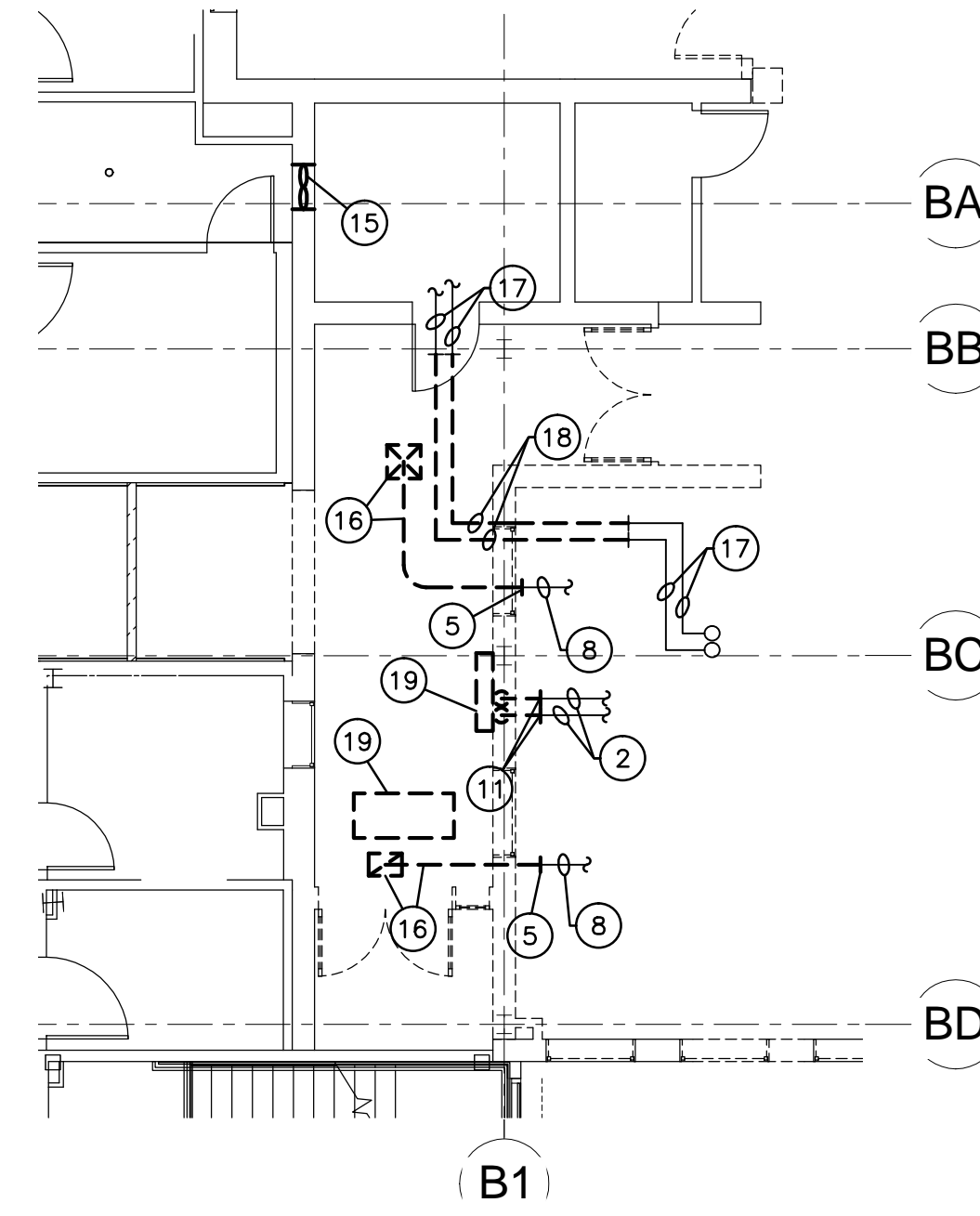


1 PARTIAL BASEMENT FLOOR - PHASE I - HVAC DEMOLITION PLAN
MD101 SCALE: 1/8"=1'-0"



2 PARTIAL BASEMENT FLOOR - PHASE I - HVAC DEMOLITION PLAN
MD101 SCALE: 1/8"=1'-0"

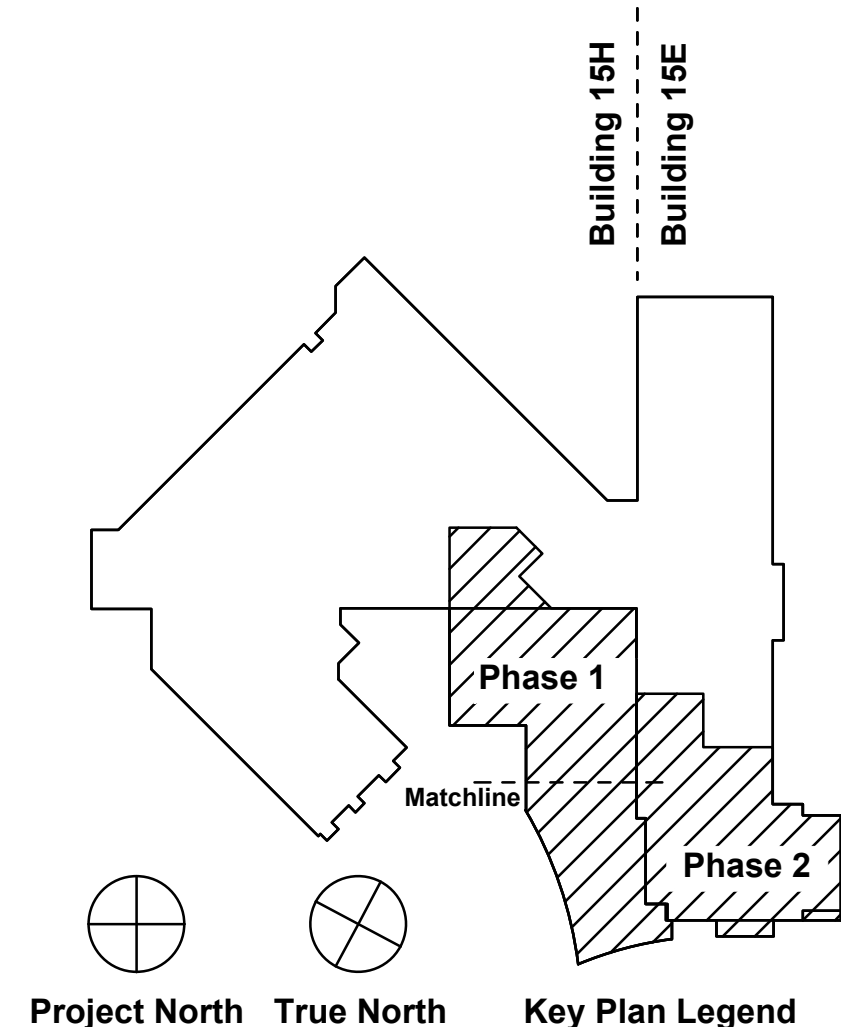
MECHANICAL LEGEND

HS	HUMIDIFIER STEAM	24/24 LAY-IN SUPPLY AIR DIFFUSER
CR	CONDENSATE RETURN	FLEXIBLE DUCT
PCR	PUMPED CONDENSATE RETURN	VOLUME DAMPER
EHWS	EXISTING HOT WATER SUPPLY	DIRECTIONAL SUPPLY AIR DIFFUSER
EHWR	EXISTING HOT WATER RETURN	FLEXIBLE DUCT
ECWS	EXISTING CHILLED WATER SUPPLY	VOLUME DAMPER
ECWR	EXISTING CHILLED WATER RETURN	24/24 LAY-IN RETURN/RELIEF GRILLE
HWS	HOT WATER SUPPLY	LAY-IN RETURN/EXHAUST AIR GRILLE
HWR	HOT WATER RETURN	RETURN/RELIEF AIR OPENING TO CORRIDOR IN FIRE RATED WALL ABOVE CEILING W/ FIRE DAMPER
CWS	CHILLED WATER SUPPLY	VARIABLE AIR VOLUME BOX (VVB) W/ HEATING COIL
CWR	CHILLED WATER RETURN	SAD SUPPLY AIR DIFFUSER OR REGISTER
LPS	LOW PRESSURE STEAM	RAG RETURN AIR GRILLE
MPS	MEDIUM PRESSURE STEAM	ER EXHAUST REGISTER
HPS	HIGH PRESSURE STEAM	A.F.F. ABOVE FINISHED FLOOR
SSD	STEAM SAFETY DISCHARGE LINE	TYP. TYPICAL
CF	CHEMICAL FEED LINE	G.C. GENERAL CONTRACTOR
CD	COLD WATER LINE	P.C. PLUMBING CONTRACTOR
CD	CONDENSATE DRAIN LINE	E.C. ELECTRICAL CONTRACTOR
CV	BALL VALVE (ON RISE)	A.T.C. AUTOMATIC TEMPERATURE CONTROL
CV	CHECK VALVE	A.D. ACCESS DOOR
STR	STRAINER	TRANS. TRANSITION
BV	BALANCING VALVE	S.A. SUPPLY AIR
A.T.C.	A.T.C. VALVE	R.A. RETURN AIR
GV	GLOBE VALVE	O.A. OUTDOOR AIR
FC	FLOW CONTROL DEVICE	V.D. VOLUME DAMPER
U	UNION	M.D. MOTORIZED DAMPER
PR	PRESSURE REDUCING VALVE	EX. EXISTING
IS	IN-LINE AIR SEPARATOR WITH AIR VENT	VVB VARIABLE AIR VOLUME BOX
PG	PRESSURE GAUGE	DN DOWN
T	THERMOMETER	P&F PITCH AND FLOW
FD	FLEXIBLE DUCT	EF EXHAUST FAN
EA	EXHAUST AIR DUCT	RA ROOFTOP AIR HANDLING UNIT
SA	SUPPLY AIR DUCT	CP CIRCULATING PUMP
RA	RETURN AIR DUCT	WH WALL HEATER
OA	OUTDOOR AIR DUCT	ET EXPANSION TANK
EL	ELBOW UP	FR FIN RADIATION
ED	ELBOW DOWN	CU CABINET UNIT HEATER
SC	SUPPLY PIPE CONNECTION	CU CONDENSING UNIT
RC	RETURN PIPE CONNECTION	SC STEAM CONVERTER
TP	"P" TRAP	HL HUMIDIFIER
FD	FIRE DAMPER	CRP CONDENSATE RETURN PUMP
SD	SMOKE DAMPER	TV THREE WAY VALVE
TH	THERMOSTAT	MAV MANUAL AIR VENT
HD	HUMIDISTAT	
NP	NEW PIPING, DUCTWORK OR EQUIPMENT	
EP	EXISTING PIPING, DUCTWORK OR EQUIPMENT	
NC	NEW CONNECTION POINT TO EXISTING PIPING OR DUCTWORK	
DM	DUCT MOUNTED FIRE DAMPER	
VD	VOLUME DAMPER	
NT	NOTE TAG	
MD	MOTORIZED DAMPER	
HB	HOT WATER BASEBOARD FIN RADIATION (HBR)	
WH	WALL MOUNTED UNIT HEATER (WH)	
SA	SUPPLY AIR DUCT	
RA	RETURN/EXHAUST AIR DUCT	
OA	OUTDOOR AIR DUCT	

HVAC DEMOLITION NOTES:

