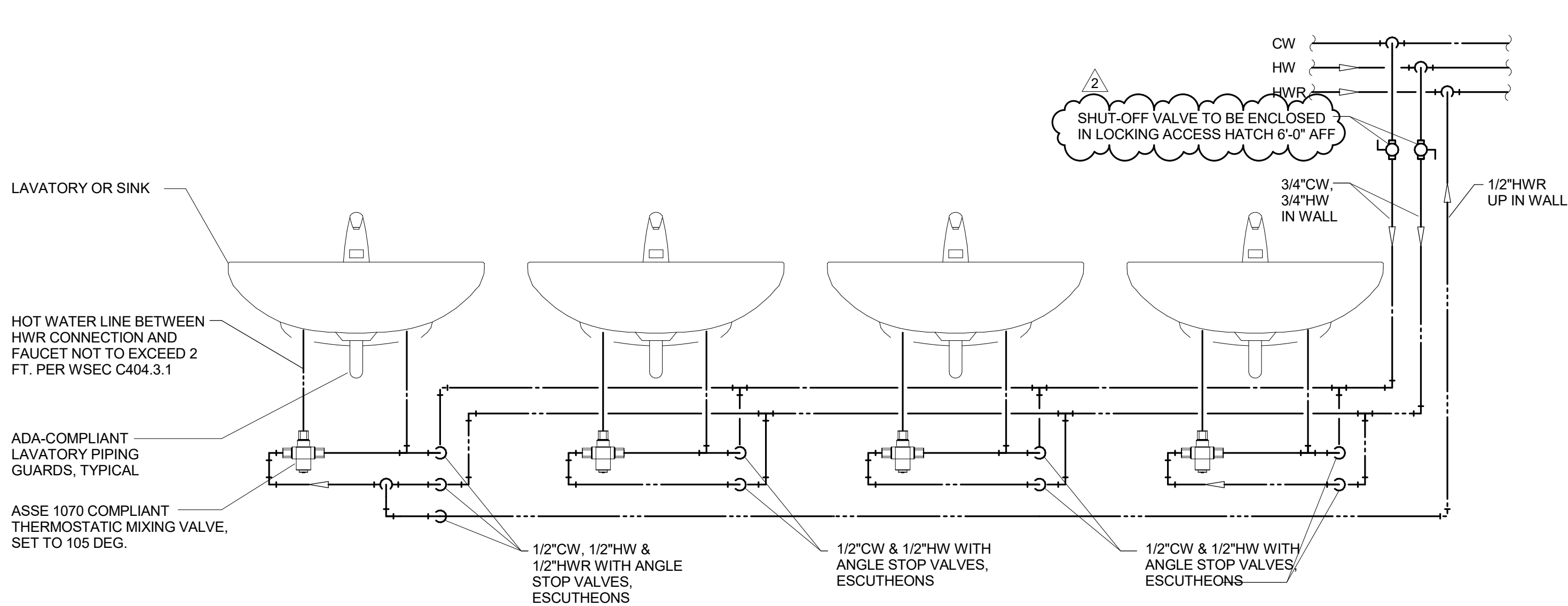
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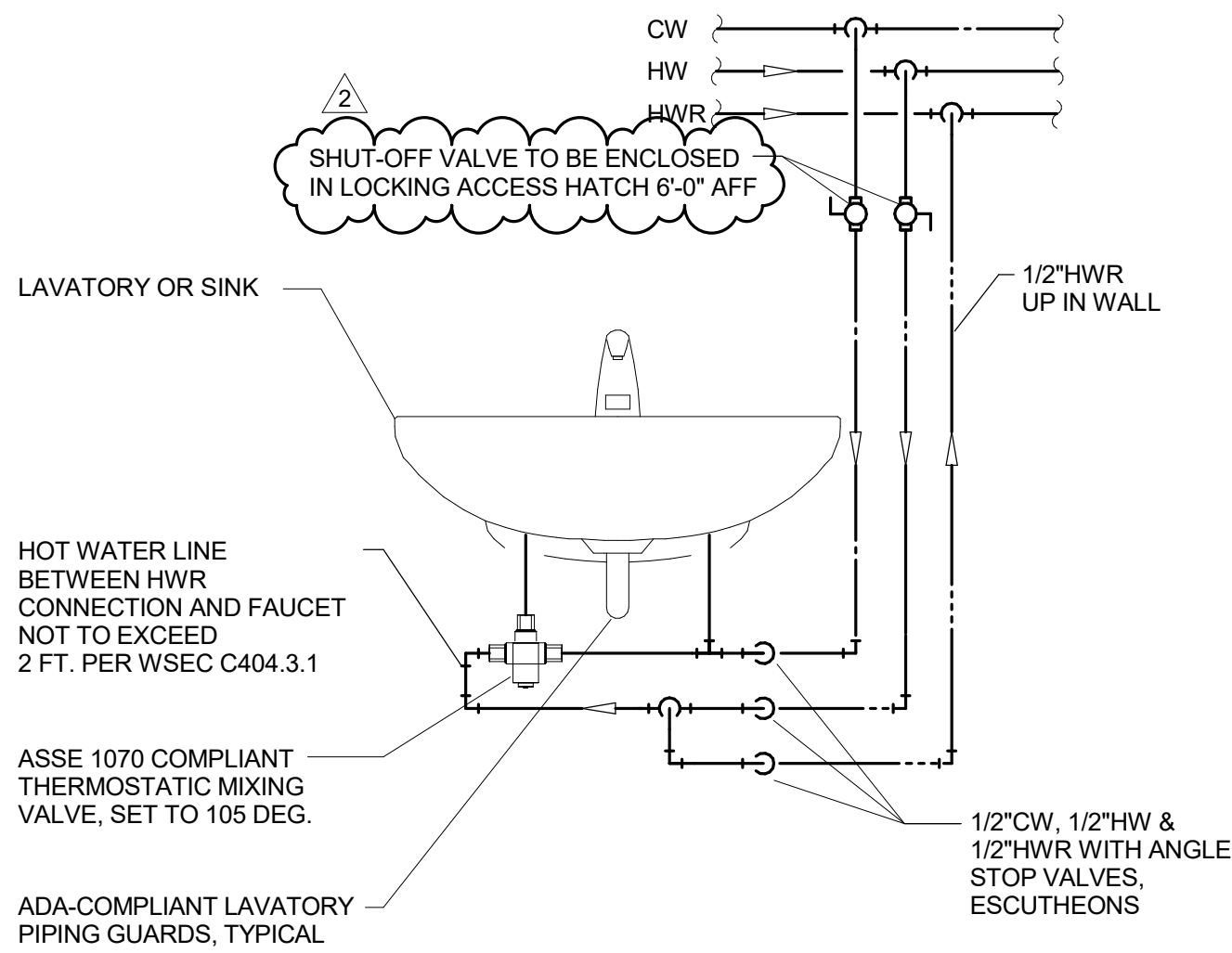




