




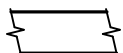

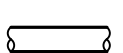









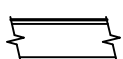






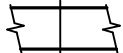



HVAC ABBREVIATIONS			
(NOT ALL ABBREVIATIONS ARE NECESSARILY USED)			
ABV	ABOVE	KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	LAT	LEAVING AIR TEMPERATURE
AD	ACCESS DOOR	LDB	LEAVING AIR DRY BULB TEMPERATURE
APD	AIR PRESSURE DROP	LWB	LEAVING AIR WET BULB TEMPERATURE
AMB	AMBIENT	LWT	LEAVING WATER TEMPERATURE
BLW	BELOW	MVD	MANUALLY ADJUSTED VOLUME DAMPER
BTM	BOTTOM	MFR	MANUFACTURER
BTUH	BRITISH THERMAL UNITS PER HOUR	MFS	MAXIMUM FUSE SIZE
BHP	BRAKE HORSEPOWER	MAX	MAXIMUM
BLDG	BUILDING	MECH	MECHANICAL
CAP	CAPACITY	MIN	MINIMUM
CLG	CEILING/COOLING	MA	MIXED RETURN/OUTDOOR AIR
CONC	CONCRETE	MBH	1,000 BTUH
CONN	CONNECT	MCA	MINIMUM CIRCUIT AMPS
CONTR	CONTRACTOR	MCC	MOTOR CONTROL CENTER
COORD	COORDINATE	MOCP	MAXIMUM OVER CURRENT PROTECTION
COP	COEFFICIENT OF PERFORMANCE	NPSH	NET POSITIVE SUCTION HEAD
CFM	CUBIC FEET PER MINUTE	NC	NOISE CRITERIA
DPR/DPRS	DAMPER/DAMPERS	NO	NUMBER
°F	DEGREES FAHRENHEIT	OPG/OPGS	OPENING/OPENINGS
DTL	DETAIL	OA	OUTSIDE AIR
DIA	DIAMETER	PH	PHASE
DIFF	DIFFUSER	POS	POSITIVE/POSITION
DDC	DIRECT DIGITAL CONTROL	LBS	POUNDS
DISCH	DISCHARGE	PRESS	PRESSURE
D/C	DISCONNECT (SWITCH)	RECT	RECTANGULAR
DN	DOWN	REG	REGISTER
DB	DRY BULB (TEMPERATURE)	REQ'D	REQUIRED
EFF	EFFICIENCY	RA	RETURN AIR
ELEC	ELECTRICAL	RM	ROOM
EDB	ENTERING AIR DRY BULB TEMPERATURE	RND	ROUND
EAT	ENTERING AIR TEMPERATURE	SENS	SENSIBLE HEAT LOSS/GAIN
EWB	ENTERING AIR WET BULB TEMPERATURE	SHT	SHEET
EWI	ENTERING WATER TEMPERATURE	SHT MTL	SHEET METAL
EXH	EXHAUST	SQ	SQUARE
(E) OR EXIST	EXISTING	SUCT	SUCTION
ESP	EXTERNAL STATIC PRESSURE	SA	SUPPLY AIR
FMS	FACILITY MANAGEMENT SYSTEM	S&R	SUPPLY & RETURN
FT	FEET/FOOT	TEMP	TEMPERATURE
FLEX	FLEXIBLE	TCC	TEMPERATURE CONTROL CONTRACTOR
FLR	FLOOR	TSP	TOTAL STATIC PRESSURE
FRM	FROM	TYP	TYPICAL
FURN	FURNISH	VAV	VARIABLE AIR VOLUME
F/A	FROM ABOVE	VFD	VARIABLE FREQUENCY DRIVE
F/B	FROM BELOW	VIB ISOL	VIBRATION ISOLATION/ISOLATOR
GPM	GALLONS PER MINUTE	V	VOLTS/VOLT
GEN	GENERAL	WG	WATER GAUGE
GR	GRILLE	WPD	WATER PRESSURE DROP
GYP BD	GYPSUM BOARD	WTD	WATER TEMPERATURE DROP
HD	HEAD (PRESSURE)	WTR	WATER/WATER TEMPERATURE RISE
HTR	HEATER	W	WATT/WATTS
HZ	HERTZ	WT	WEIGHT
HP	HORSEPOWER	WB	WET BULB (TEMPERATURE)
IN	INCHES/INCH		

HVAC LEGEND			
(NOT ALL SYMBOLS ARE NECESSARILY USED)			
	THERMOSTAT, HUMIDISTAT		FIRE DAMPER
	TEMPERATURE, HUMIDITY SENSOR		FIRE/SMOKE DAMPER
X-X-X	EXISTING TO BE DEMOLISHED/RELOCATED		MOTORIZED DAMPER
	EXISTING TO REMAIN		EXHAUST AIR DEVICE
	DUCTWORK		SUPPLY DIFFUSER
	PIPE OR ROUND DUCTWORK		RETURN AIR DEVICE
	SMOKE DETECTOR		SIDEWALL GRILLE/REGISTER
	RECTANGULAR DUCT (VERTICAL)		DISCHARGE AIR FLOW
	ROUND DUCTWORK/OR PIPE (VERTICAL)		INTAKE AIR FLOW
	DUCTWORK W/LINER		POINT OF CONNECTION TO EXISTING
	RECTANGULAR ELBOW W/TURNING VANES	<u>AIR DEVICE DESIGNATOR</u>  MARK  NECK SIZE  CFM	
	FLEXIBLE DUCT		
	MANUAL VOLUME DAMPER		
	FLEXIBLE DUCT CONNECTION		

HVAC PIPING LEGEND			
(NOT ALL SYMBOLS ARE NECESSARILY USED)			
	FLOW MEASURING DEVICE		PRESSURE REGULATOR
	PIPE FLANGE		SAFETY VALVE OR PRESSURE RELIEF
	UNION		MANUAL AIR VENT
	STRAINER		HOT WATER HEATING SUPPLY
	THERMOMETER		HOT WATER HEATING RETURN
	PRESSURE GAUGE		MAKE-UP WATER
	PRESSURE / TEMPERATURE PLUG		DRAIN LINE
	EXISTING PIPING		PIPE FLOW
	FLEXIBLE PIPE CONNECTION		PIPE SLOPE
	BALL VALVE		
	GATE VALVE		
	GLOBE VALVE		
	BUTTERFLY VALVE		
	CHECK VALVE		
	COMBINATION BALANCE & STOP VALVE		
	STRAIGHT-THRU CONTROL VALVE		
	THREE-WAY CONTROL VALVE		

GENERAL NOTES	
<b>GENERAL</b> 1. COMPLETED INSTALLATIONS SHALL CONFORM TO ALL APPLICABLE FEDERAL CODES, STATE AND LOCAL ORDINANCES AND THE SPECIFICATIONS. IF ANY CONFLICTS OCCUR, THE MOST STRINGENT SHALL APPLY. 2. PIPING AND DUCT LAYOUT IS ONLY SCHEMATIC, EXACT LOCATION OF PIPES AND DUCTS SHALL BE COORDINATED WITH BLDG. STRUCTURE, AND WORK OF OTHER CONTRACTORS PRIOR TO START OF ANY CONSTRUCTION OR DEMOLITION. 3. EXISTING WORK SHOWN ON PLANS IS FROM PREVIOUS ENGINEERING DOCUMENTS AND FIELD OBSERVATION. ACTUAL CONDITIONS MAY VARY, AND CONTRACTOR MUST FIELD VERIFY EXISTING WORK. MAKE MINOR ADJUSTMENTS NECESSARY TO COMPLETE WORK. IF EXISTING CONDITIONS PROHIBIT WORK, NOTIFY THE ARCHITECT FOR REDIRECTION AS REQUIRED. 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL WARRANTIES ON THE EQUIPMENT INSTALLED. 5. INSURE THE EXECUTION OF ALL WARRANTIES FOR EQUIPMENT AND INSTALLATION AS PRESCRIBED BY THE OWNER. 6. ALL DUCTS AND PIPES ARE ABOVE CEILING AND TIGHT TO BOTTOM OF STRUCTURE UNLESS OTHERWISE NOTED. 7. ELEVATIONS, WHERE SHOWN, ARE CENTER OF PIPE AND BOTTOM OF DUCT UNLESS OTHERWISE NOTED. 8. COORDINATE SIZE AND LOCATION OF ALL RECESSES AND OPENINGS REQUIRED FOR HVAC WORK. 9. LOCATE ALL TEMPERATURE, PRESSURE AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE OR DUCT UP- OR DOWNSTREAM AS RECOMMENDED BY THE MANUFACTURER FOR ACCURACY. 11. LOCATE TEMPERATURE AND PRESSURE GAUGES INSTALLED IN MECHANICAL ROOMS FOR UNOBSTRUCTED ACCESS TO VIEWING. 12. LOCATE ROOM THERMOSTATS, HUMIDISTAT, AND TEMPERATURE AND HUMIDITY SENSORS 4'-0" (CENTERLINE) ABOVE FINISHED FLOOR. NOTIFY ARCHITECT WHERE DIMENSION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION. 13. VERIFY CONDITION OF ALL EXISTING LIFE SAFETY DEVICES (FIRE DAMPERS, DUCT DETECTORS, ETC.) WITHIN LIMITS OF CONSTRUCTION. REPAIR OR REPLACE IF FOUND TO BE DAMAGED OR NON-FUNCTIONAL. 14. PROVIDE ALL DUCTWORK TRANSITIONS TO ACCOMMODATE ALL FIRE, FIRE / SMOKE DAMPERS, HUMIDIFIERS, FANS, AIR HANDLING UNITS & TERMINAL BOXES. REFER TO MANUFACTURER'S DATA FOR EQUIPMENT CONNECTION SIZES. 15. LOCATIONS OF FIRE AND FIRE/SMOKE DAMPERS ARE PROVIDED AS REQUIRED FOR DUCTWORK LAYOUT SHOWN. PROVIDE ADDITIONAL DAMPERS AS REQUIRED BY GOVERNING AUTHORITY AND AS REQUIRED SHOULD DUCTWORK LAYOUT CHANGE AS A RESULT OF ACTUAL FIELD CONDITIONS. 16. WHEN ALL CONSTRUCTION IS COMPLETE, INSTALL NEW, CLEAN PRE- AND POST- FILTERS IN AIR HANDLING UNITS SERVING THE RENOVATED AREAS. VERIFY CONDITION OF UNIT FILTER GAUGES. REPAIR OR REPLACE IF FOUND TO BE DAMAGED OR NON-FUNCTIONAL.	<b>DUCTWORK</b> 1. RUN ALL DUCTS LEVEL UNLESS OTHERWISE NOTED. 2. DUCT SIZES SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. INSTALLED DIMENSIONS SHALL NOT BE SMALLER INTERNAL LINER, WHERE ALLOWED, SHALL NOT BE INSTALLED DOWNSTREAM OF FINAL FILTERS. 3. DUCT TAPE IS NOT ACCEPTABLE FOR VAPOR BARRIER SEAMS. 4. PROVIDE AIRTIGHT ACCESS DOOR IN DUCTS ADJACENT TO ALL AUTOMATIC DAMPERS TEMPERATURE CONTROL DEVICES, FIRE DAMPERS AND SMOKE DAMPERS. 5. MAINTAIN MINIMUM 25'-0" BETWEEN OUTDOOR AIR INTAKES AND EXHAUST OUTLETS AND PLUMBING VENTS.  <b>PIPING</b> 1. SUPPORT ALL STEEL PIPE AT INTERVALS OF NOT MORE THAN 10'-0", COPPER PIPE AT INTERVALS OF NOT MORE THAN 8'-0". 2. PIPING RUNOUTS TO TERMINAL UNITS ARE 3/4" UNLESS OTHERWISE NOTED ON PIPING PLAN. 3. PROVIDE DEEP SEAL P-TRAP AT THE CONDENSATE DRAIN OF COOLING COILS. MINIMUM REQUIREMENTS FOR THE CONDENSATE DRAIN TYPE "M" COPPER. SIZE SHALL BE SAME SIZE AS EQUIPMENT DRAIN CONNECTION, BUT NOT LESS THAN 3/4". ROUTE INDIVIDUALLY OR COLLECT INTO COMMON PIPE FOR DISCHARGE TO THE NEAREST FLOOR DRAIN, MOP SINK OR OTHER APPROVED LOCATION. MAY BE ROUTED ABOVE CEILING WITH SPECIFIED INSULATION.  <b>CONTROLS</b> 1. INSTALL CONTROL DEVICES AS REQUIRED ON ALL UNITS. VERIFY ALL EQUIPMENT IS FUNCTIONAL AND PROPER BALANCE IS ACHIEVED BEFORE COMPLETION. COORDINATE WITH OWNER'S REPRESENTATIVE ON EXISTING EQUIPMENT. 2. PROVIDE ALL CONTROLS AND CONTROLLERS, INCLUDING STARTERS AND CONTACTORS, NECESSARY FOR A COMPLETE AND OPERATIONAL HVAC SYSTEM. INCLUDE ALL ELECTRICAL WORK NECESSARY TO COMPLY WITH THIS REQUIREMENT. COORDINATE POWER SOURCE CONNECTIONS PRIOR TO ORDERING EQUIPMENT OR BEGINNING WORK. 3. COORDINATE THE VOLTAGE AND PHASE OF EACH PIECE OF EQUIPMENT WITH ALL TRADES BEFORE ORDERING.