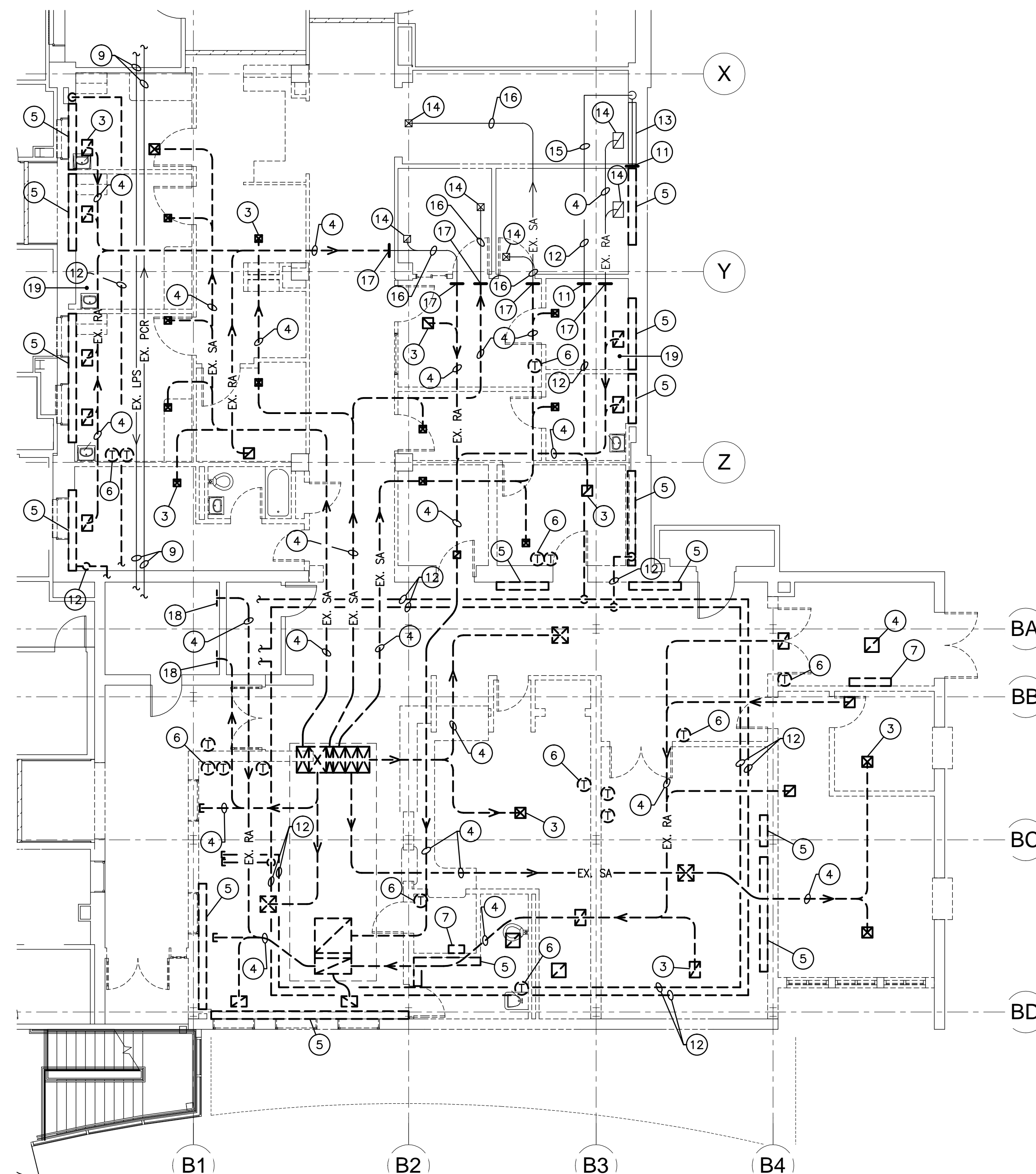
- REMOVE EXISTING OUTSIDE AIR LOUVER FOR NEW DUCT CONNECTION.
- EXISTING LOW PRESSURE STEAM AND CONDENSATE RETURN PIPING ABOVE CEILING TO REMAIN.
- REMOVE EXISTING DIFFUSER/GRILLE IN CEILING (TYPICAL).
- REMOVE EXISTING DUCTWORK ABOVE CEILING (TYPICAL).
- POINT OF DUCT TERMINATION. CAP AND INSULATE EXISTING DUCTWORK. VERIFY EXACT DUCT SIZE AND LOCATION.
- REMOVE EXISTING THERMOSTAT (TYPICAL).
- REMOVE EXISTING VARIABLE AIR VOLUME BOX.
- EXISTING DUCTWORK TO REMAIN.
- REMOVE EXISTING FAN COIL UNIT AND ALL PIPE CONNECTIONS.
- REMOVE EXISTING HEATING HOT WATER AND CHILLED WATER LINES TO POINT OF TERMINATION.
- POINT OF PIPE TERMINATION. CLOSE VALVES TO ALL TERMINATED LINES. CAP AND INSULATE EXISTING LINES. VERIFY EXACT PIPE SIZE AND LOCATION IN THE FIELD.
- EXISTING CHILLED WATER AND HOT WATER LINES TO MAINS TO REMAIN.
- EXISTING SHUT-OFF VALVES TO REMAIN (TYPICAL).
- REMOVE DUCTWORK BACK TO DUCT DROP FROM FLOOR ABOVE. PROVIDE NEW DUCT CONNECTION. SEE NEW DUCTWORK PLANS.
- REMOVE EXISTING SIDEWALL EXHAUST FAN IN WALL AND CONTROLS. FILL IN BLOCK WALL TO MATCH EXISTING SURROUNDINGS AND SEAL AIRTIGHT.
- REMOVE EXISTING DUCTWORK, DIFFUSERS AND GRILLES TO ACCOMMODATE NEW AIR HANDLING UNIT AND DUCTWORK INSTALLATION.
- EXISTING STEAM SUPPLY AND CONDENSATE RETURN LINES TO REMAIN.
- RELOCATE EXISTING STEAM SUPPLY AND CONDENSATE RETURN LINES FOR NEW DUCTWORK TO MAINTAIN EXISTING ROOFTOP AIR HANDLING UNIT OPERATION. VERIFY EXACT SIZE AND LOCATION IN THE FIELD.
- REMOVE EXISTING CABINET UNIT HEATER AND CAP EXISTING HEATING HOT WATER LINES.
- EXISTING AIR HANDLING UNIT TO REMAIN.
- POINT OF DUCT TERMINATION/NEW CONNECTION.
- EXISTING CHILLED WATER PIPING ABOVE CEILING TO REMAIN.
- PROVIDE TEMPORARY FILTERS DURING CONSTRUCTION. PROVIDE MERV-8 TYPE FILTER ON OUTSIDE OF 132x48 INTAKE AIR LOUVER. PROVIDE 4" DEEP, HIGH CAPACITY, 4-PLY RING PANEL IN AIR HANDLING UNIT OR ON DUCT OPENING INSIDE OF BUILDING. VERIFY EXACT SIZE OF ALL FILTERS IN THE FIELD. REPLACE FILTERS ONCE A WEEK OR MORE OFTEN BASED ON FILTER CLEANLINESS. (TYPICAL FOR 4)
- PROVIDE TEMPORARY FILTERS DURING CONSTRUCTION. TEMPORARILY EXTEND INTAKE AIR OPENING UP TO EXISTING 15H ROOF LINE AND DIRECT OPENING TOWARD EXISTING ROOF. PROVIDE MERV-8 TYPE FILTER ON OUTSIDE OF DUCT OPENING. PROVIDE 4" DEEP, HIGH CAPACITY, 4-PLY RING PANEL IN AIR HANDLING UNIT OR ON DUCT OPENING INSIDE OF BUILDING. VERIFY EXACT SIZE OF ALL FILTERS IN THE FIELD. REPLACE FILTERS ONCE A WEEK OR MORE OFTEN BASED ON FILTER CLEANLINESS. (TYPICAL)

GENERAL NOTE:
PROVIDE TEMPORARY FILTERS ON EXISTING URGENT CARE ROOFTOP AIR HANDLING UNIT DURING PHASE 1 CONSTRUCTION. PROVIDE MERV-8 TYPE FILTERS ON OUTSIDE OF AIR HANDLING UNIT OPENINGS. PROVIDE 4" DEEP, HIGH CAPACITY, 4-PLY RING PANEL IN AIR HANDLING UNIT. VERIFY EXACT SIZE OF ALL FILTERS IN THE FIELD. REPLACE FILTERS ONCE A WEEK OR MORE OFTEN BASED ON FILTER CLEANLINESS.