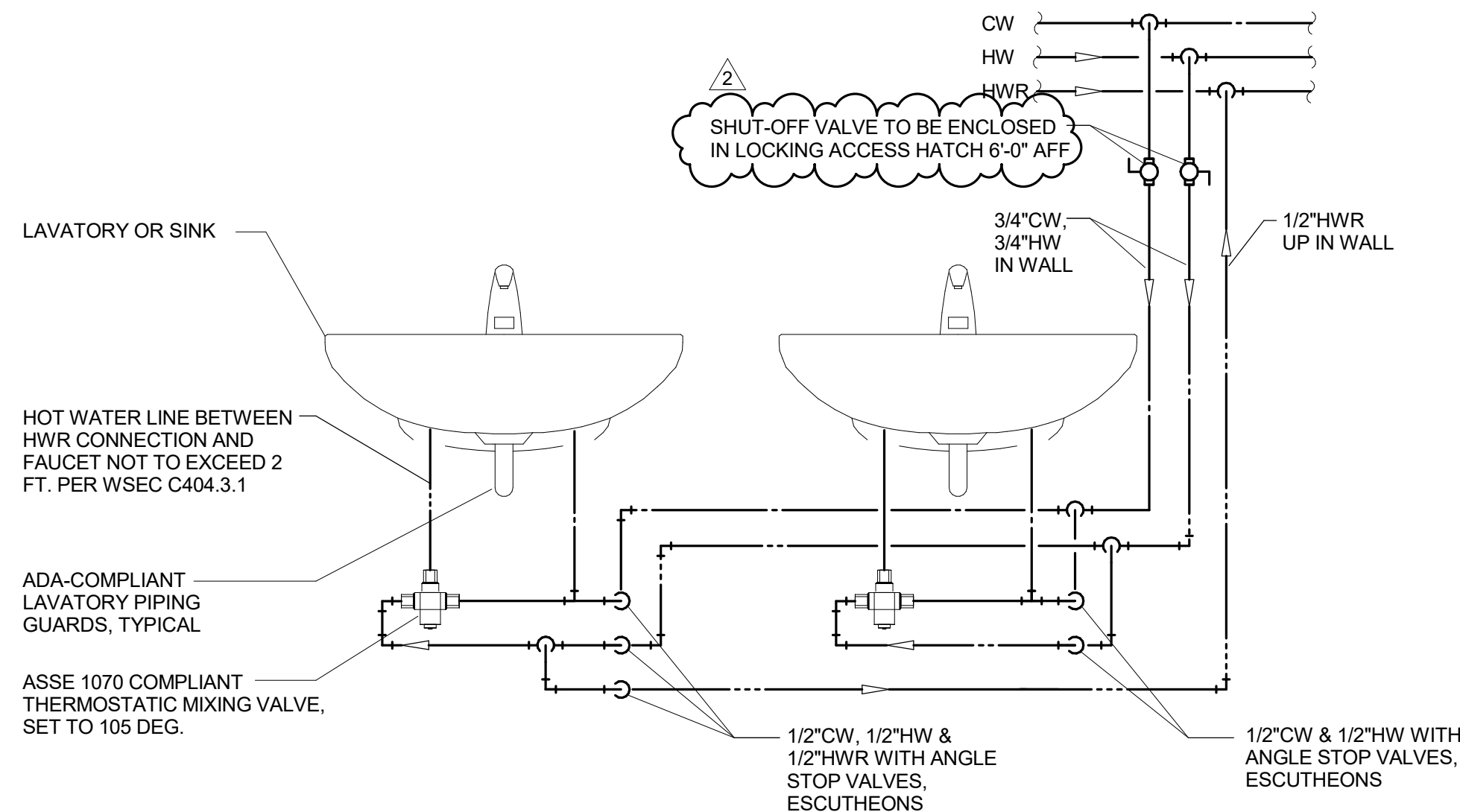
1 DETAIL - ELECTRIC HEAT PUMP WATER HEATER
SCALE: NTS