GENERAL DEMOLITION NOTES	
1. DEMOLITION SHALL EXTEND TO POINTS OF CONNECTION WITH LIVE SERVICES, PANELBOARDS, OR OTHER APPLICABLE TERMINATION POINTS. DEMOLITION SHALL NOT PERMIT ABANDONMENT OF ANY SYSTEM OR A COMPONENT OF ANY SYSTEM, UNLESS SPECIFICALLY NOTED AS "ABANDON" OR "TO REMAIN."	
2. DEMOLITION OF SYSTEMS SHALL INCLUDE UNITS, SUPPORT SYSTEMS, SYSTEM ACCESSORIES, SYSTEM CONTROLS, WIRING AND CONDUIT FOR POWER AND CONTROLS, ASSOCIATED PIPING, DUCTWORK, SUPPORTS, ETC. IN THEIR ENTIRETY, UNLESS SPECIFICALLY OTHERWISE NOTED.	
3. ALL REMOVED EQUIPMENT SHALL BE MAINTAINED IN GOOD CONDITION. REMOVED EQUIPMENT NOT INDICATED FOR REUSE SHALL REMAIN THE PROPERTY OF THE OWNER. SHOULD THE OWNER DECLINE POSSESSION OF ANY EQUIPMENT, SAID EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL DELIVER ALL REMOVED EQUIPMENT TO THE OWNER. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL CONTRACTOR PROPERTY FROM THE SITE. THE OWNER WILL RETAIN VALVES, ACTUATORS, STARTERS AND DRIVES. ALL OTHER EQUIPMENT SHALL BE REMOVED FROM SITE BY CONTRACTOR UNLESS DIRECTED OTHERWISE.	
4. DEMOLITION AND/OR RELOCATION OF CONTROLS FOR UNITS TO REMAIN SHALL INCLUDE, BUT NOT BE LIMITED TO: SPACE & DUCT THERMOSTATS; SPACE & DUCT TEMPERATURE SENSORS; SMOKE DETECTORS, FIRESTATS, FREEZESTATS, AND OTHER SAFETIES OR LIMIT DEVICES; CONTROL VALVES AND DAMPERS - PROVIDE NEW DDC ACTUATORS AS REQUIRED; ALL HVAC CONTROL PANELS. NEW CONTROL SYSTEM SHOP DRAWINGS SHALL INCLUDE ALL EXISTING DEVICES, DAMPERS, CONTROL VALVES, ETC. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.	
5. EXISTING INFORMATION SHOWN ON THE PLANS IS DERIVED FROM ORIGINAL DESIGN AND MODIFICATION PLANS FOR THE SITE MADE AVAILABLE TO THE ENGINEER. ADDITIONAL UNDOCUMENTED MODIFICATIONS MAY HAVE BEEN MADE AT THE SITE. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION, ROUTING, AND SIZES OF EXISTING DUCTWORK AND PIPING TO REMAIN OR BE MODIFIED PRIOR TO BEGINNING ANY WORK. CONTRACTOR SHALL REPORT ANY MAJOR DISCREPANCIES TO THE ARCHITECT FOR RECOMMENDED ACTION.	

Computer Filename:

Revisions

Date

FEI PROJECT NO. 16045

FEI PROJECT NO.: 16045

Seal

Seal

Drawing Title

HVAC LEGEND AND GENERAL NOTES

Project Title

AUDIE L. MURPHY VA HOSPITAL STUDY AE BSL - 3 - LAB HVAC DESIGN

Building Number

1

Checked

MSF

Drawn

JDS

Location

7400 Merton Minter San Antonio, TX 78229

Date

10/28/16

Project No.

67444-14-711

Drawing No.

MO

Dwg. of

South Texas Veterans Health Care System

STVHCS

San Antonio, Texas

100% ISSUE FOR CONSTRUCTION



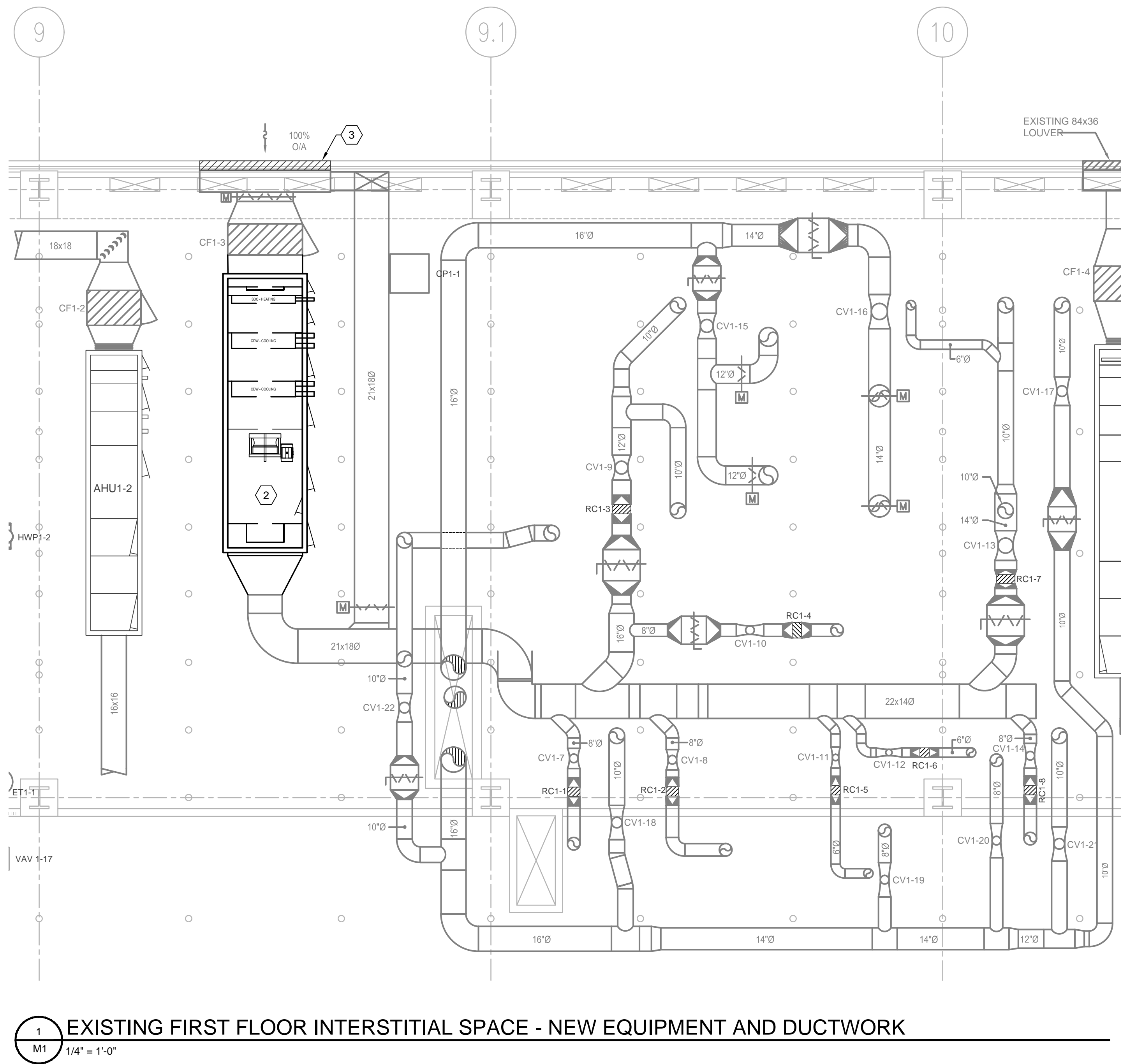
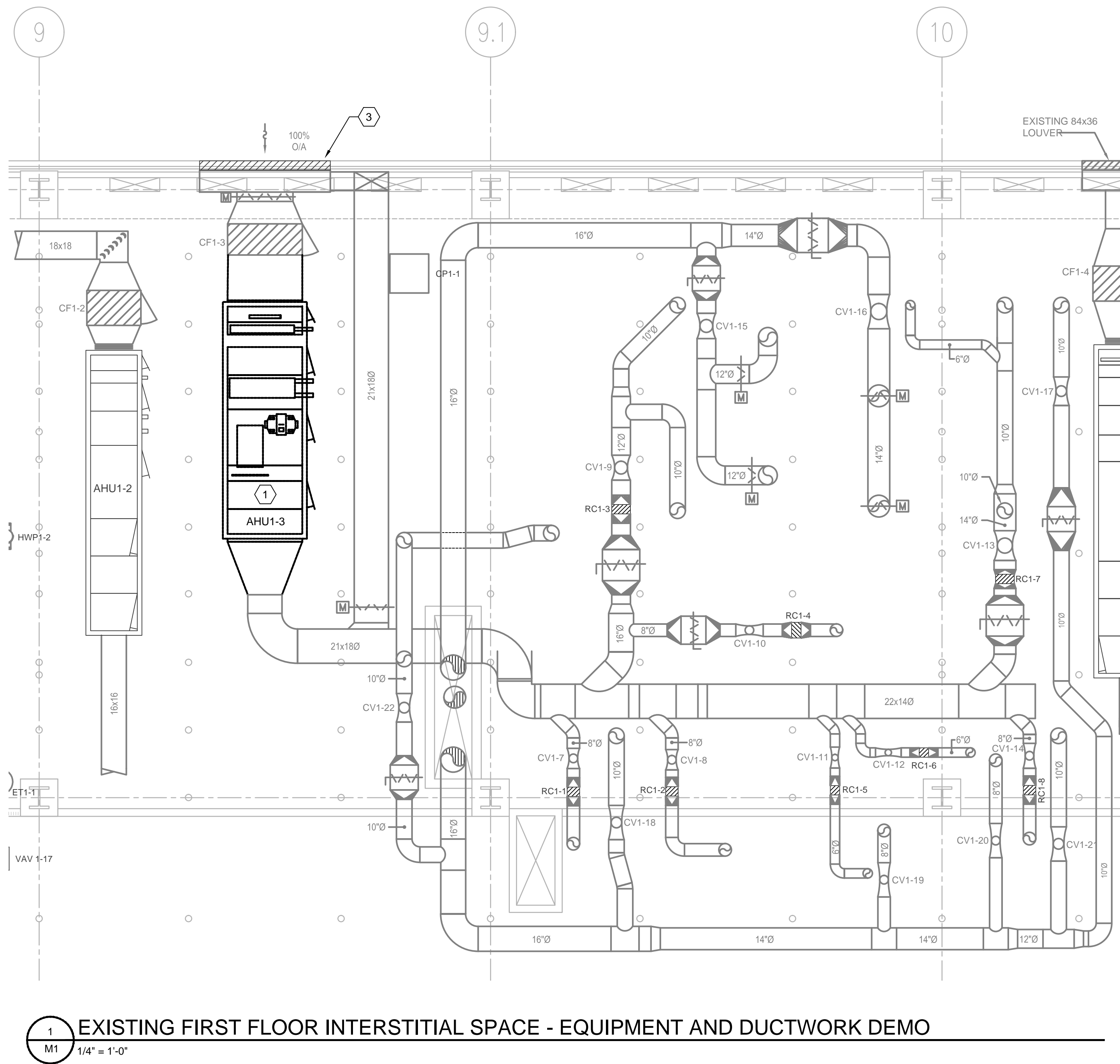
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three inches = one foot  
one and one-half inches=one foot  
one inch=one foot  
three-quarters inch = one foot  
one-half inch = one foot  
three-eighths inch = one foot  
one-quarter inch = one foot  
one-eighth inch = one foot