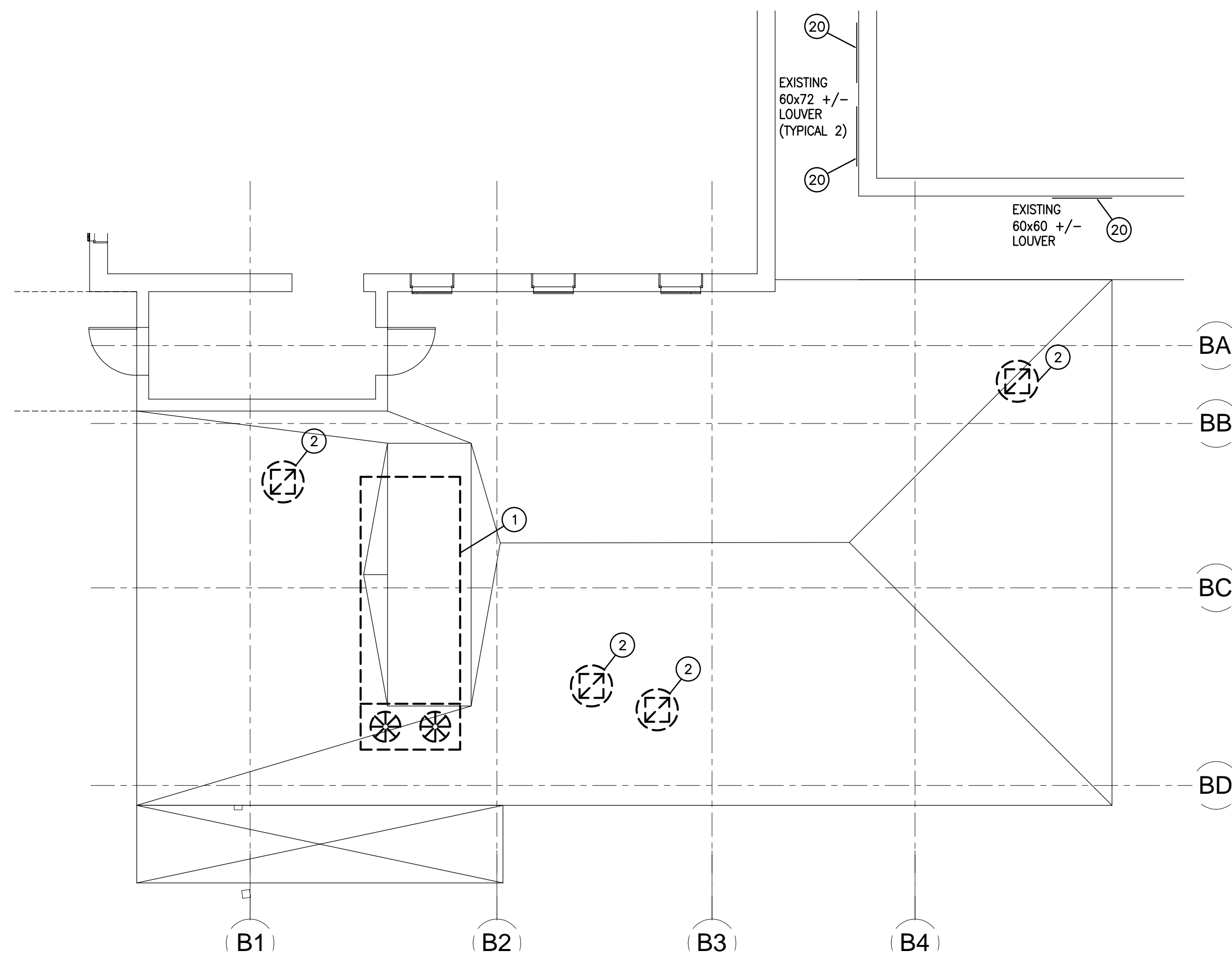


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Scale As Noted		Building Number 15		Checked Andres		Drawn M. Huylo		Project No. 620-332		Drawing No. MD-101																	
Issued For Final Contract Documents		Location 100 Route 9D Castle Point, NY 12511																									