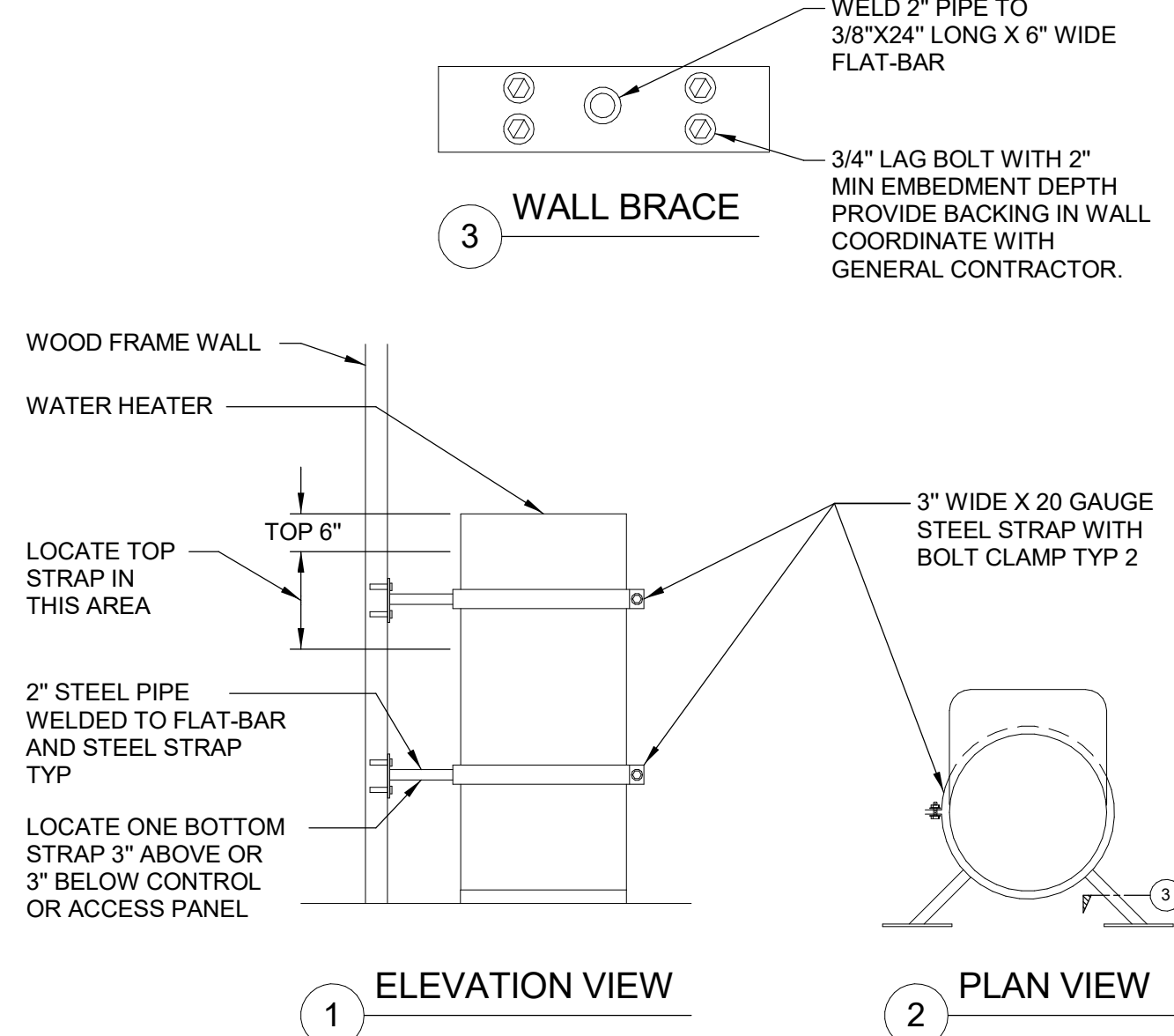
2 DETAIL - 4 LAVATORY PIPING
SCALE: NTS



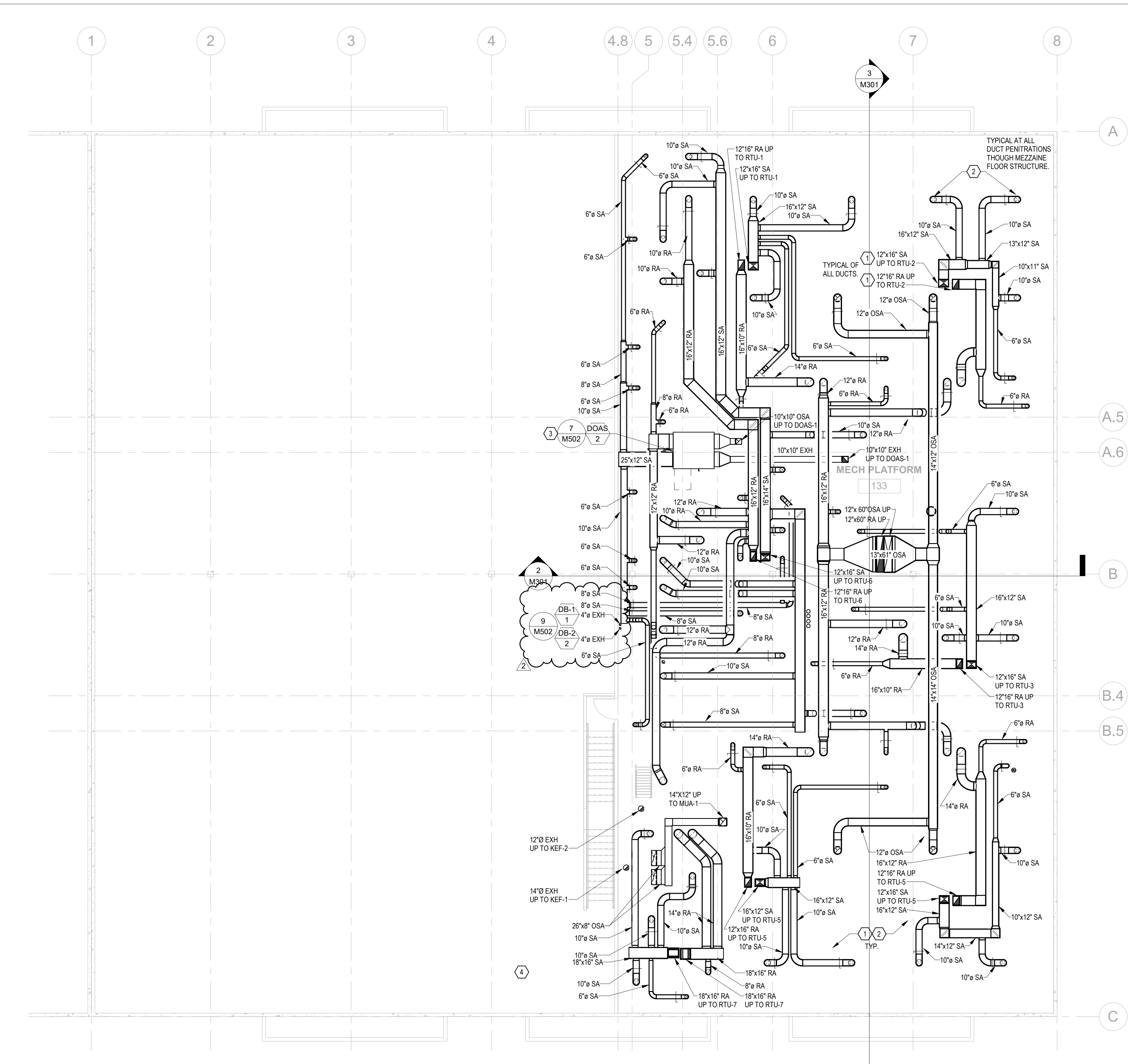
3 DETAIL - LAVATORY PIPING
SCALE: NTS



4 DETAIL - 2 LAVATORY PIPING
SCALE: NTS



5 DETAIL - WATER HEATER SEISMIC SUPPORT
SCALE: NTS

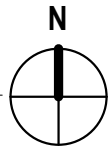


GENERAL NOTES:

- A. THE CONTRACTOR DOCUMENTS ENDEAVOR TO PROVIDE THE CONTRACTOR WITH A REASONABLE REPRESENTATION OF THE WORK TO BE PERFORMED. NOT ALL OFFSETS AND BENDS REQUIRED IN THE DUCT AND PIPING SYSTEMS CAN BE ANTICIPATED OR SHOWN. DO NOT RELY ON THE SCALE OF THE DRAWINGS FOR MATERIAL TAKE-OFFS OR COST ESTIMATION. CAREFULLY INVESTIGATE CONDITIONS SURROUNDING INSTALLATION TO PROVIDE CODE REQUIRED AND MANUFACTURER'S CLEARANCES. ALL WORK SHOWN IS DIAGRAMMATIC AND SHALL BE ROUTED TO FIR WITHIN STRUCTURE. COORDINATE WITH ALL TRADES.
- B. FOR TYPICAL CONNECTIONS TO CEILING SUPPLY AIR DIFFUSERS AND RETURN AIR GRILLES, SEE DETAILS.
- C. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING TYPES, GRID AND LIGHT LOCATIONS FOR COORDINATION.
- D. PROVIDE MAXIMUM MAINTENANCE ACCESS POSSIBLE AT ALL EQUIPMENT. PROVIDE MINIMUM THREE FEET CLEARANCE AT ALL ELECTRICAL PANELS, COMPRESSOR, FAN ACCESS POINTS AND ALL OTHER ACCESS REQUIRED PER MANUFACTURE'S INSTRUCTIONS.
- E. COORDINATE WITH STRUCTURAL TRADES AND FIELD VERIFY STRUCTURAL CONDITIONS PRIOR TO INSTALLATION OF MECHANICAL SYSTEMS. UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS NO PIPE OR DUCT SHALL PENETRATE ANT BEAM JOIST, OR OTHER STRUCTURALLY SUPPORTIVE ELEMENT.
- F. UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL PIPING AND DUCT SHALL BE ROUTED AS CLOSE TO OVERHEAD STRUCTURE AS POSSIBLE DO NOT SUPPORT DUCT OR PIPE IN DIRECT CONTACT WITH THE BUILDING STRUCTURE WITHOUT ADEQUATE MEASURES TO PREVENT NOISE DUE TO VIBRATION OF NORMAL SYSTEM USE.
- G. INSTALL VALVES, REGULATORS, DAMPERS AND ALL OTHER SUCH DEVICES REQUIRING ACCESS OR ADJUSTMENT IN PLAIN VIEW AND WITHIN REASONABLE REACH FROM LADDERS, PLATFORMS, CATWALKS AND ACCESS DOORS.
- H. ALL DUCT BRANCHES TO DIFFUSERS, GRILLES AND REGISTERS SHALL BE NECK SIZE UNLESS OTHERWISE INDICATED.
- I. ALL DUCTWORK TO BE SHEET METAL ONLY, DUCTBOARD NOT ALLOWED EXCEPT FOR CEILING RA BOOTS.
- J. PROVIDE 1" THICK DUCT LINER IN SA AND RA DUCTWORK, FOR FIRST FIFTEEN FEET FROM AIR HANDLER, TYPICAL ALL, UNLESS OTHERWISE NOTED.
- K. PROVIDE MINIMUM 10'-0" DISTANCE BETWEEN ALL OSA INTAKES AND EXHAUST FANS, FLUE VENTS, PLUMBING, ETC.
- L. REFER TO ARCHITECTURAL DRAWINGS AND ARCHITECTURAL DETAIL SHEETS FOR INTERIOR WALL CONSTRUCTION TYPES SUCH AS: WALL EXTENDS TO BOTTOM OF CEILING. COORDINATE ALL AIR TRANSFER DUCTS WITH FULL HEIGHT WALLS.
- M. PROVIDE BALANCING DAMPERS ON ALL SUPPLY, RETURN, OSA AND EXHAUST BRANCH DUCTS. PROVIDE REMOTE DUCT VOLUME DAMPER AT ALL HARD CEILING LOCATIONS.
- N. COORDINATE ALL DUCTWORK ROUTING WITH CABLE TRAY IN CEILING SPACE IN ORDER TO AVOID CONFLICT WITH SERVICE ACCESS.