A  
B  
C  
D  
E  
F

Computer Filenames:

GENERAL NOTES:	NOTES BY SYMBOL: "□" "○"
<div>1. REFER TO M0 FOR GENERAL NOTES AND LEGENDS.</div> <div>2. REFER TO M2 FOR PIPING.</div> <div>3. REFER TO M3 FOR SECTIONS.</div> <div>4. REFER TO M4 FOR EQUIPMENT SCHEDULE.</div> <div>5. REFER TO M5 FOR DETAILS.</div>	<div>1. REMOVE EXISTING AHU1-3. COVER AND SEAL ALL DUCT OPENINGS AIR-TIGHT UNTIL THEY ARE RECONNECTED TO THE NEW AIR HANDLER.</div> <div>2. NEW AHU1-3. RECONNECT TO EXISTING INLET AND OUTLET DUCTS. REPAIR, REPLACE OR PROVIDE NEW INSULATION AS REQUIRED.</div> <div>3. THE EXPECTED METHOD OF EQUIPMENT EGRESS/INGRESS TO THE INTERSTITIAL SPACE IS BY REMOVING THE EXTERIOR INTAKE LOUVER AND IF NECESSARY ENLARGING THE OPENING. THE CONTRACTOR WILL PROVIDE SPECIFIC DETAILS EXPLAINING THE PLAN OF ACTION AS PART OF THEIR BID. INCLUDING THE WORK AREA REQUIRED AND CONSTRUCTION FENCE LOCATION OUTSIDE OF THE BUILDING. ALL EQUIPMENT, DUCT, PIPING, CONTROLS, OR OTHERS PARTS OF THE SYSTEM NOT BEING DEMOLISHED SHALL BE REINSTALLED AND REPAIRED OR REPLACED TO LIKE NEW CONDITION.</div>



100% ISSUE FOR CONSTRUCTION

<div>Revisions</div> <div>Date</div>	<div>FEI Project No.: 16045</div>	<div>FEI ENGINEERING INC.</div>	<div>2201 N. Collins, Suite 200 Arlington, Texas 76011-2008 (817) 461-2307 Fax: (817) 461-1025 F-1106 MECHANICAL • ELECTRICAL • PLUMBING</div>	<div>Seal</div> <div>MARK S. FRATTO REGISTERED PROFESSIONAL ENGINEER 60977 10-28-2016</div>	<div>Seal</div>	<div>Drawing Title</div> <div>INTERSTITIAL SPACE - HVAC DEMO AND NEW DUCTWORK</div>	<div>Project Title</div> <div>AUDIE L. MURPHY VA HOSPITAL STUDY AE BSL - 3 - LAB HVAC DESIGN</div>	<div>Date</div> <div>10/28/16</div>	<div>South Texas Veterans Health Care System</div>	<div>STVHCS San Antonio, Texas</div>
						<div>Approved: Area Project Manager</div>	<div>Building Number</div> <div>1</div>	<div>Checked</div> <div>MSF</div>		

GENERAL NOTES:

1. REFER TO M0 FOR GENERAL NOTES AND LEGENDS.

2. REFER TO M1 FOR DUCTWORK.

3. REFER TO M3 FOR SECTIONS.

4. REFER TO M4 FOR EQUIPMENT SCHEDULE.

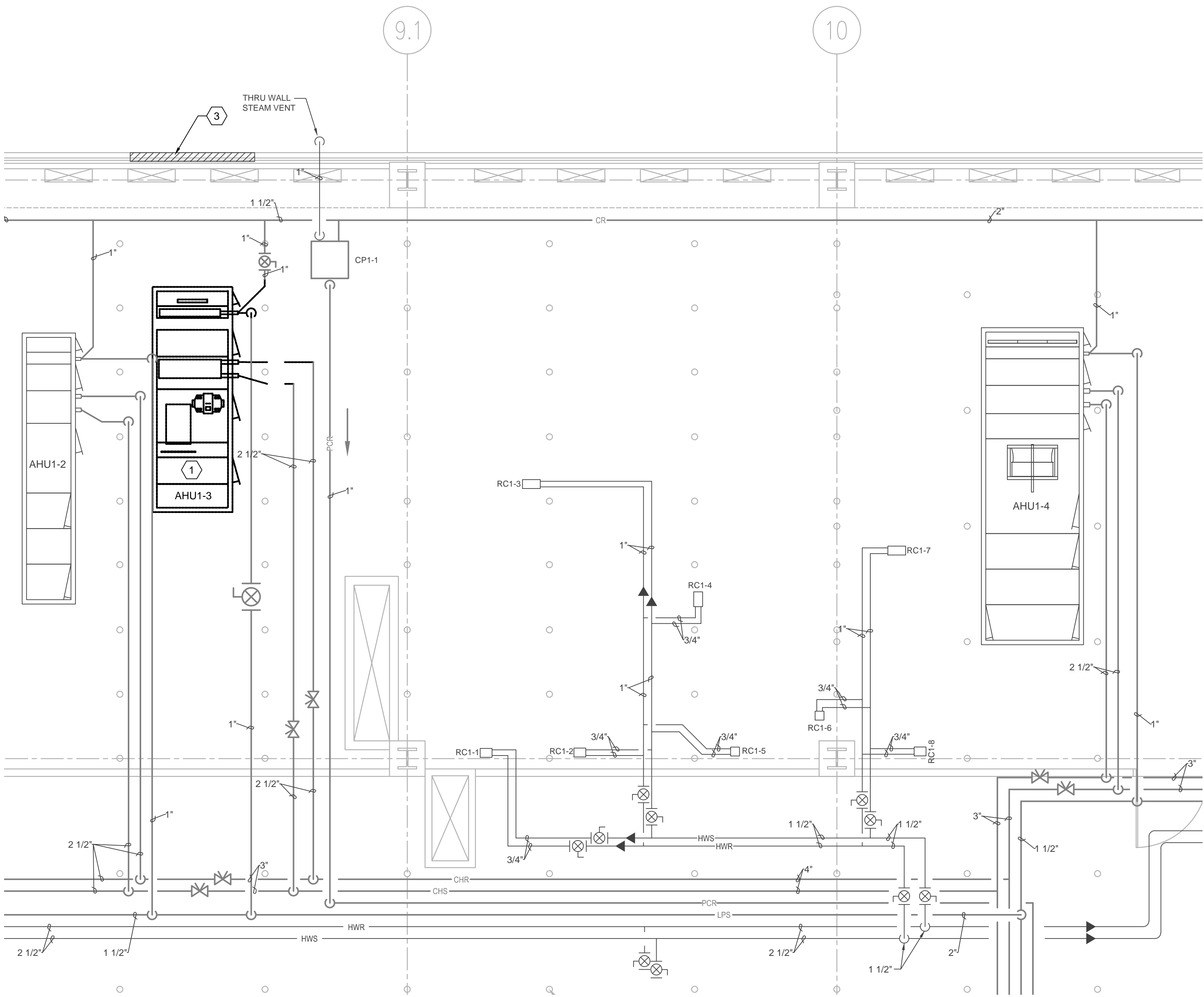
5. REFER TO M5 FOR DETAILS.