1 BASEMENT FLOOR - PHASE II - HVAC DEMOLITION PLAN
MD102 SCALE: 1/8"=1'-0"

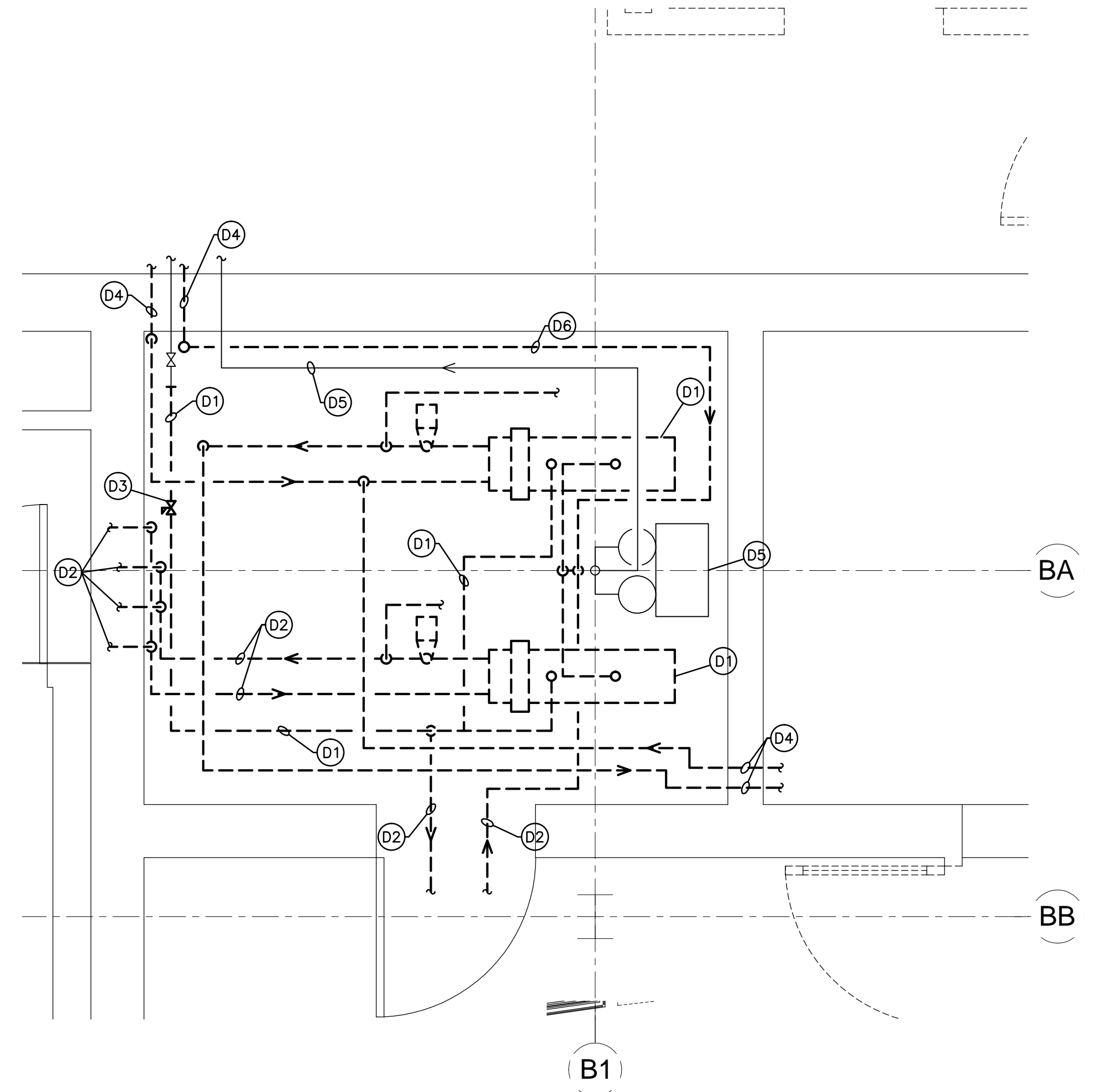


2 ROOF - PHASE II - HVAC DEMOLITION PLAN
MD102 SCALE: 1/8"=1'-0"

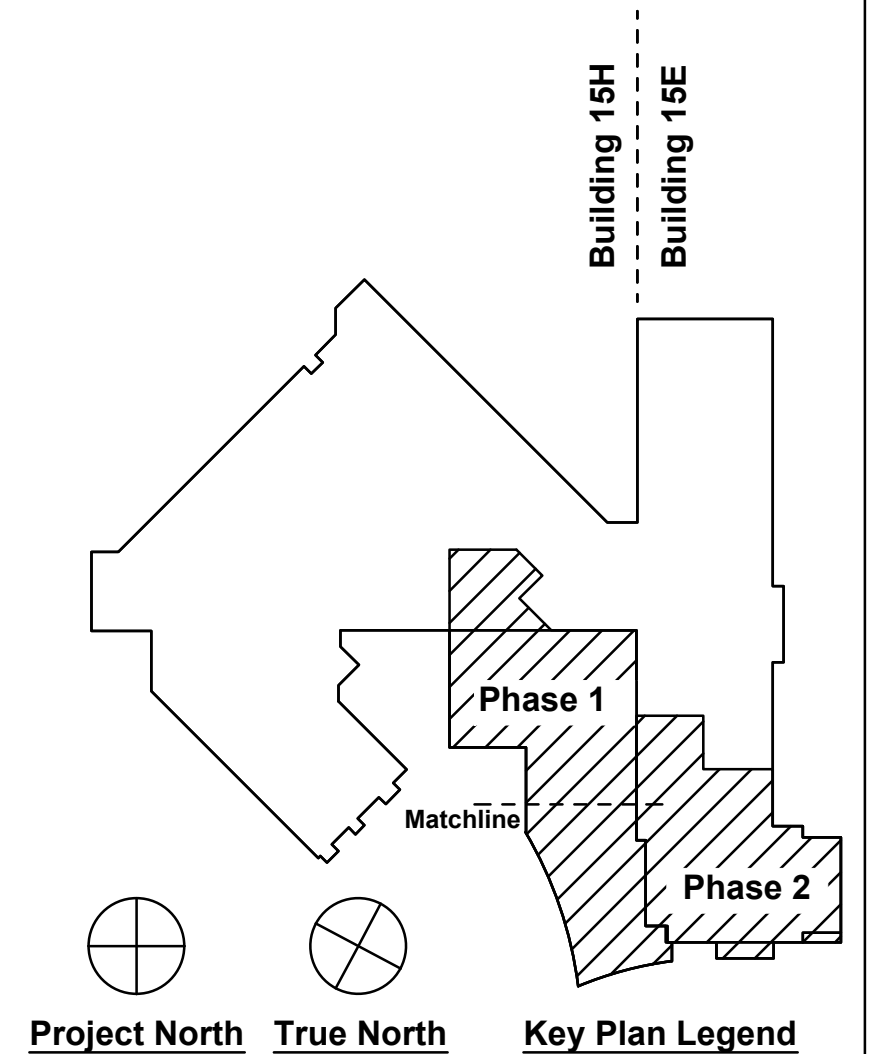
- HVAC DEMOLITION NOTES:
- 1 REMOVE EXISTING ROOFTOP AIR HANDLING UNIT AND ALL ASSOCIATED DUCTWORK, PIPING, AND CONTROL CONNECTIONS. REUSE EXISTING SUPPLY AIR AND RETURN AIR DUCT OPENINGS WHERE APPLICABLE. FILL IN UNUSED PORTION OF EXISTING OPENINGS, INSULATE AND SEAL WEATHERTIGHT WITH ROOFING SYSTEM.
 - 2 REMOVE EXISTING FAN ON ROOF AND ALL ASSOCIATED DUCTWORK. FILL IN EXISTING OPENING, INSULATE AND SEAL WEATHERTIGHT WITH ROOFING SYSTEM.
 - 3 REMOVE EXISTING DIFFUSER/GRILLE IN CEILING (TYPICAL).
 - 4 REMOVE EXISTING DUCTWORK ABOVE CEILING IN ITS ENTIRETY (TYPICAL).
 - 5 REMOVE EXISTING WALL MOUNTED FIN RADIATION AND ALL HEATING HOT WATER LINES.
 - 6 REMOVE EXISTING THERMOSTAT (TYPICAL).
 - 7 REMOVE EXISTING HEATING TERMINAL UNIT AND ALL PIPING.
 - 8 NONE.
 - 9 EXISTING LOW PRESSURE STEAM LINE AND PUMPED CONDENSATE RETURN LINE TO REMAIN.
 - 10 REMOVE EXISTING FAN ON ROOF. INSULATE AND CAP CURB WEATHERTIGHT.
 - 11 POINT OF PIPE TERMINATION. CAP AND INSULATE EXISTING HOT WATER LINES. VERIFY PIPE SIZES AND LOCATIONS IN THE FIELD.
 - 12 REMOVE ALL EXISTING HEATING HOT WATER SUPPLY AND RETURN MAINS AND EQUIPMENT TAKE-OFFS.
 - 13 EXISTING FIN RADIATION TO REMAIN. CAP EXISTING SUPPLY AND RETURN HEATING LINES ABOVE CEILING AND WITHIN EXISTING PARTITIONS.
 - 14 EXISTING DIFFUSER/GRILLE TO REMAIN.
 - 15 EXISTING HEATING LINES ABOVE CEILING TO REMAIN ABANDONED.
 - 16 EXISTING DUCTWORK TO REMAIN.
 - 17 POINT OF DUCTWORK TERMINATION/NEW CONNECTION.
 - 18 REMOVE EXISTING SIDEWALL GRILLE. FILL IN BLOCK WALL TO MATCH EXISTING. SEAL AIRTIGHT.
 - 19 EXISTING SUPPLY, RETURN, AND CONDENSATE DRAIN LINES ABOVE THE BASEMENT FLOOR CEILING SERVING THE FAN COIL UNITS ON THE FIRST FLOOR SHALL REMAIN. COORDINATE ALL NEW AMENITIES WITH EXISTING PIPING.
 - 20 PROVIDE TEMPORARY FILTERS DURING CONSTRUCTION. PROVIDE MERV-8 TYPE FILTER ON OUTSIDE OF INTAKE AIR LOUVER. PROVIDE 4" DEEP, HIGH CAPACITY, 4-PLY RING PANEL IN AIR HANDLING UNIT OR ON DUCT OPENING INSIDE OF BUILDING. VERIFY EXACT SIZE OF ALL FILTERS IN THE FIELD. REPLACE FILTERS ONCE A WEEK OR MORE OFTEN BASED ON FILTER CLEANLINESS.

GENERAL NOTE:
PROVIDE TEMPORARY FILTERS ON NEW URGENT CARE ROOFTOP AIR HANDLING UNIT (RTU-1) DURING PHASE 2 CONSTRUCTION. PROVIDE MERV-8 TYPE FILTERS ON OUTSIDE OF AIR HANDLING UNIT OPENINGS. PROVIDE 4" DEEP, HIGH CAPACITY, 4-PLY RING PANEL IN AIR HANDLING UNIT. VERIFY EXACT SIZE OF ALL FILTERS IN THE FIELD. REPLACE FILTERS ONCE A WEEK OR MORE OFTEN BASED ON FILTER CLEANLINESS.