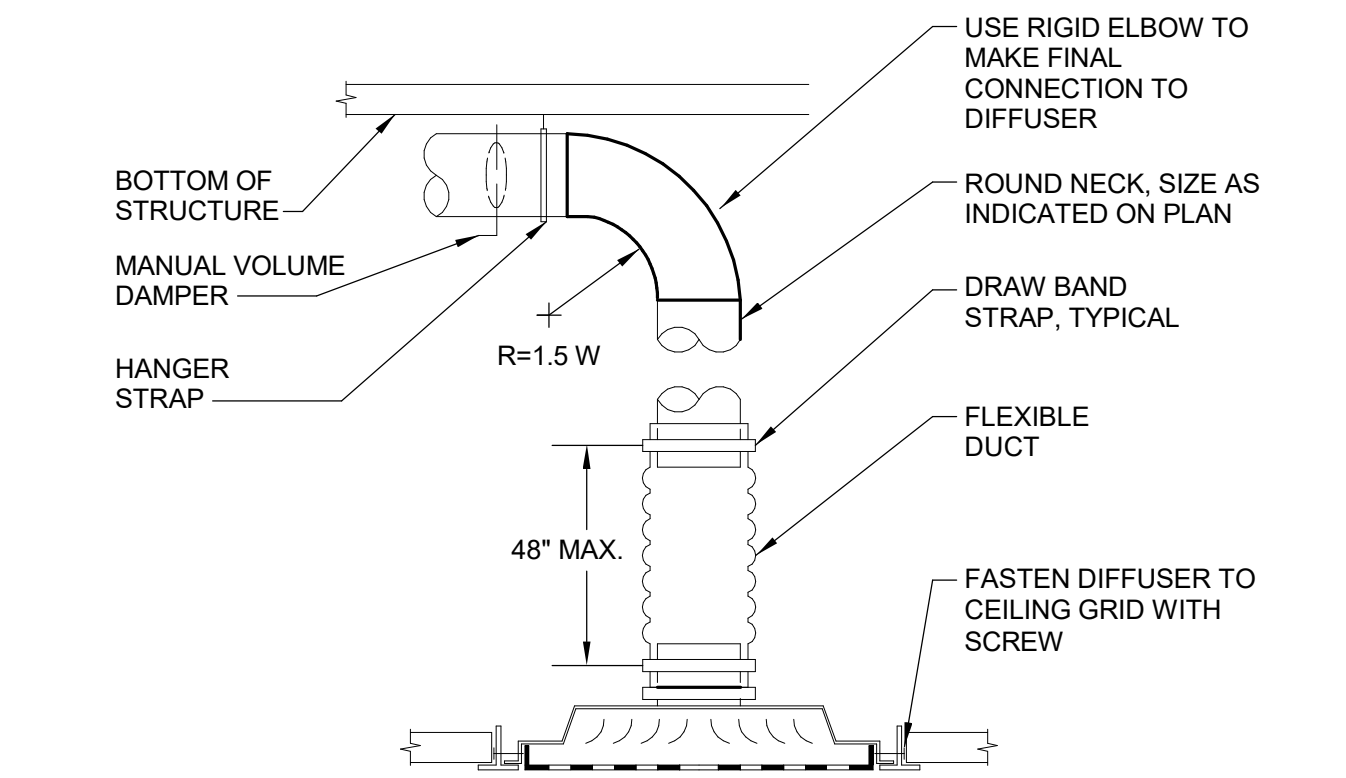
KEYED NOTES:

- 1 PROVIDE INSULATION ON ALL DUCTWORK ASSOCIATED WITH RTUS AND DOAS UNITS, INCLUDING OUTDOOR AIR, SUPPLY AIR, RETURN AIR, RELIEF AIR, AND EXHAUST AIR DUCTS, WHERE LOCATED IN UNCONDITIONED SPACES. INSULATION SHALL COMPLY WITH THE WASHINGTON STATE ENERGY CODE, INCLUDING APPLICABLE MINIMUM R-VALUES FOR DUCT TYPE AND LOCATION. PROVIDE CONTINUOUS VAPOR BARRIER AND CONDENSATION CONTROL WHERE REQUIRED.
- 2 DUCT DROPS TO BE ROUTED BETWEEN JOISTS OR THROUGH NEW FRAMING STRUCTURE. COORDINATE DUCT DROPS WITH STRUCTURAL FRAMING. SEE STRUCTURAL DRAWINGS.
- 3 PROVIDE SUSPENDED SUPPORT FOR THE UNIT FROM THE STRUCTURE ABOVE. PROVIDE SEISMIC RESTRAINTS/BRACING FOR THE SUPPORTED UNIT IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS. MOUNT THE UNIT AS HIGH AS PRACTICAL. COORDINATE INSTALLATION WITH THE UNIT LOCATED AT THE BOTTOM OF THE ACCESS AREA AND VERIFY FINAL MOUNTING ELEVATION IN THE FIELD.
- 4 ROUTE DUCTWORK AS HIGH AS POSSIBLE BETWEEN BELOW THE PARALLEL JOIST STRUCTURE. WHERE DUCTWORK MUST PASS BELOW GLULAM BEAMS. SEE SECTIONS FOR OVERALL DUCTWORK ROUTING. IN NO CASE SHALL DUCTWORK CONTACT THE BUILDING STRUCTURE OR FRAMING.



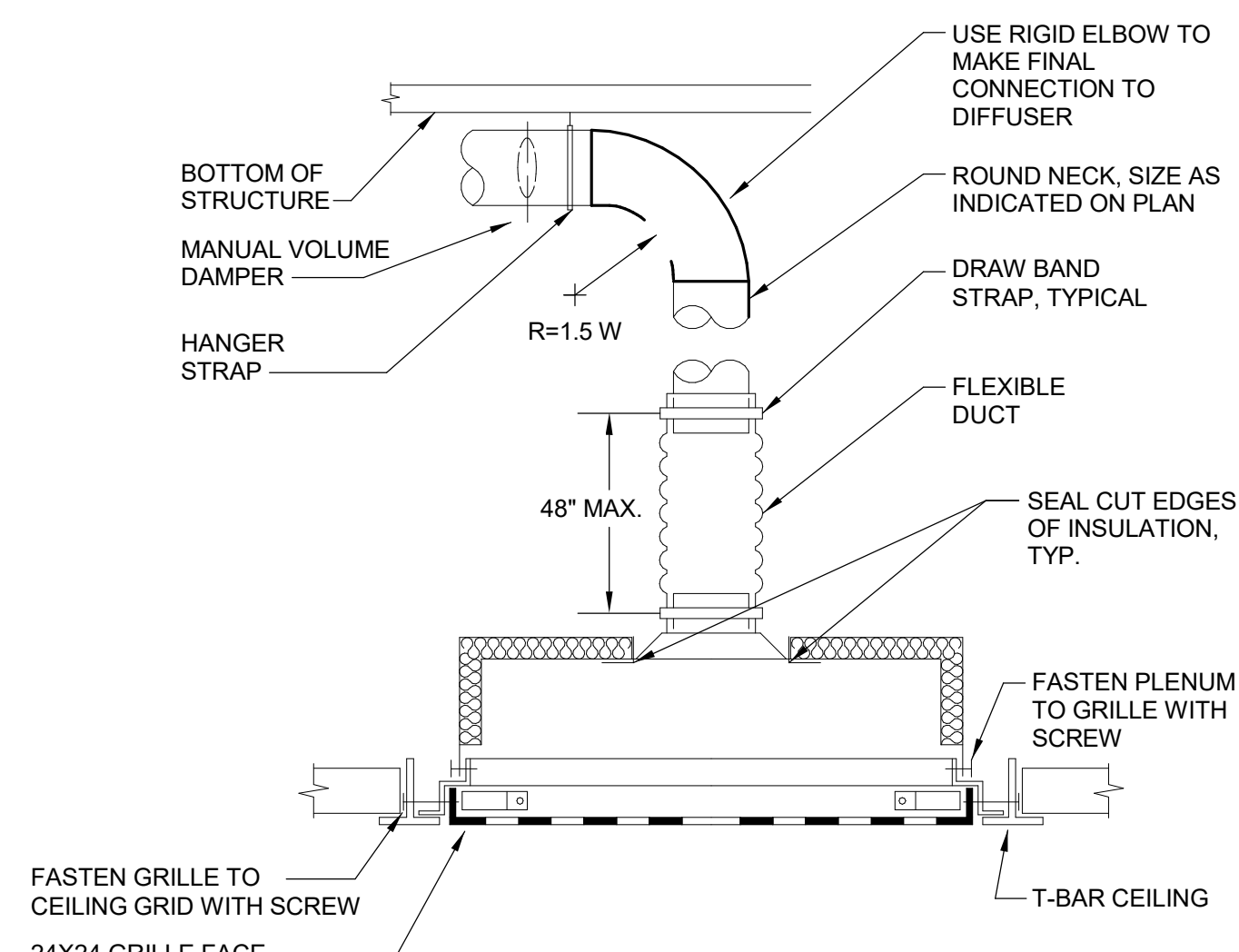
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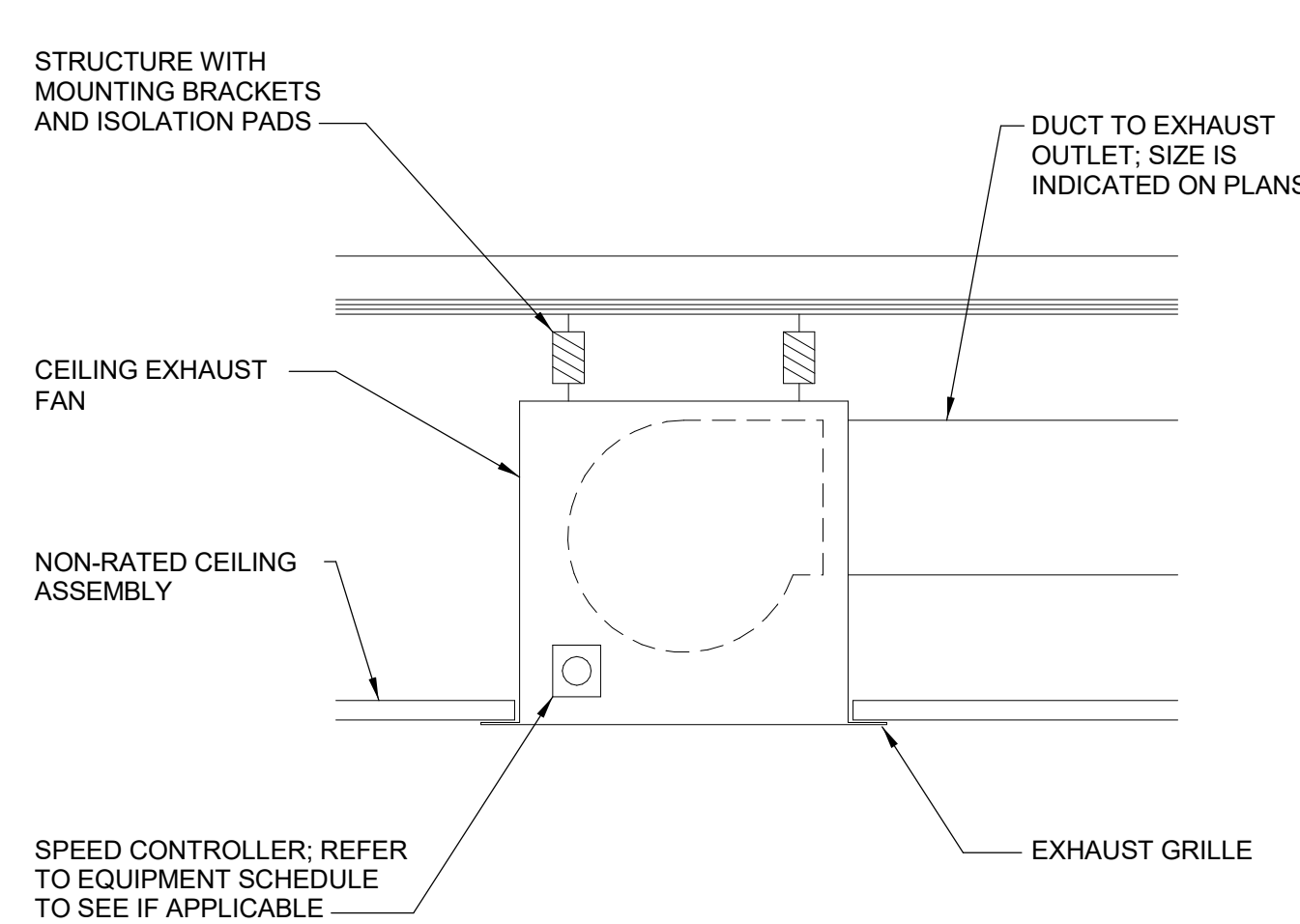