NOTES BY SYMBOL: "⬢"

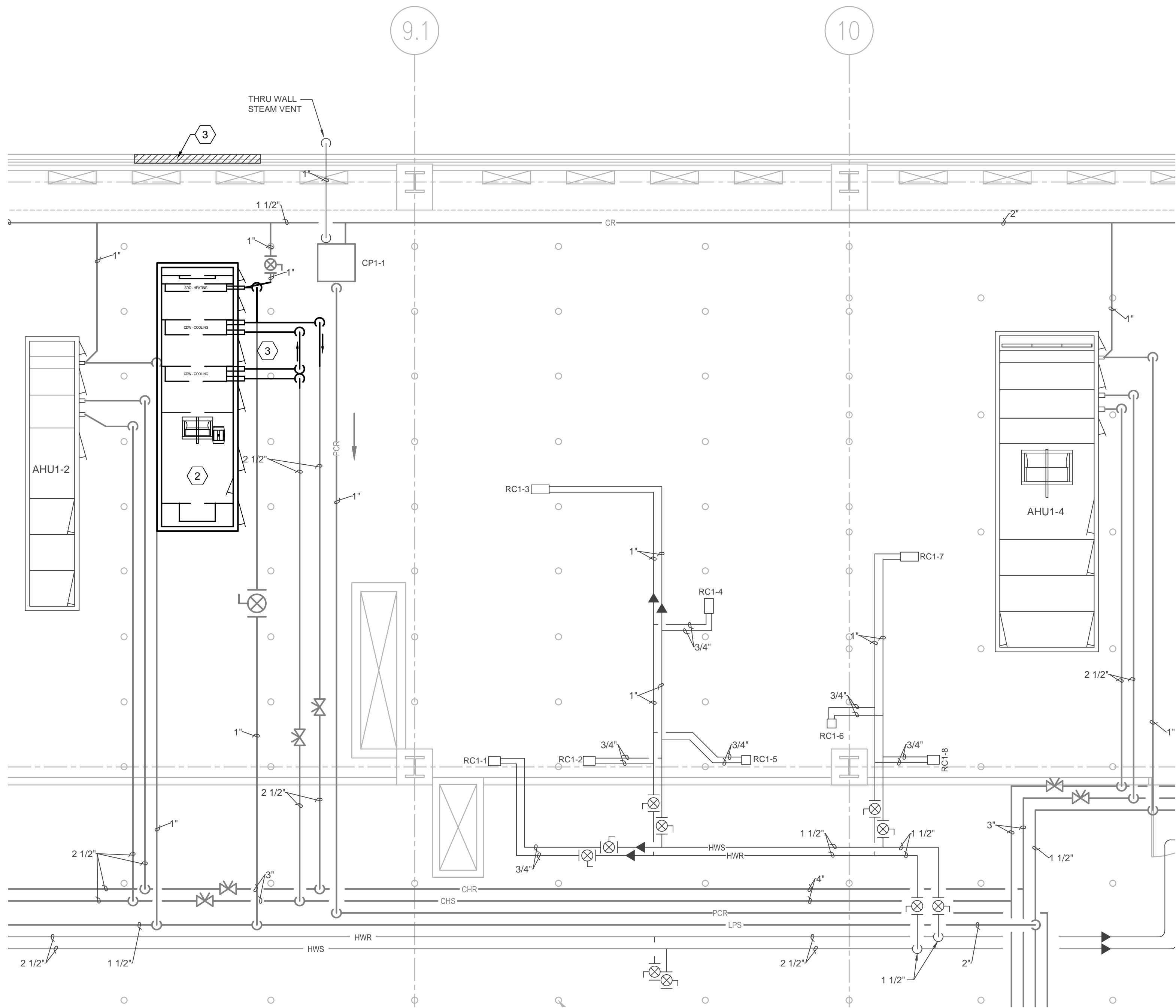
1. REMOVE EXISTING AHU1-3.

2. NEW AHU1-3, RECONNECT TO EXISTING CHILLED WATER, STEAM AND CONDENSATE RETURN PIPING. PIPE DUAL COOLING COILS IN SERIES COUNTER FLOW. ROUTE PIPING TO ALLOW ACCESS.

3. THE EXPECTED METHOD OF EQUIPMENT EGRESS/INGRESS TO THE INTERSTITIAL SPACE IS BY REMOVING THE EXTERIOR INTAKE LOUVER AND IF NECESSARY ENLARGING THE OPENING. THE CONTRACTOR WILL PROVIDE SPECIFIC DETAILS EXPLAINING THE PLAN OF ACTION AS PART OF THEIR BID, INCLUDING THE WORK AREA REQUIRED AND CONSTRUCTION FENCE LOCATION OUTSIDE OF THE BUILDING. ALL EQUIPMENT, DUCT, PIPING, CONTROLS, OR OTHERS PARTS OF THE SYSTEM NOT BEING DEMOLISHED SHALL BE REINSTALLED AND REPAIRED OR REPLACED TO LIKE NEW CONDITION.



1 EXISTING FIRST FLOOR INTERSTITIAL SPACE - EQUIPMENT AND PIPING DEMO  
M2 1/4" = 1'-0"



1 EXISTING FIRST FLOOR INTERSTITIAL SPACE - NEW EQUIPMENT AND PIPING  
M2 1/4" = 1'-0"

100% ISSUE FOR CONSTRUCTION

Revisions

Date

Computer Filenames

2201 N. Collins, Suite 200  
Arlington, Texas 76011-2008  
(817) 461-0207 Fax: (817) 461-1025  
F-1106  
MECHANICAL-ELECTRICAL-PLUMBING

FEI Project No.: 16045

Seal

STATE OF TEXAS  
MARK S. FRATTO  
60977  
REGISTERED PROFESSIONAL ENGINEER  
MECHANICAL-ELECTRICAL-PLUMBING  
10-28-2016

Seal

Drawing Title

INTERSTITIAL SPACE - HVAC  
DEMO AND NEW PIPING

Approved: Area Project Manager

Project Title

AUDIE L. MURPHY VA HOSPITAL  
STUDY AE BSL - 3 - LAB  
HVAC DESIGN

Building Number  
1

Checked  
MSF

Drawn  
JDS

Location  
7400 Merton Minter  
San Antonio, TX 78229

Date

10/28/16

Project No.

674A4-14-711

Drawing No.

M2

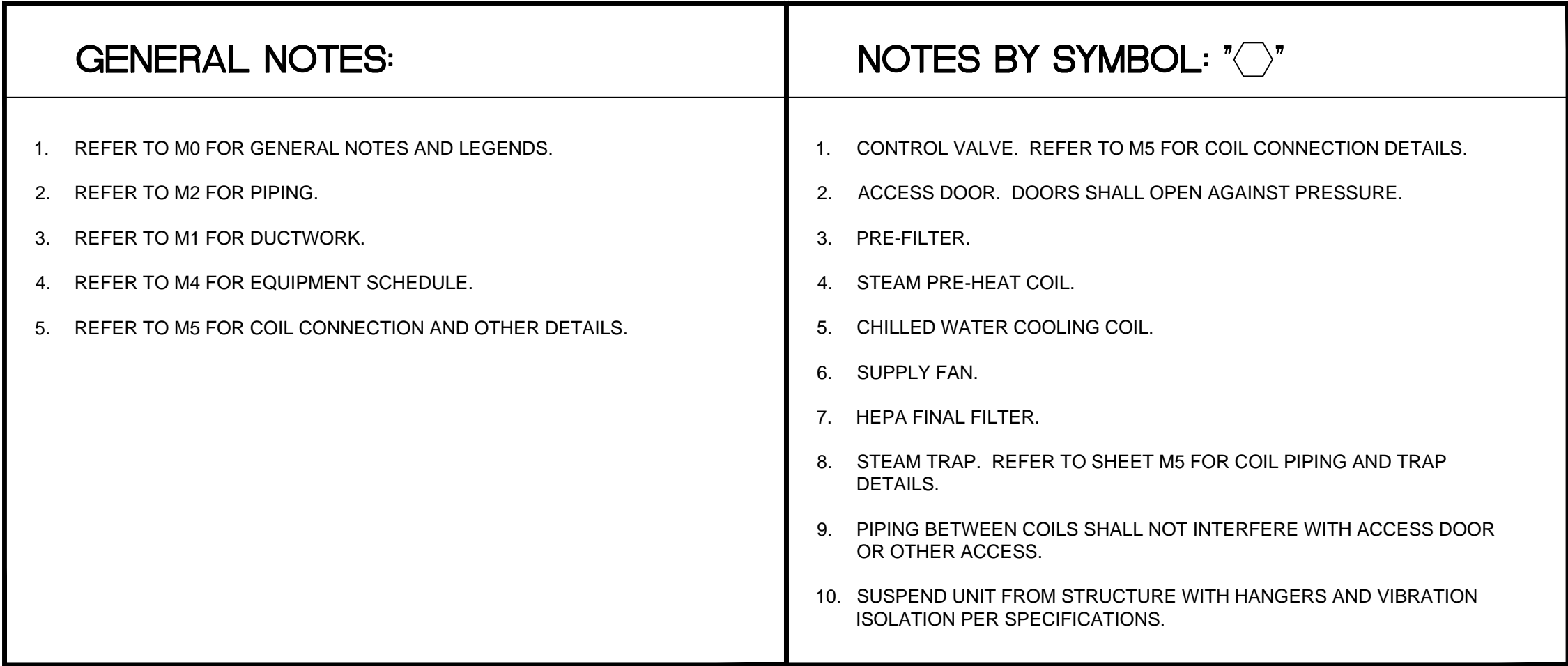
Dwg. of

South Texas  
Veterans  
Health Care  
System

STVHCS  
San Antonio, Texas

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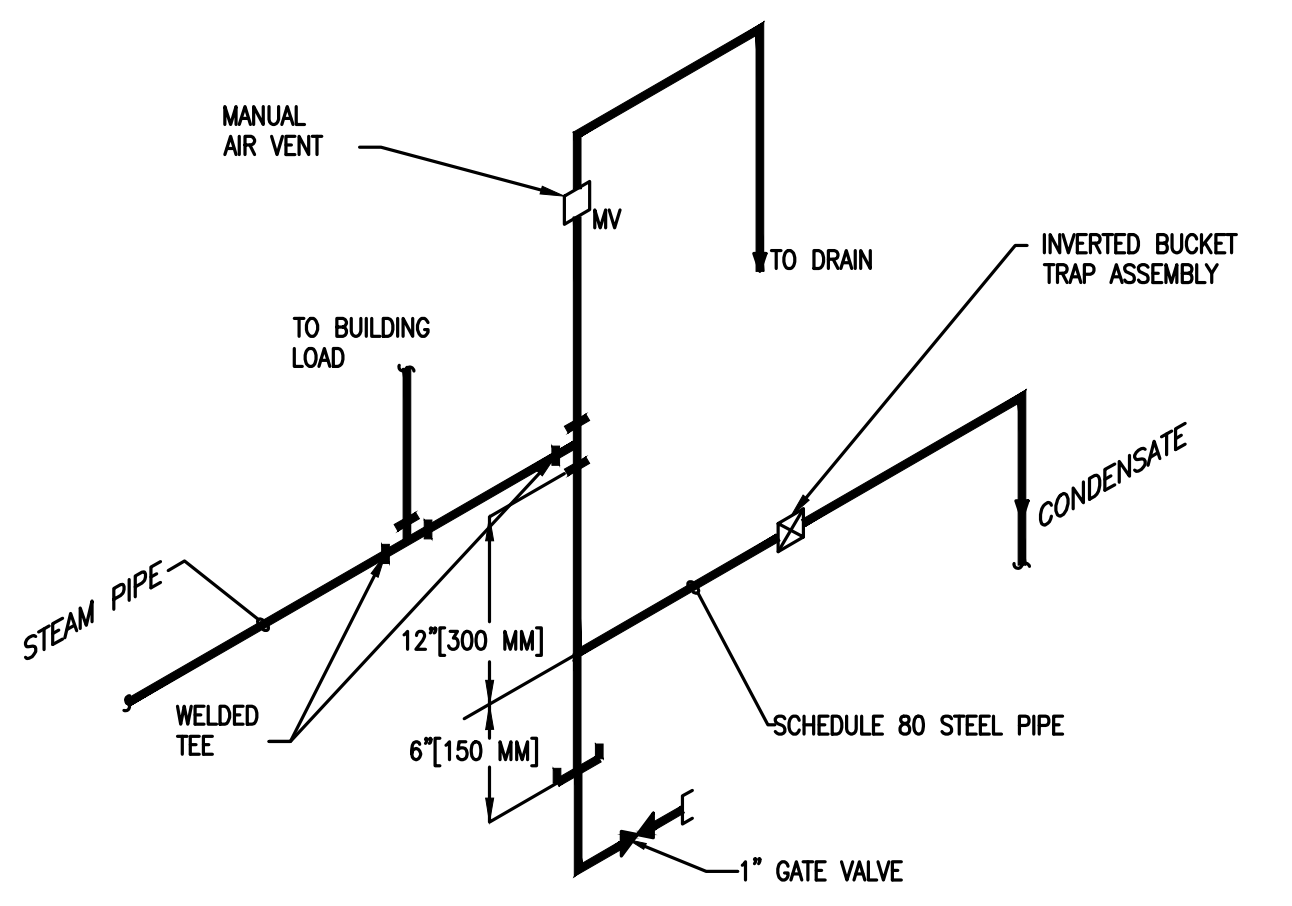
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STVHCS  
San Antonio, Te