- MECHANICAL ROOM - PHASE II - HVAC DEMOLITION PLAN NOTES:
- D1 REMOVE EXISTING STEAM TO WATER CONVERTORS AND ASSOCIATED STEAM PIPING, CONTROL VALVES, SUPPORT SYSTEMS, HOT WATER CIRCULATING PUMPS AND ALL EXISTING STANDARD EQUIPMENT NOT TO BE REUSED.
 - D2 REMOVE EXISTING HOT WATER SUPPLY AND RETURN PIPING, STEAM PIPING, AND CONDENSATE RETURN PIPING, AND SNOW MELTING SYSTEM PIPING AND EQUIPMENT AS INDICATED ON THE DRAWINGS.
 - D3 REMOVE EXISTING PRESSURE REDUCING STATION AS INDICATED AND PREPARE FOR INSTALLATION OF NEW PRESSURE REDUCING STATION.
 - D4 REMOVE ALL EXISTING PIPING NOT APPLICABLE TO THE NEW INSTALLATION.
 - D5 EXISTING CONDENSATE RETURN UNIT AND PUMPED CONDENSATE RETURN PIPING TO REMAIN AND BE REUSED.
 - D6 EXISTING WATER SERVICE AND ASSOCIATED PIPING TO REMAIN. SEE FIRE PROTECTION PLANS.

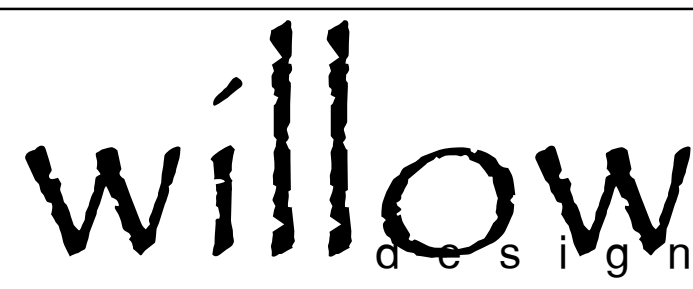
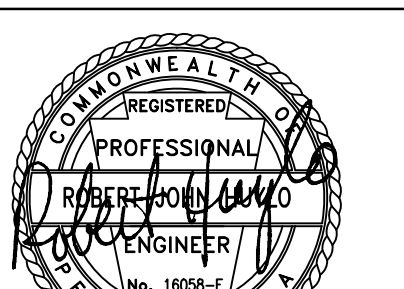