- NOTES:
1. DIFFUSER FRAME SHALL MATCH ARCHITECTURAL CEILING TYPE.
 2. IN NON-LAY-IN CEILINGS, PROVIDE 18" X 18" MINIMUM ACCESS PANEL OR REMOTE OPERATOR FOR BALANCING DAMPER. COORDINATE LOCATION WITH ARCHITECT.
 3. IF DUCT SIZE IS DIFFERENT FROM DIFFUSER NECK SIZE, PROVIDE TRANSITION FITTING AT DIFFUSER NECK.

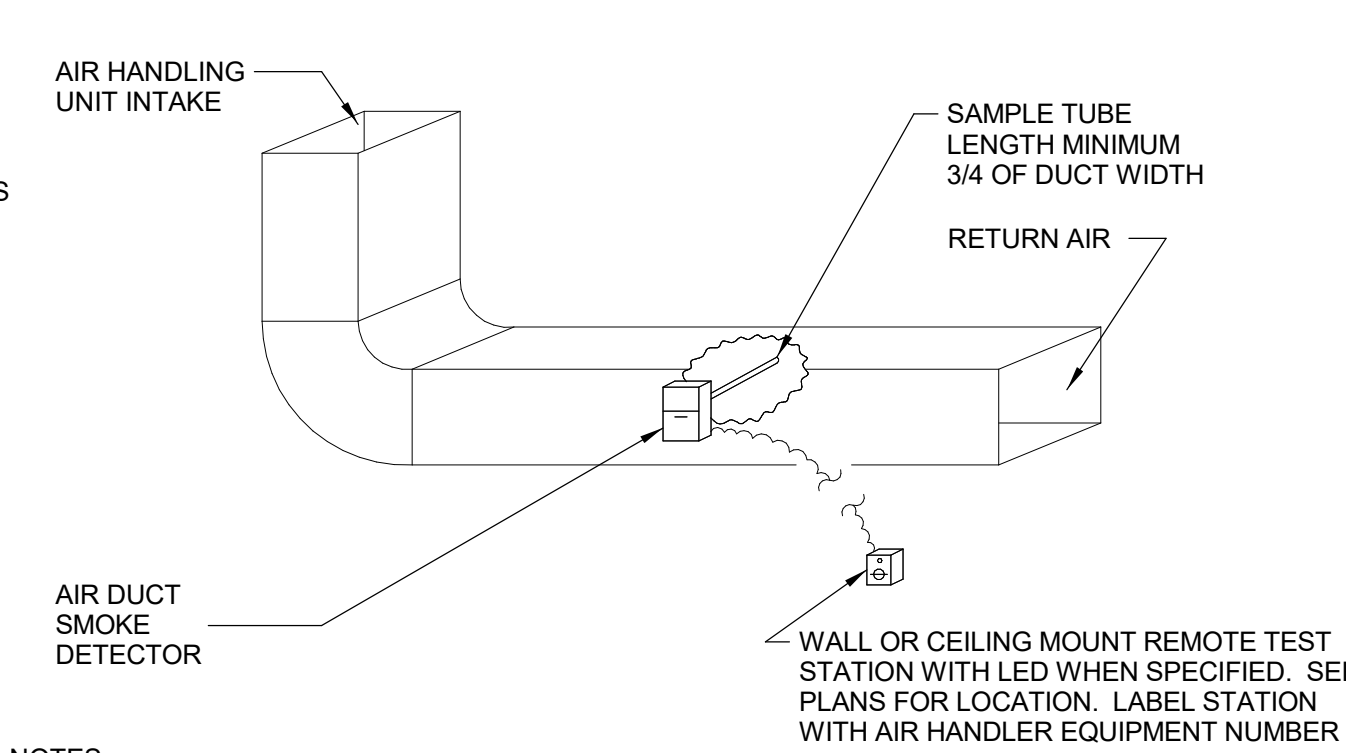
1 DETAIL - CEILING SUPPLY DIFFUSER
SCALE: NTS