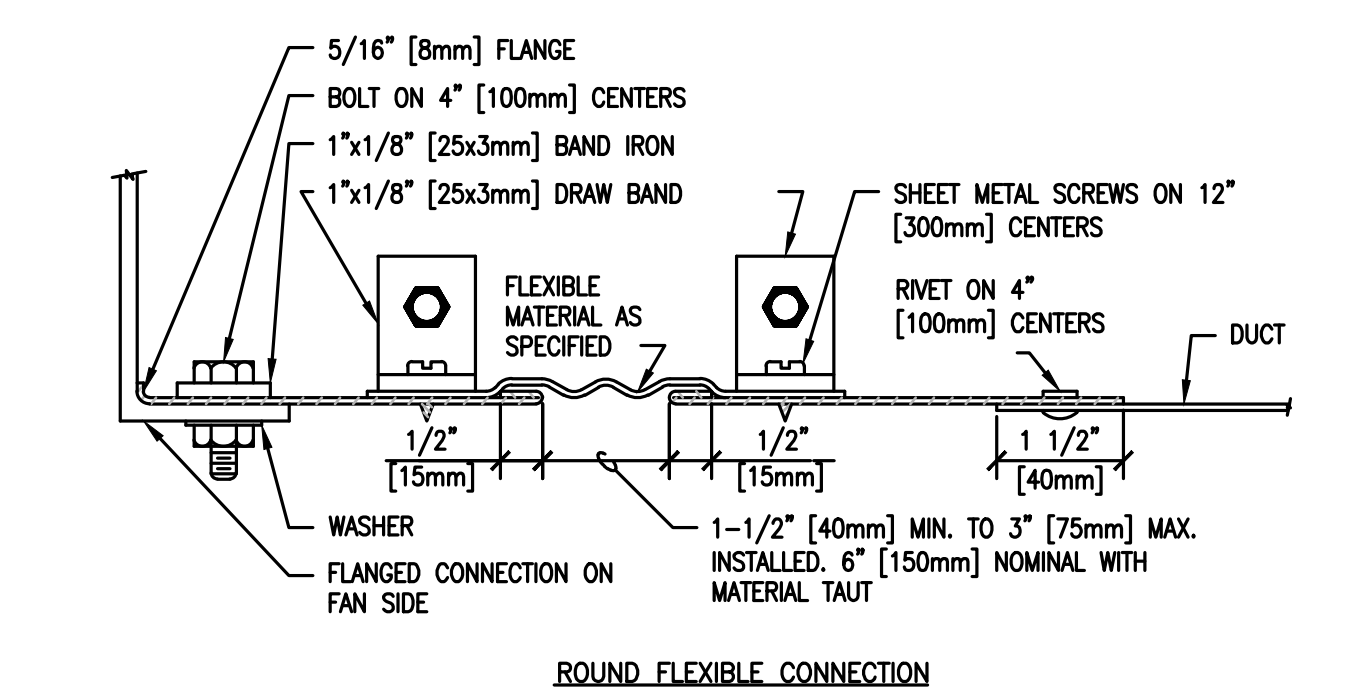
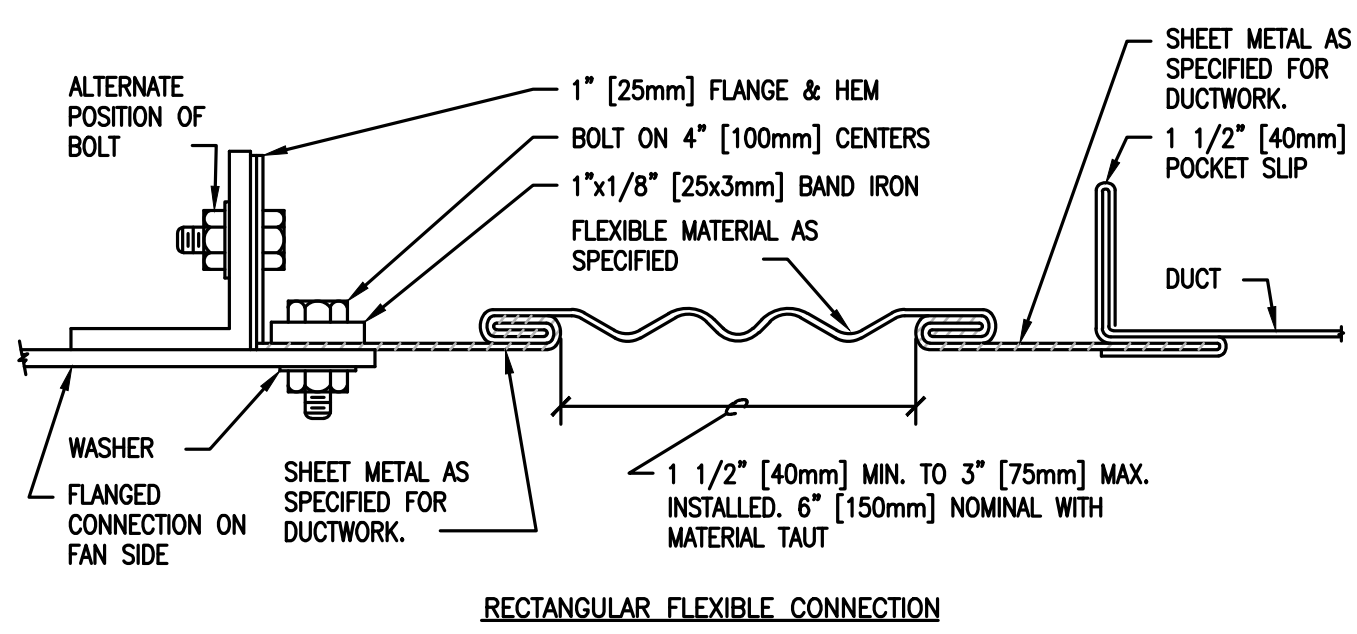
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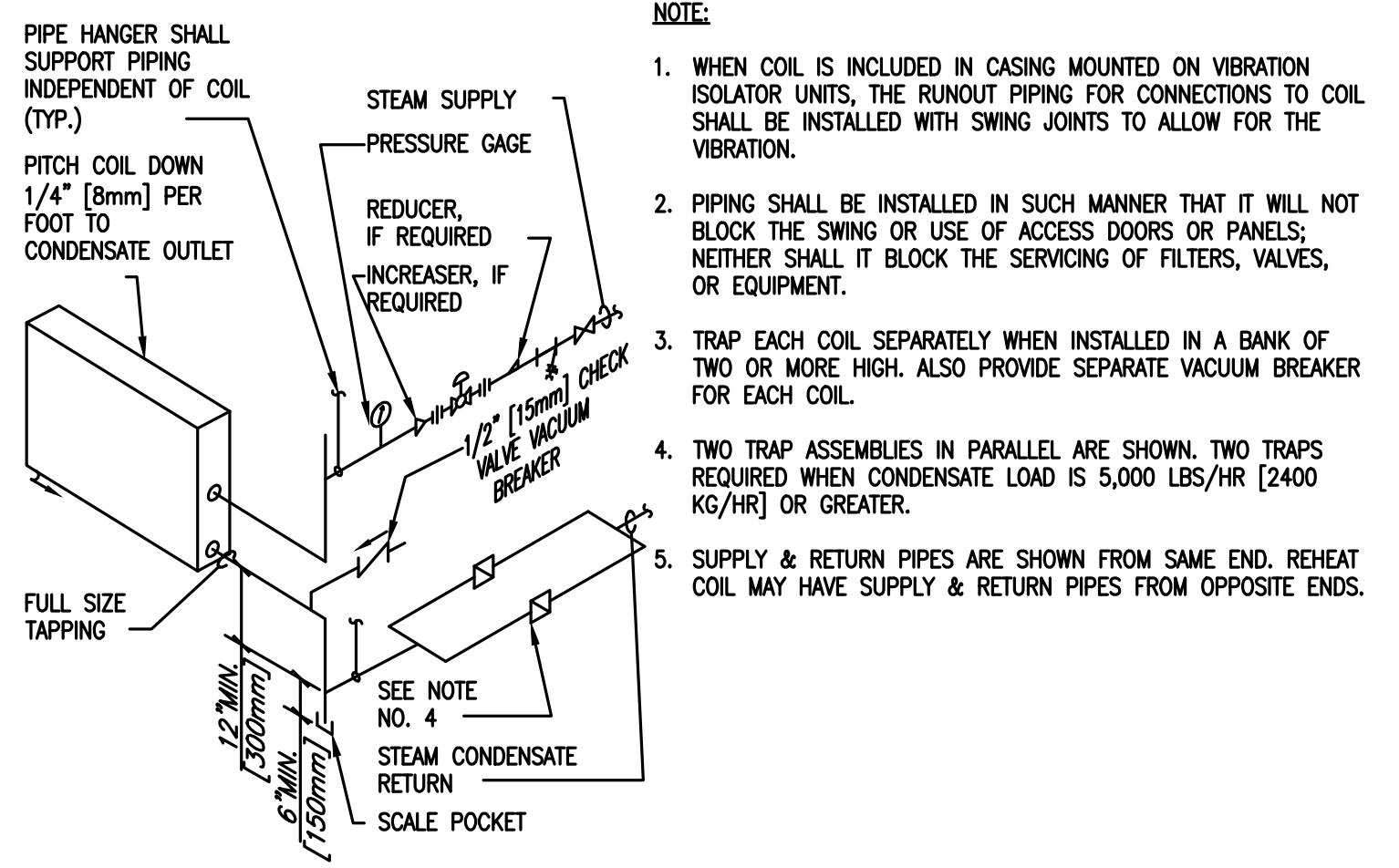