3 MECHANICAL ROOM - PHASE II - HVAC DEMOLITION PLAN
MD102 SCALE: 1/2"=1'-0"

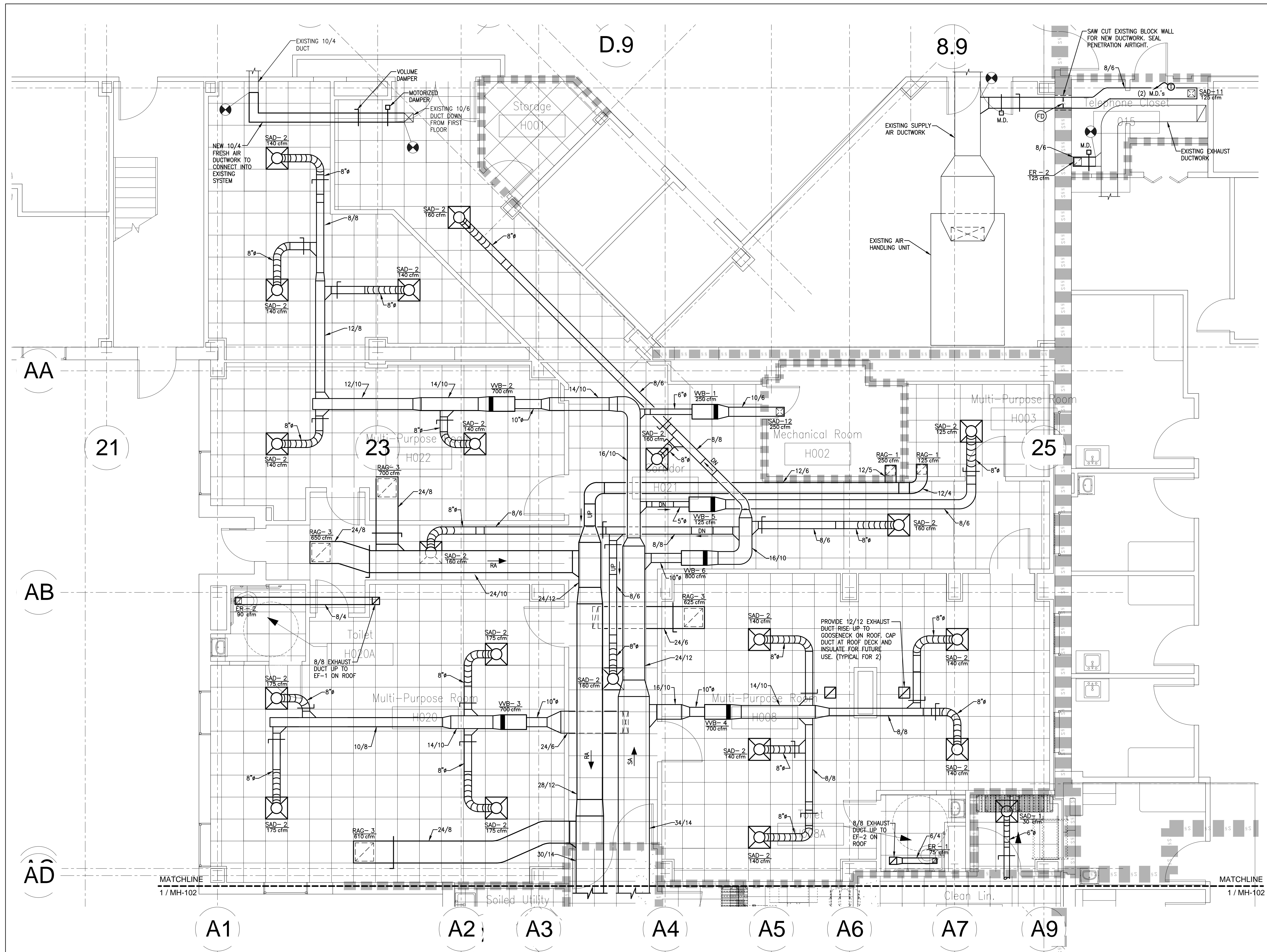


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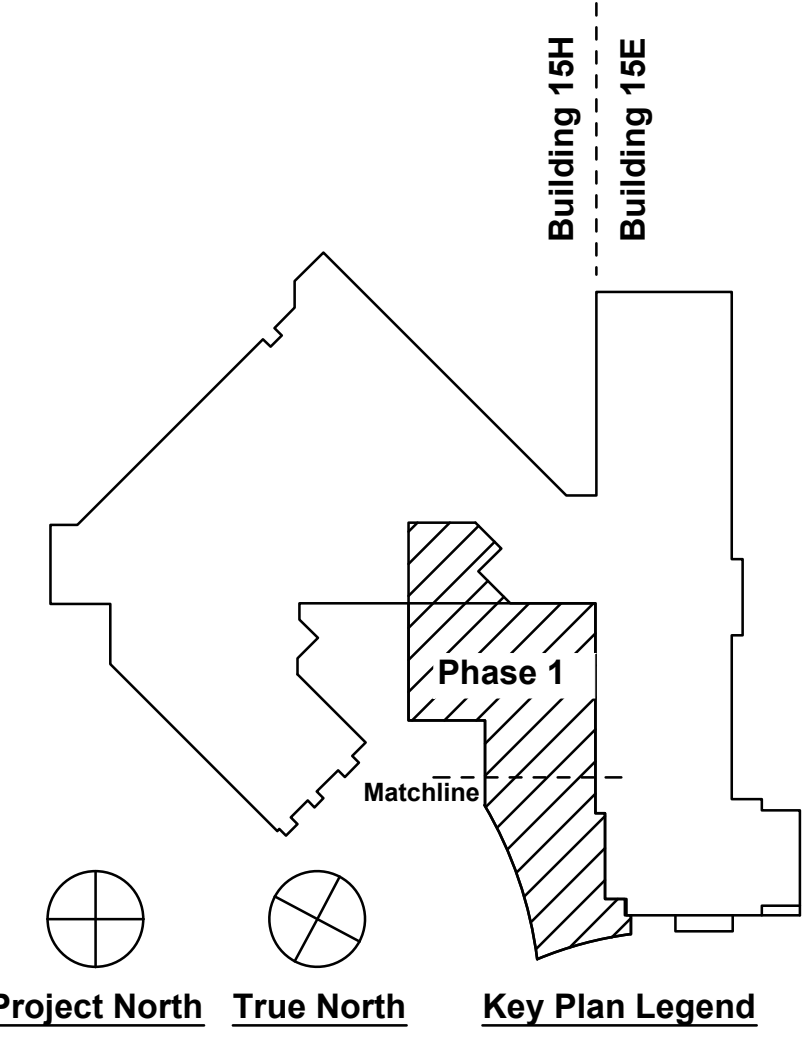
Revisions:	Date

Architect/Engineer:	Seal:
	
SERVICE DISABLED VETERAN OWNED SMALL BUSINESS	

Drawing Title BASEMENT FLOOR AND ROOF - PHASE II - HVAC DEMOLITION PLANS	Project Title Expand and Renovate Urgent Care Area - 15E at Castle Point	Date March 22, 2013
Scale As Noted	Building Number 15	Checked Andres
Issued For Final Contract Documents	Drawn M. Huylo	Drawn No. MD-102
	Location 100 Route 9D Castle Point, NY 12511	



1 PARTIAL BASEMENT FLOOR - PHASE I - HVAC DUCTWORK PLAN
WH101/SCALE: 1/4"=1'-0"