2 DETAIL - CEILING RETURN GRILLE
SCALE: NTS

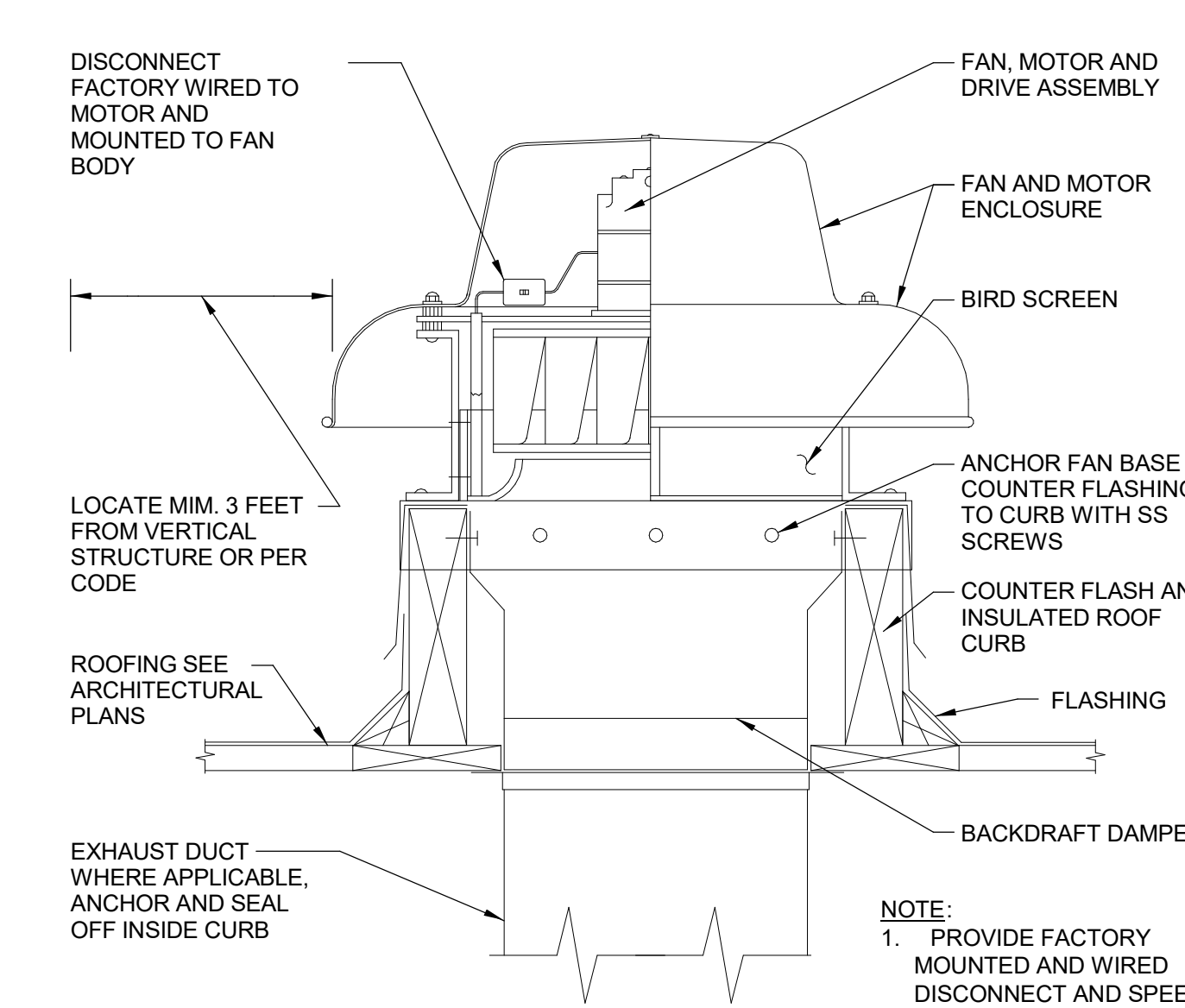


3 DETAIL - CEILING EXHAUST FAN
SCALE: NTS

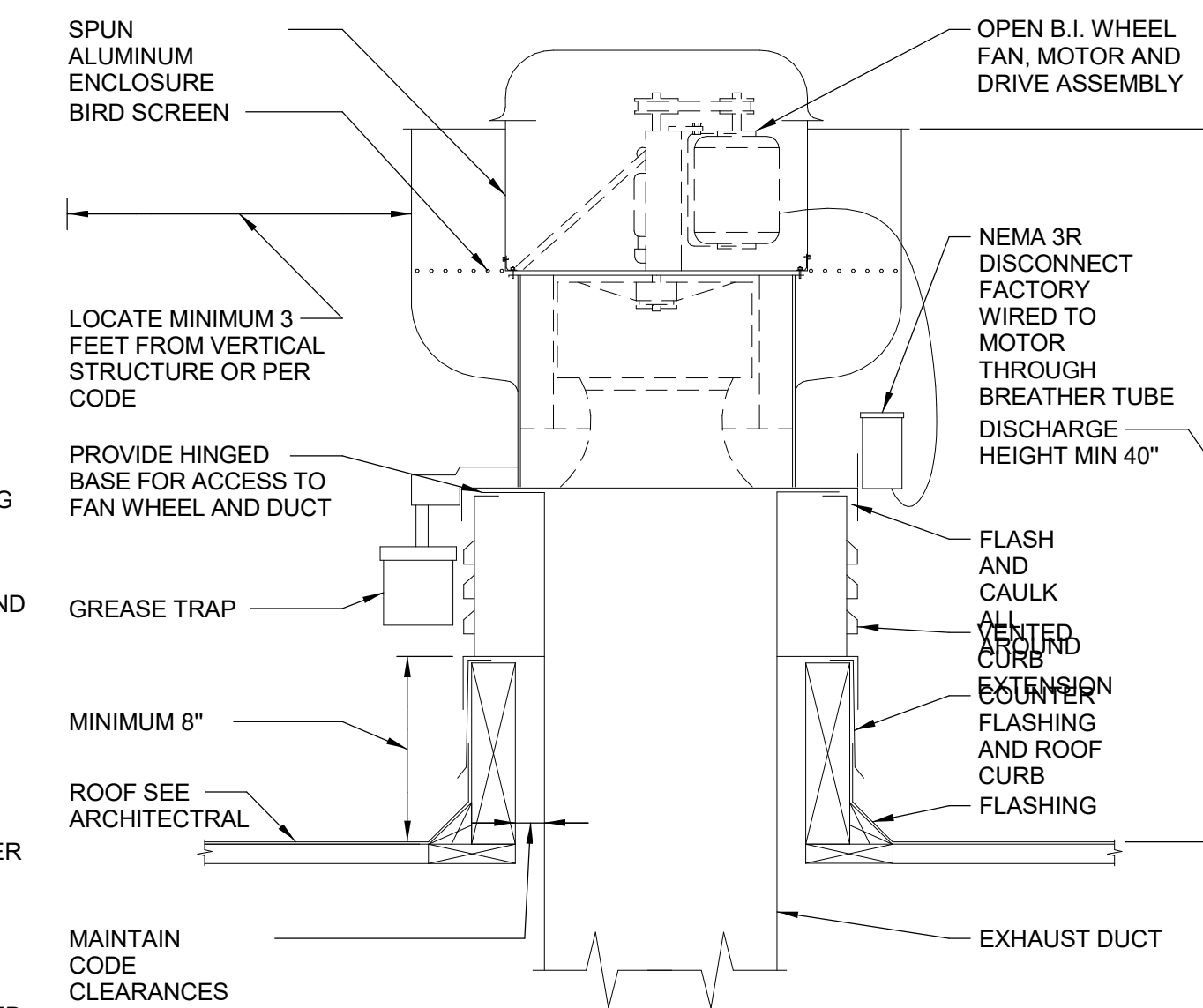


- NOTES:
1. SMOKE DETECTORS SHALL BE INSTALLED IN RETURN AIR SYSTEMS WITH A DESIGN CAPACITY GREATER THAN 2,000 CFM. IN THE RETURN AIR DUCT OR PLENUM UPSTREAM OF ANY FILTERS, EXHAUST AIR CONNECTIONS, OUTDOOR AIR CONNECTIONS, OR DECONTAMINATION EQUIPMENT AND APPLIANCES.
 2. WHERE RETURN AIR RISERS SERVE TWO OR MORE STORIES AND ARE PART OF A RETURN AIR SYSTEM AT EACH STORY, UPSTREAM OF THE CONNECTION BETWEEN THE RETURN AIR AND ANY AIR DUCTS OR PLENUMS.
 3. LOCATE SAMPLE TUBE MIN. 6 DUCT DIAMETERS DOWNSTREAM FROM ELBOWS, TAKEOFFS, ETC.