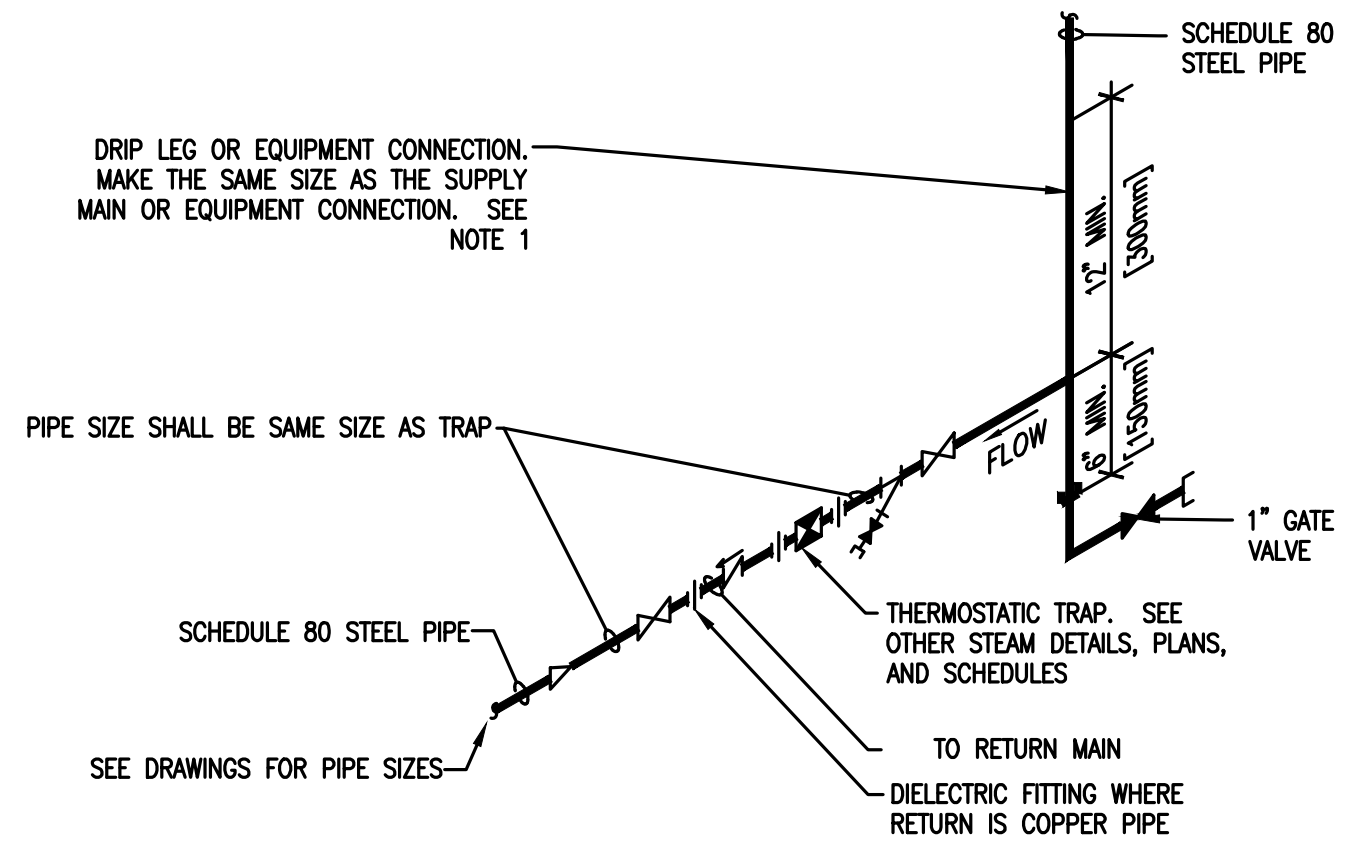
11 END OF STEAM LINE DRIP TRAP  
NTS



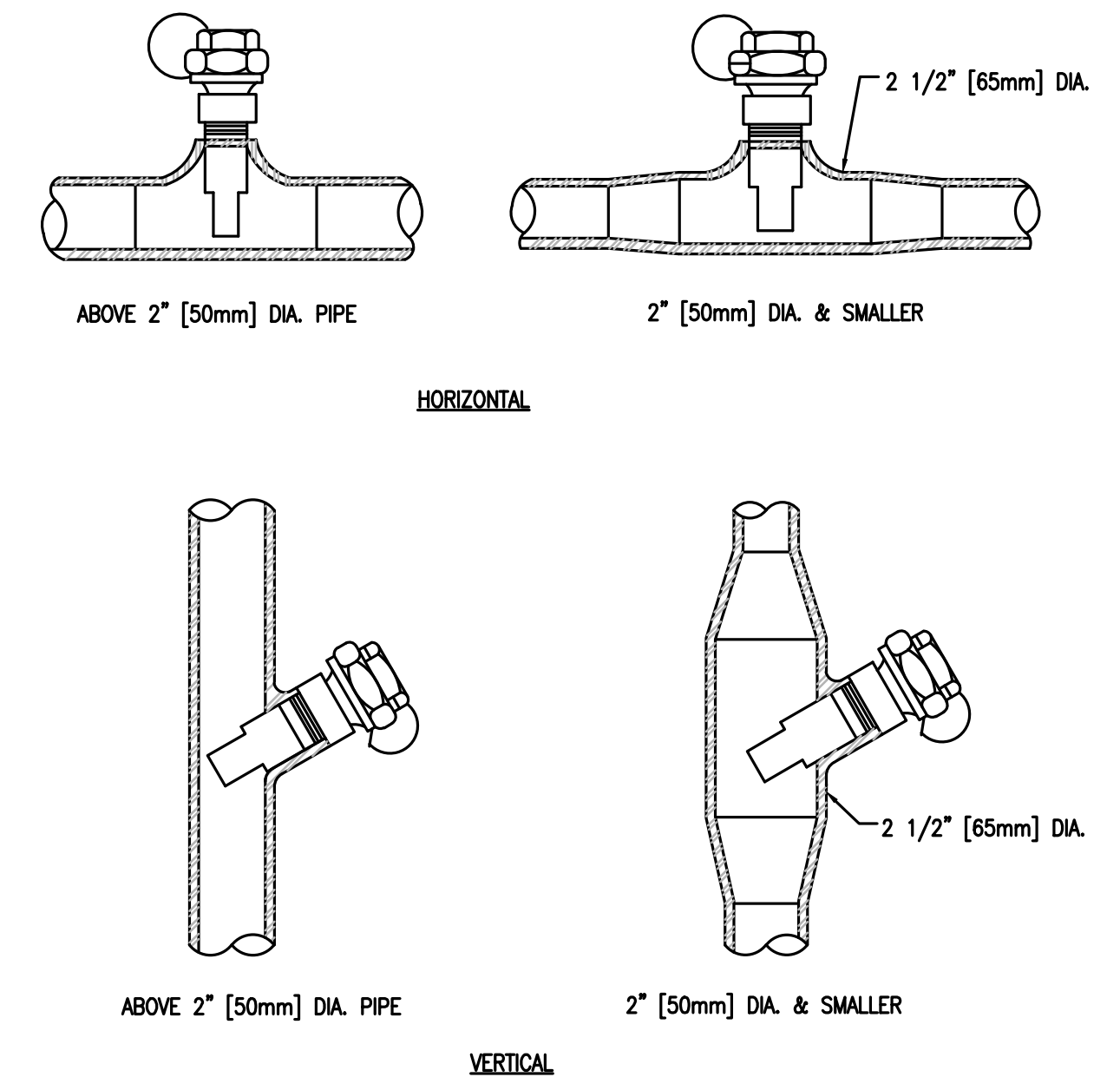
7 EQUIPMENT DUCT CONNECTIONS  
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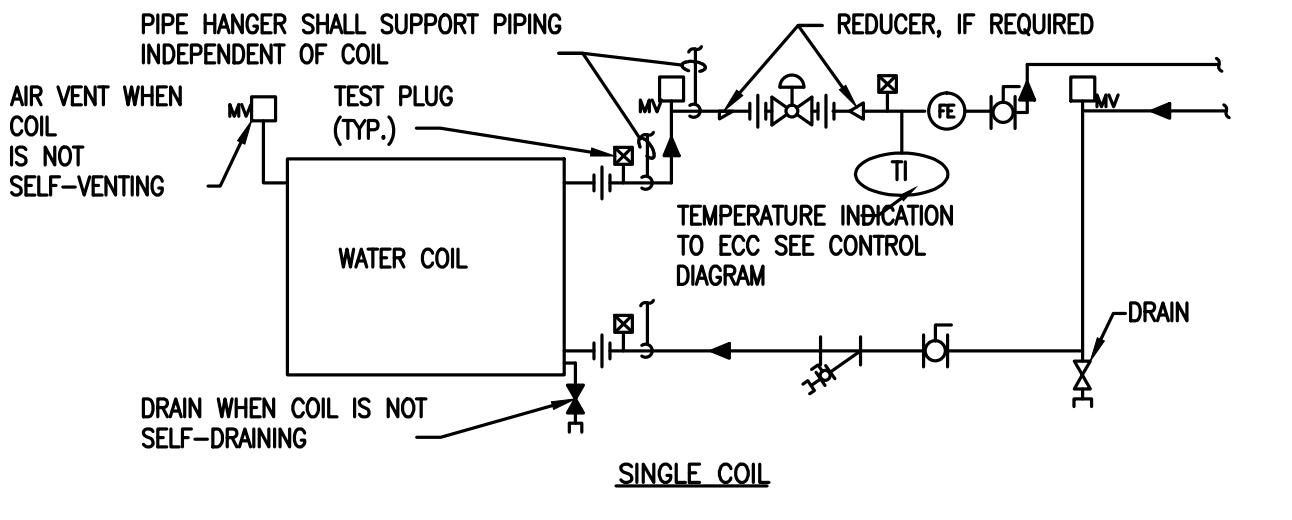
3 STEAM COIL - PIPING CONNECTIONS  
NTS



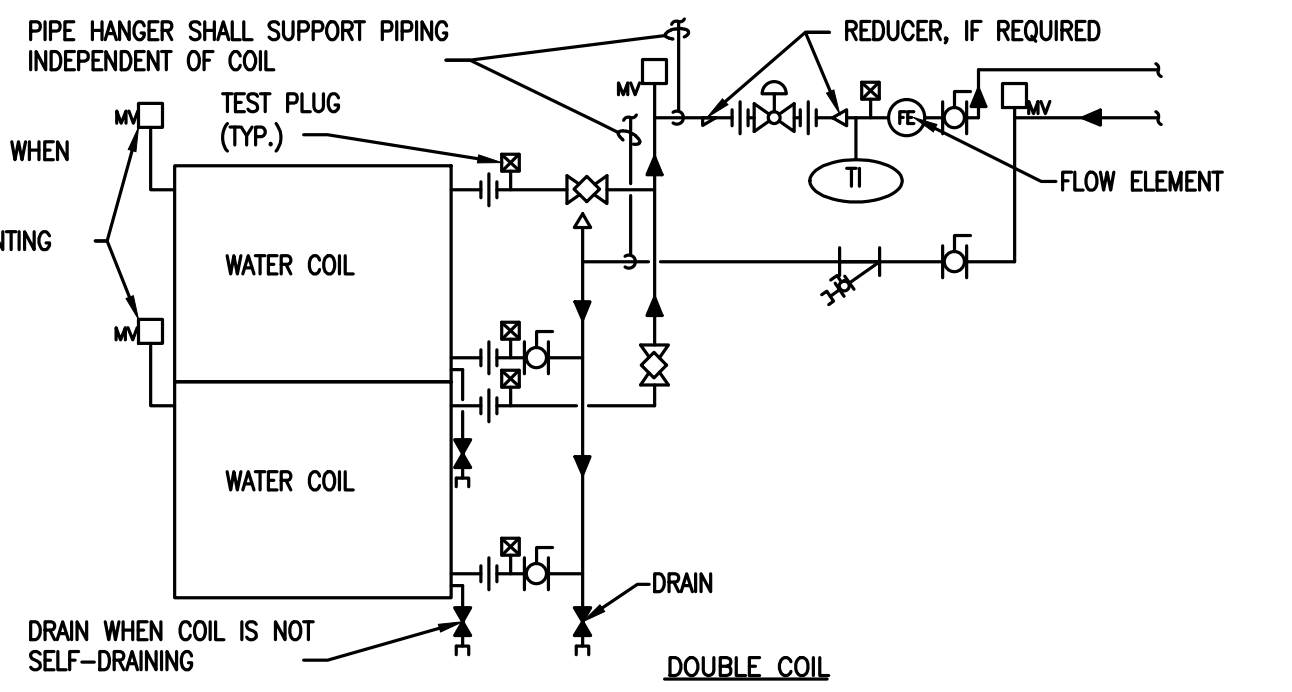
10 THERMOSTATIC STEAM TRAP ASSEMBLY  
NTS



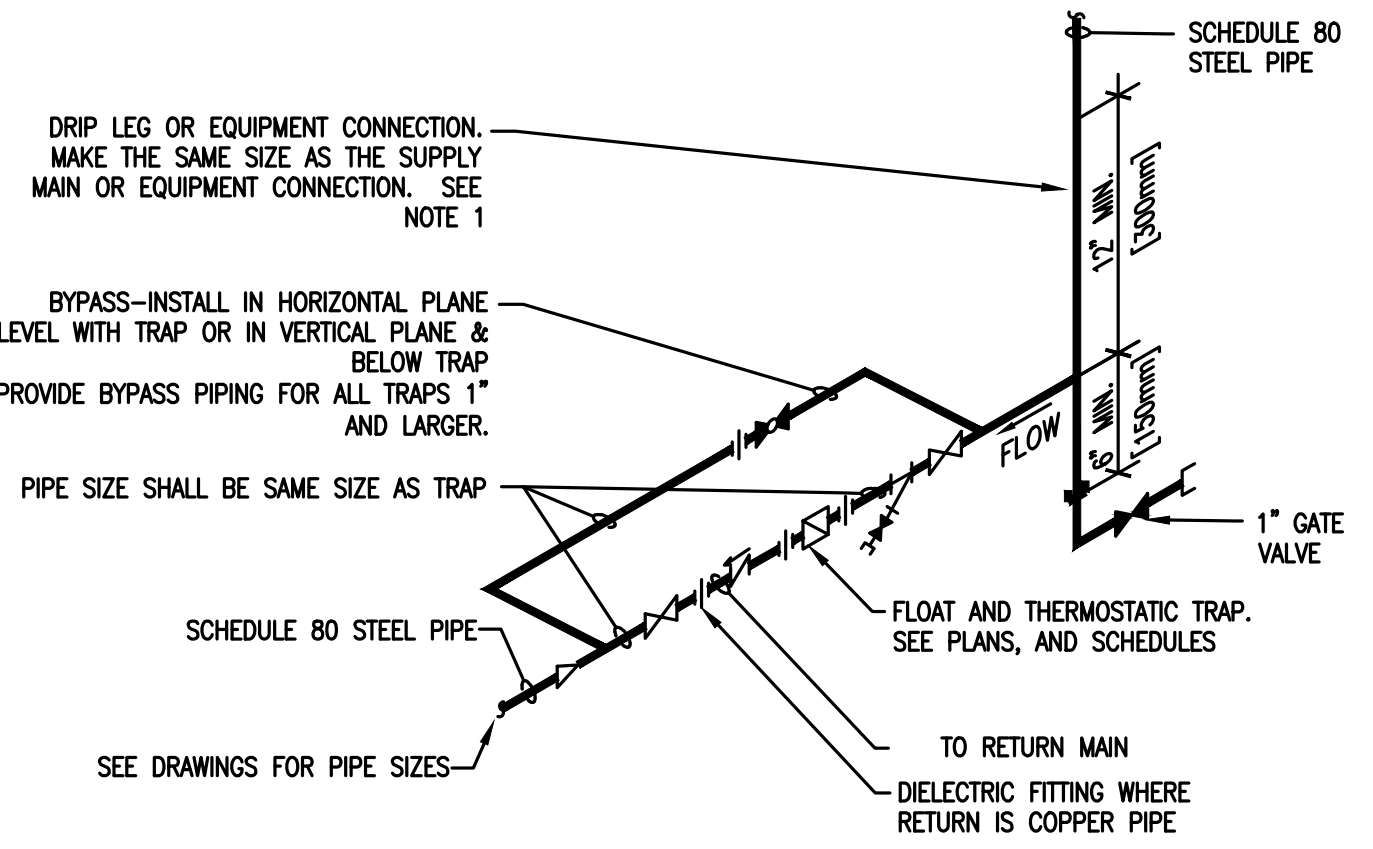
6 INSTALLATION OF THERMOMETER WELLS  
NTS



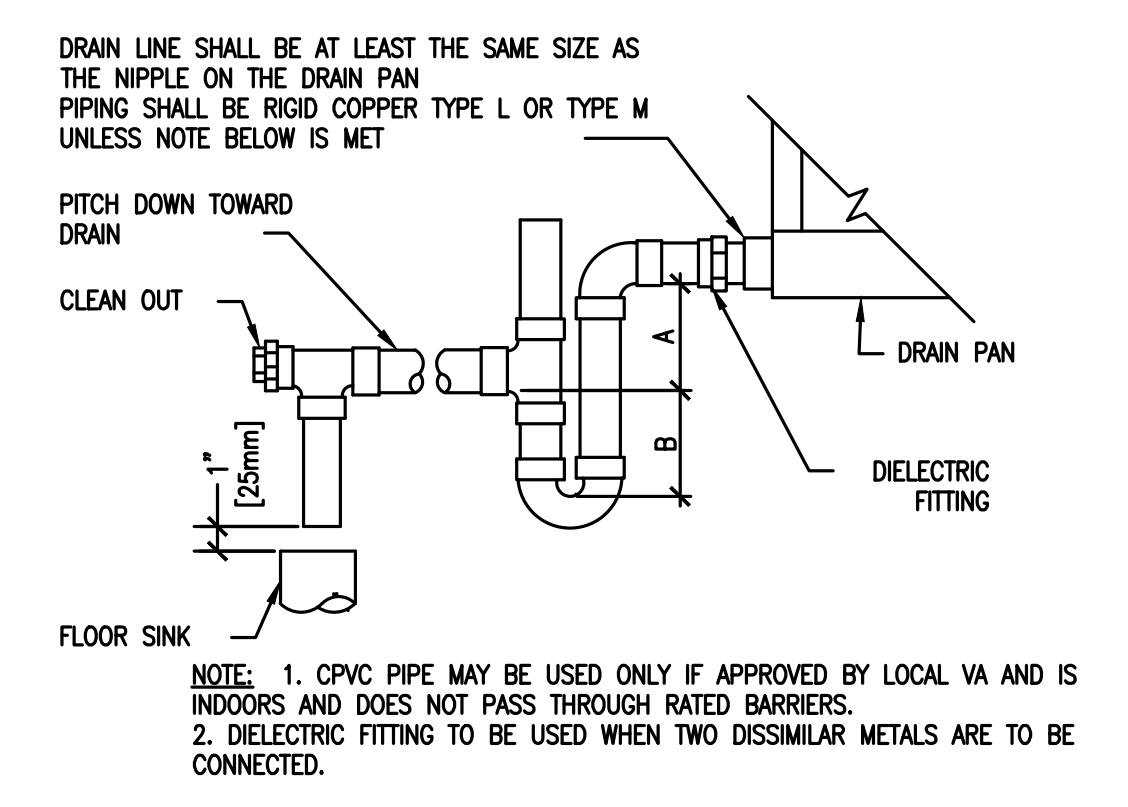
6 INSTALLATION OF THERMOMETER WELLS  
NTS



6 INSTALLATION OF THERMOMETER WELLS  
NTS



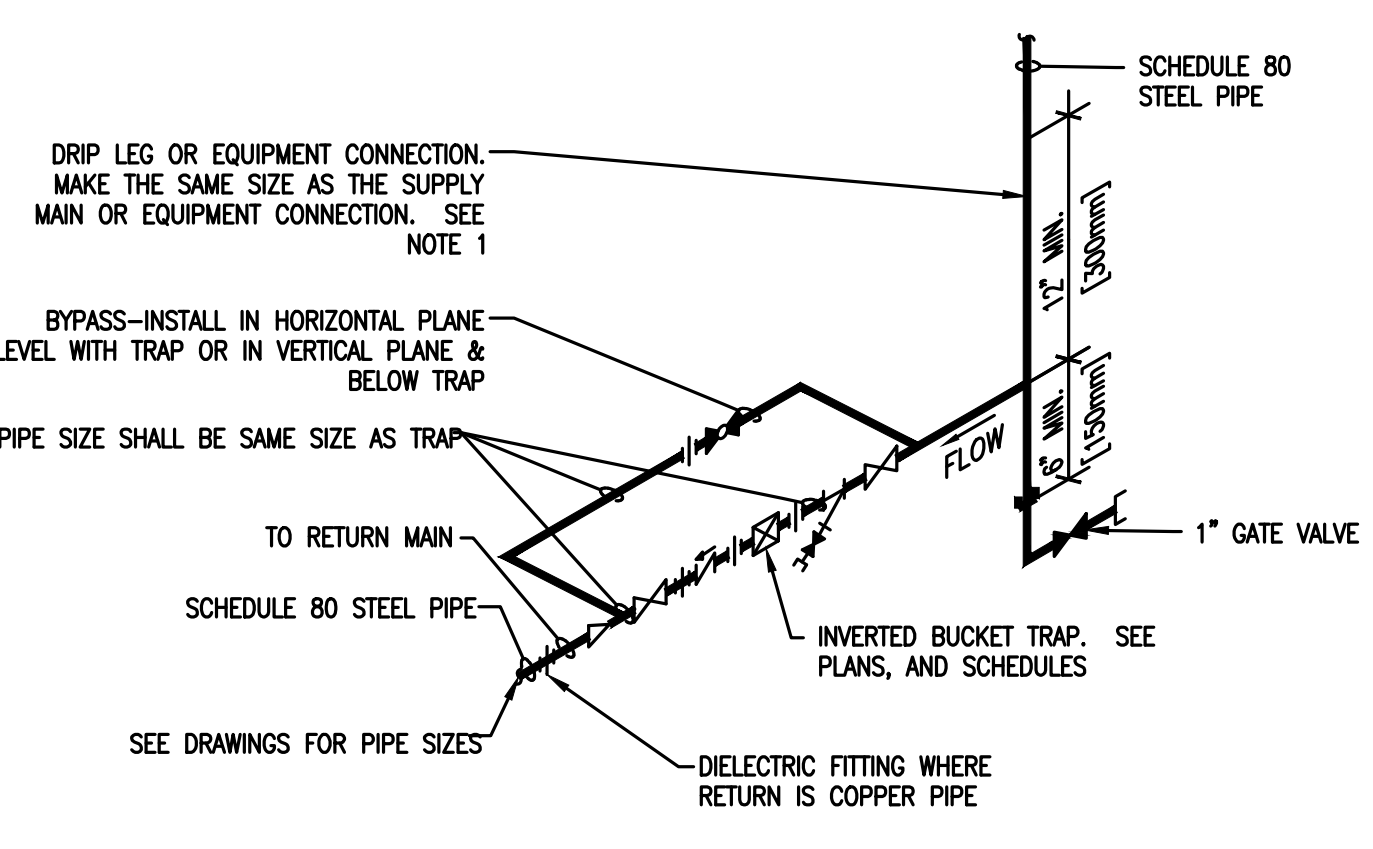
9 FLOAT AND THERMOSTATIC STEAM TRAP ASSEMBLY  
NTS