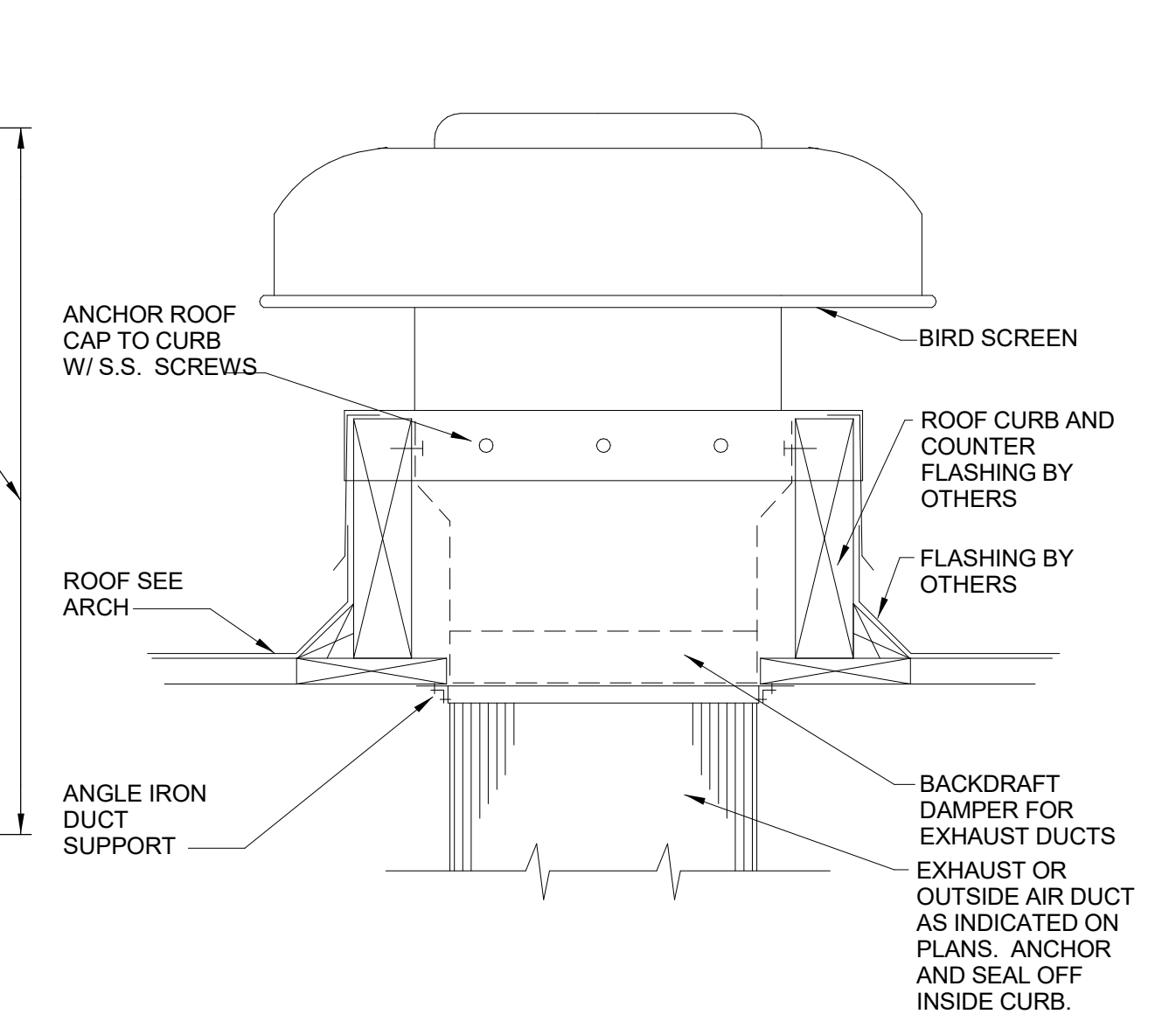
3 DETAIL - DUCT MOUNTED SMOKE DETECTOR
SCALE: NTS



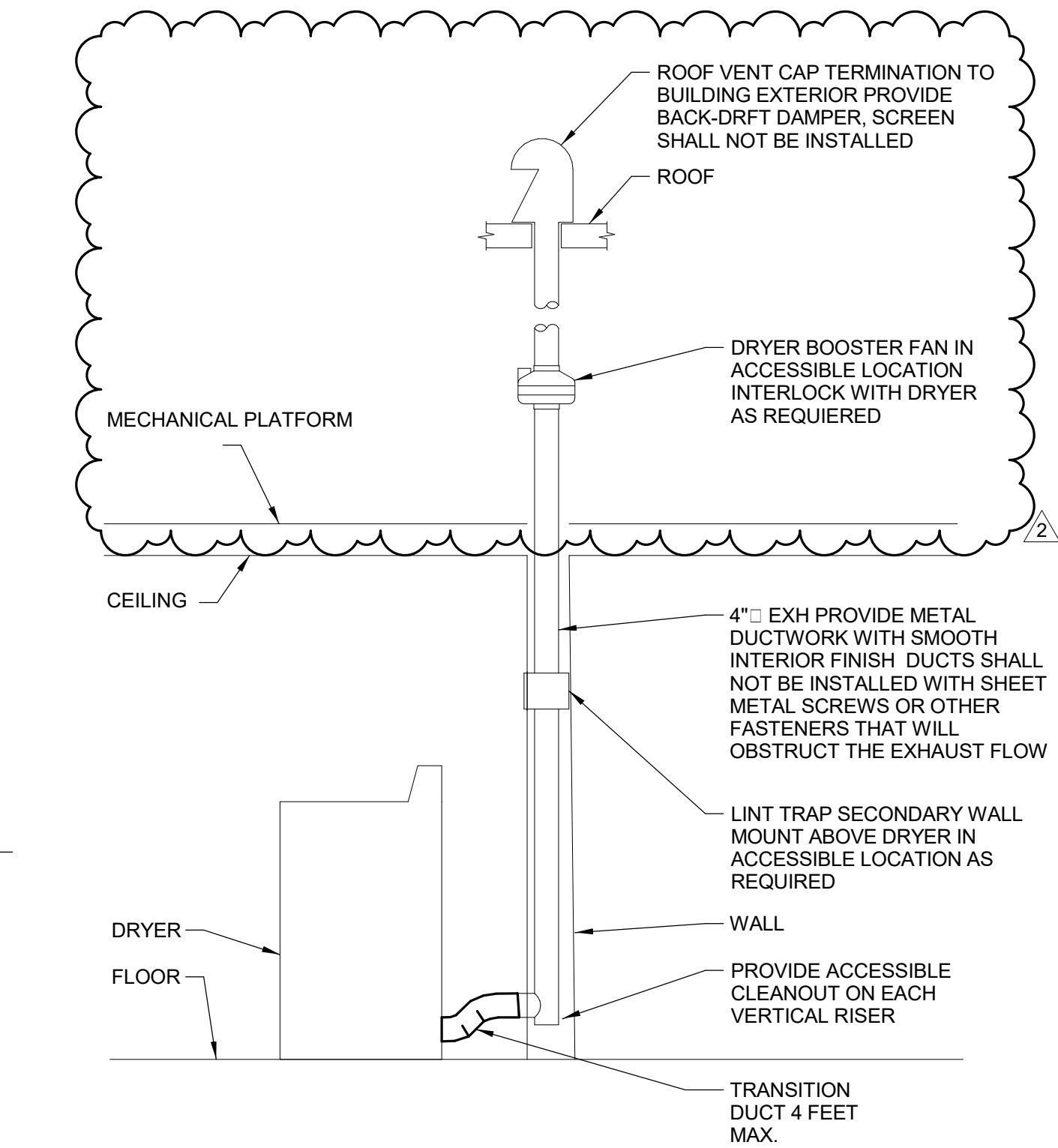
4 DETAIL - ROOF EXHAUST FAN - DIRECT DRIVE
SCALE: NTS