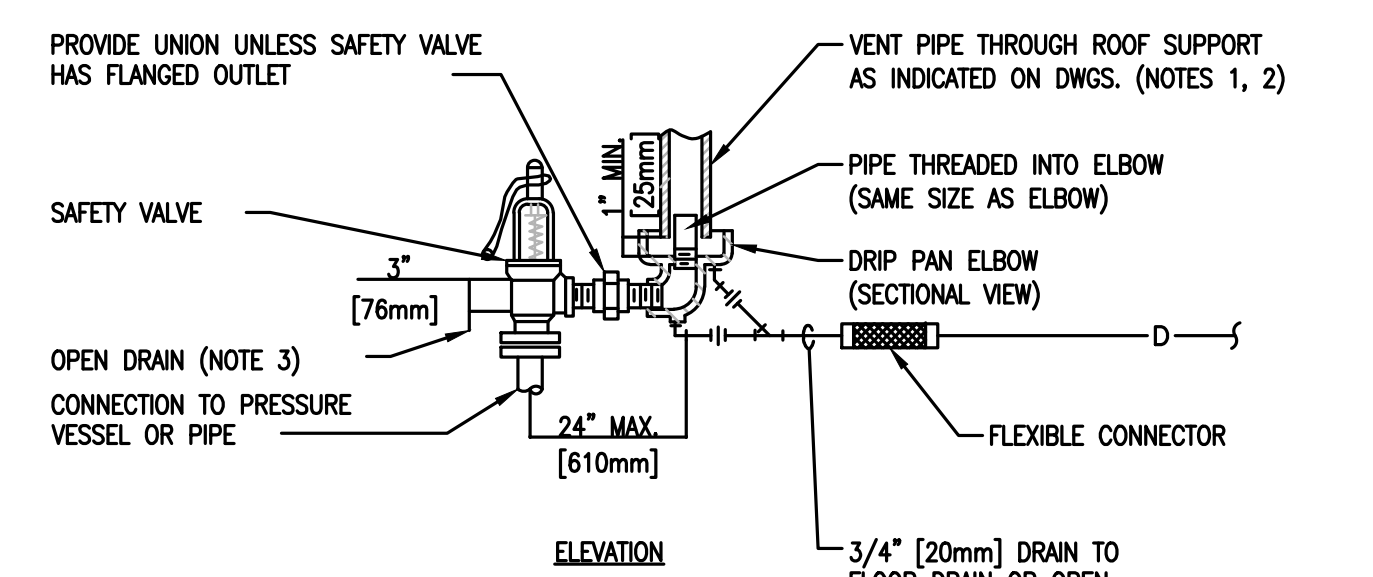
UNIT TYPE	A	B
DRAW THRU	2" [50mm] PLUS X	X
BLOW THRU	1" [25mm] MINIMUM	2X

WHERE X = STATIC PRESSURE IN PAN

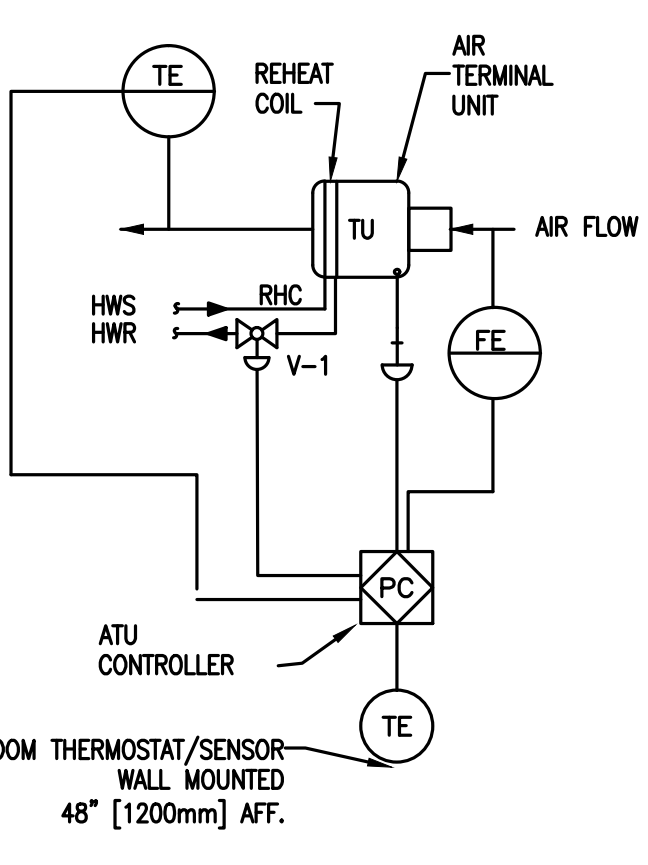
5 AIR HANDLING UNIT DRAIN TRAP DETAIL  
NTS



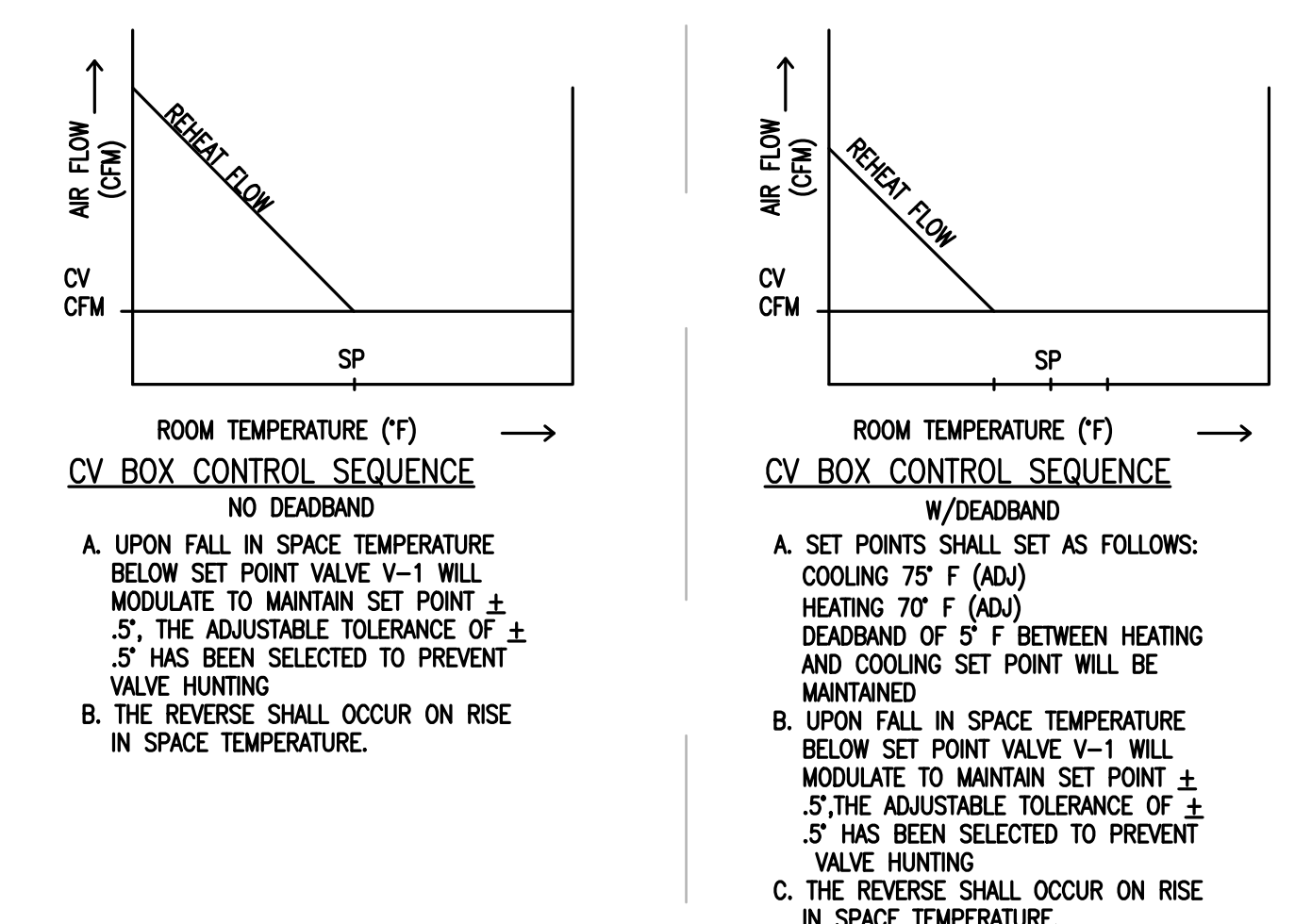
8 INVERTED BUCKET STEAM TRAP ASSEMBLY  
NTS



4 STEAM SAFETY VALVE  
NTS



1 CONSTANT VOLUME AIR TERMINAL UNIT CONTROL DIAGRAM  
NTS



100% ISSUE FOR CONSTRUCTION

Revisions	Date	Project Title	DATE	Project No.	Building Number	Checked	Drawn	Location	Dwg. of	STVHCS	San Antonio, Texas
		HVAC DETAILS	10/28/16	67444-14-711	1	MSF	JDS	7400 Merton Minter San Antonio, TX 78229	M5		

FEI Project No.: 16045

10-28-2016

VA FORM 08-6231A, JAN 1990