5 DETAIL - ROOF EXHAUSTER WITH GREASE TRAP
SCALE: NTS

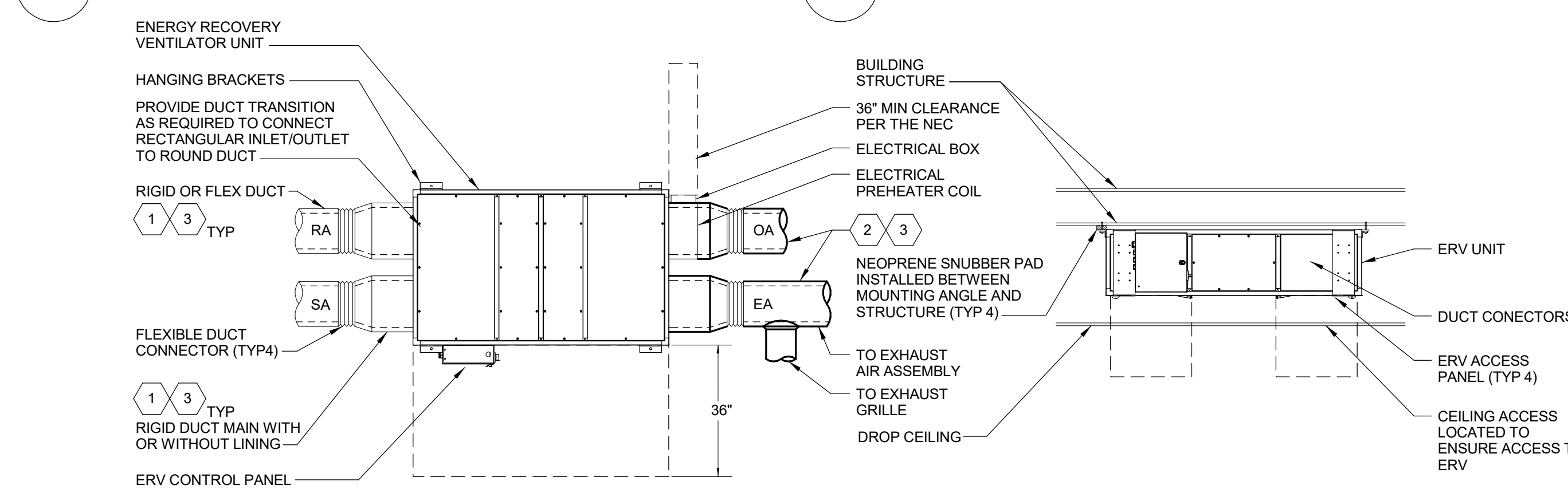


6 DETAIL - ROOF HOOD
SCALE: NTS

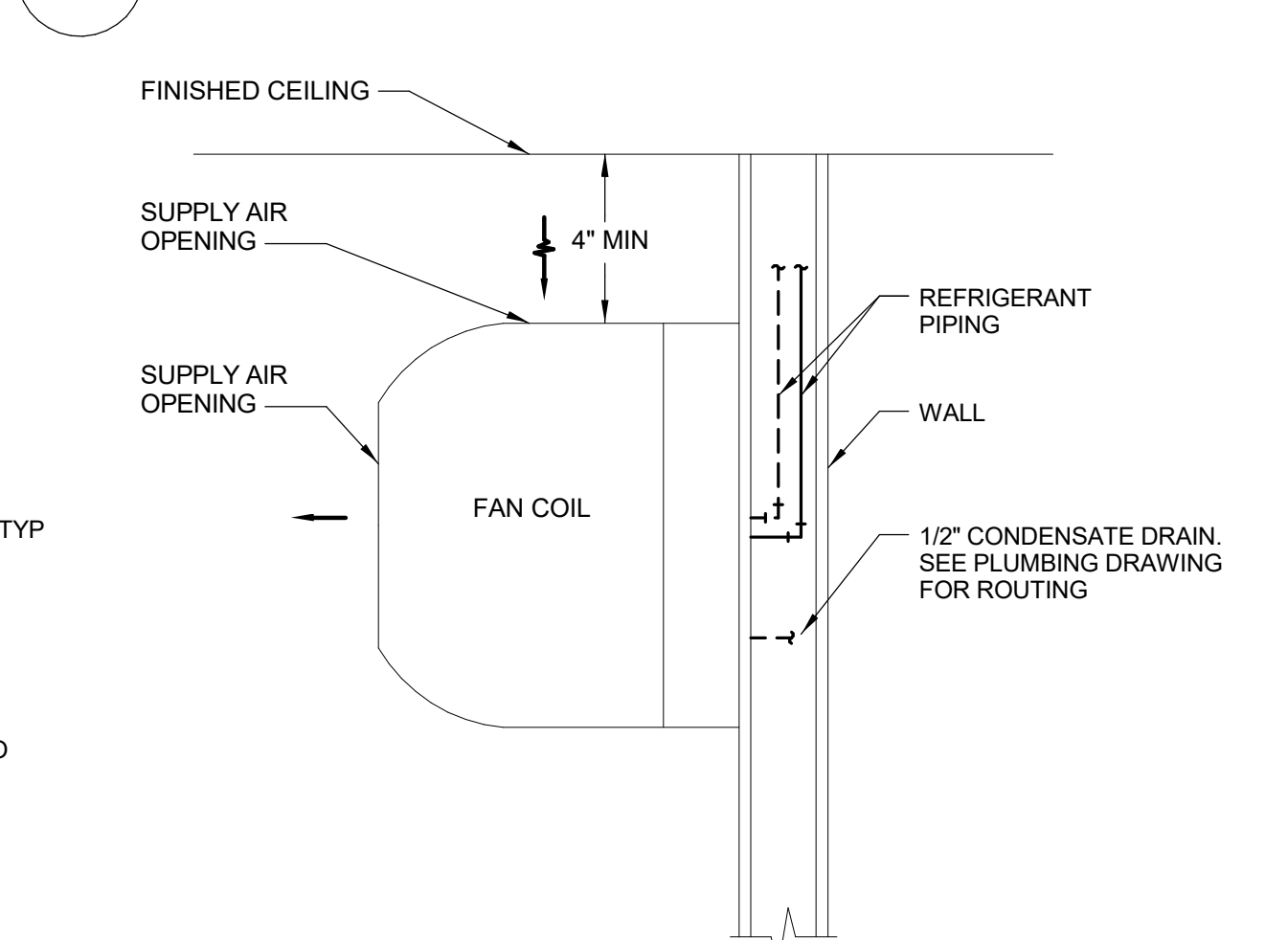


- NOTES:
1. CLOTHES DRYERS SHALL BE EXHAUSTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. DRYER EXHAUST SYSTEMS SHALL BE INDEPENDENT OF ALL OTHER SYSTEMS AND SHALL CONVEY MOISTURE AND ANY PRODUCTS OF COMBUSTION TO THE OUTSIDE OF THE BUILDING
 2. THE MAX LENGTH OF A CLOTHES DRYER EXHAUST DUCT SHALL NOT EXCEED 25 FT FROM THE DRYER LOCATION TO THE OUTLET TERMINAL. THE MAX LENGTH OF THE DUCT SHALL BE REDUCED 2-1/2 FT FOR EACH 45° BEND AND 5 FT FOR EACH 90° BEND. THE MAX LENGTH OF THE EXHAUST DUCT DOES NOT INCLUDE THE TRANSITION DUCT.
 3. AS INDICATED ON DRAWINGS OR WHERE EQUIVALENT LENGTH EXCEEDS 25 FEET, PROVIDE BOOSTER FAN, LINT TRAP AND APPURTENANCES.
 4. WHERE A CLOSET IS DESIGNED FOR INSTALLATION OF A CLOTHES DRYER, AN OPENING HAVING AN AREA OF NOT LESS THAN 100 SQUARE INCHES SHALL BE PROVIDED IN THE CLOSET ENCLOSURE.

9 DETAIL - DRYER VENTING
SCALE: NTS



7 DETAIL - ERV
SCALE: NTS



8 DETAIL - FAN COIL WALL MOUNTING
SCALE: NTS

- KEYED NOTES:
1. LINE RIGID DUCT MAIN WITH 1" ACOUSTICAL LINER FOR A MINIMUM OF 5'-0" AFTER ERV OR PROVIDE RIGID, UNLINED MAIN DUCT FROM ERV AND MINIMUM 5'-0" OF FLEXIBLE DUCTWORK FOR RUNOUT TO DIFFUSER/GRILLE.
 2. FULLY INSULATE EXHAUST AND OUTSIDE AIR DUCTWORK OUTSIDE OF BUILDING.
 3. SUPPORT DUCTWORK WITH RESILIENT MOUNTS FOR 10'-0" AFTER ERV.