Revisions:		Date	Architect/Engineer:		Seal:	Drawing Title		Project Title		Date	
			 Architecture SERVICE DISABLED VETERAN OWNED SMALL BUSINESS			PARTIAL BASEMENT FLOOR - PHASE I - HVAC DUCTWORK PLAN		Expand and Renovate Urgent Care Area - 15E at Castle Point		March 22, 2013	
						Scale		Building Number		Checked	
						As Noted		15		Andres	
								Drawn		Jennings	
								Location		Drawing No.	
								100 Route 9D Castle Point, NY 12511		MH-101	
											

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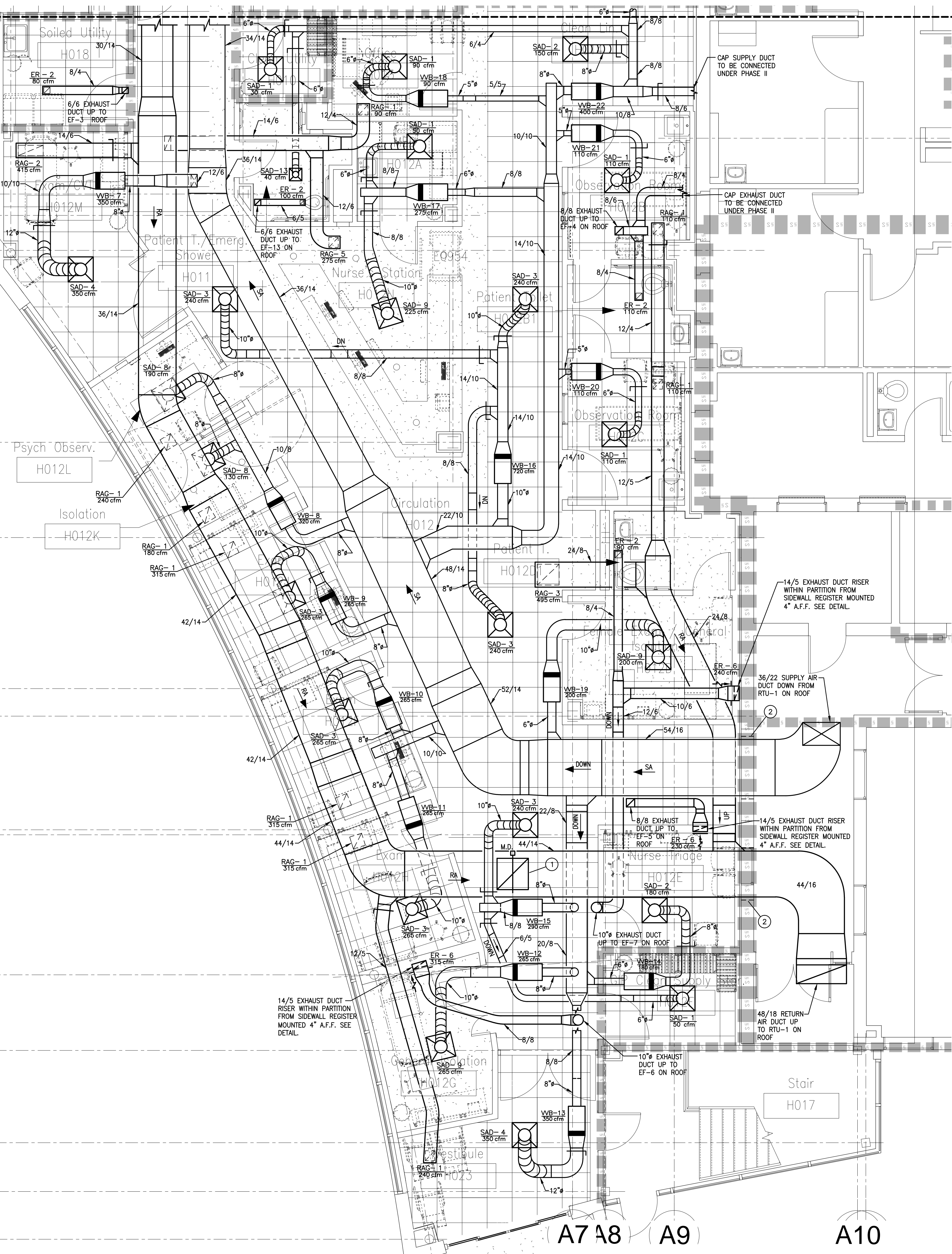
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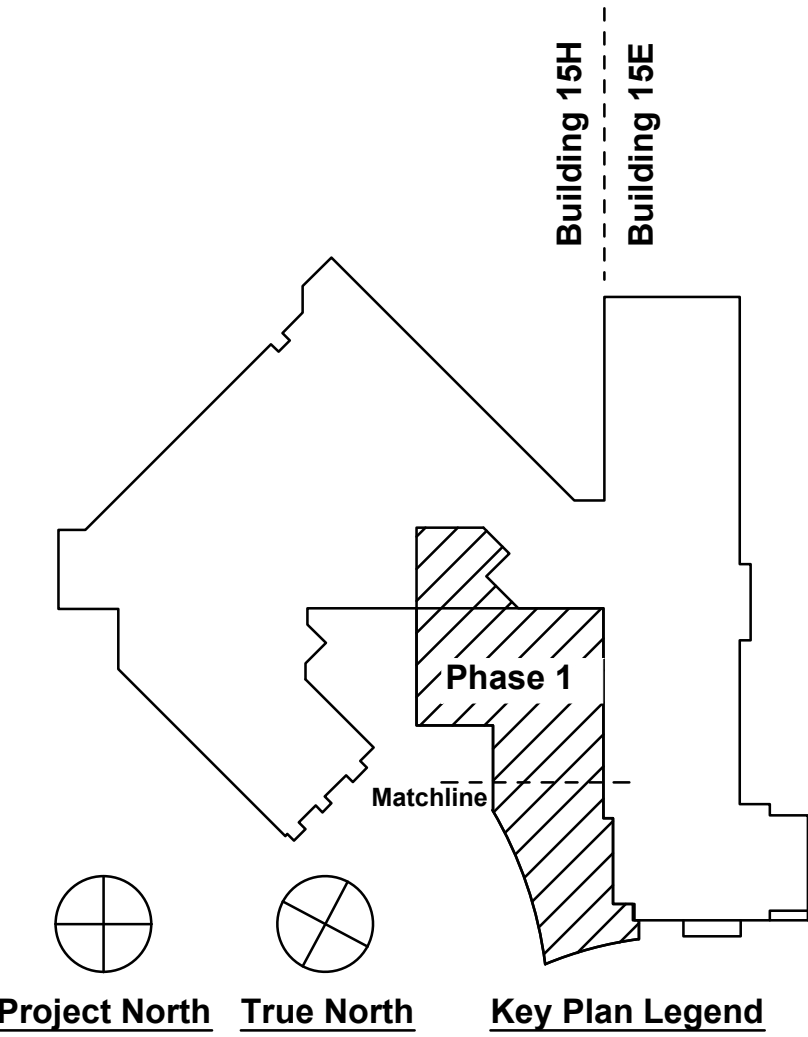
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PARTIAL BASEMENT FLOOR - PHASE I - HVAC DUCTWORK PLAN NOTES:

- 30/30 EXHAUST DUCT WITH MOTORIZED DAMPER TO CONNECT INTO RTU-1 RETURN AIR DUCT MAIN FOR EMERGENCY MODE OPERATION AND RELIEF AIR MODE. EXHAUST DUCT SHALL RISE UP TO EF-8 ON ROOF.
- SAW CUT EXISTING BLOCK WALL FOR NEW DUCTWORK. PROVIDE LINTEL (SEE STRUCTURAL PLANS FOR DETAIL). SEAL PENETRATION AIRTIGHT.

1 PARTIAL BASEMENT FLOOR - PHASE I - HVAC DUCTWORK PLAN
SCALE: 1/4"=1'-0"



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Revisions:	Date

Architect/Engineer:

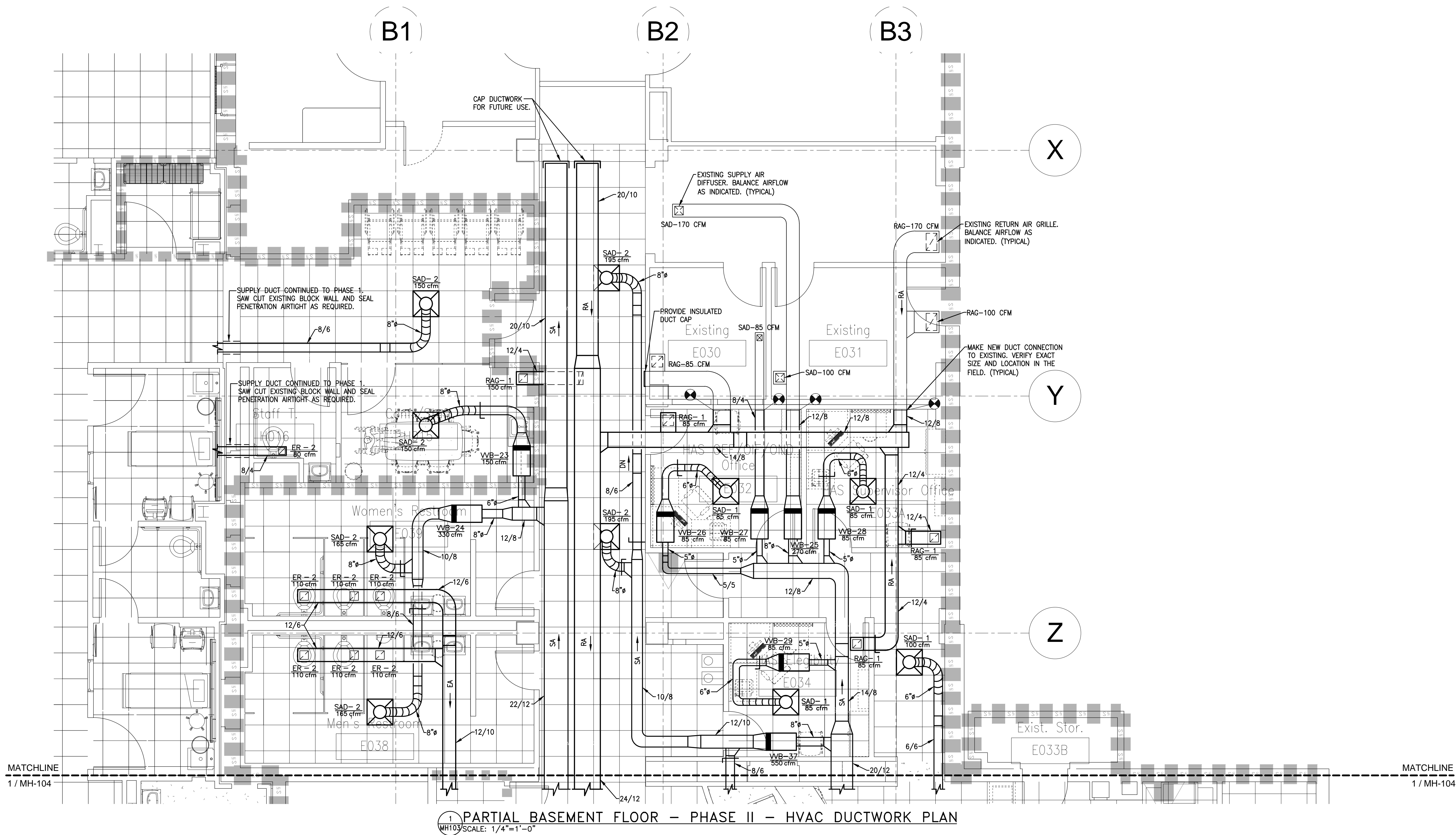
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Architecture
SERVICE DISABLED VETERAN OWNED SMALL BUSINESS

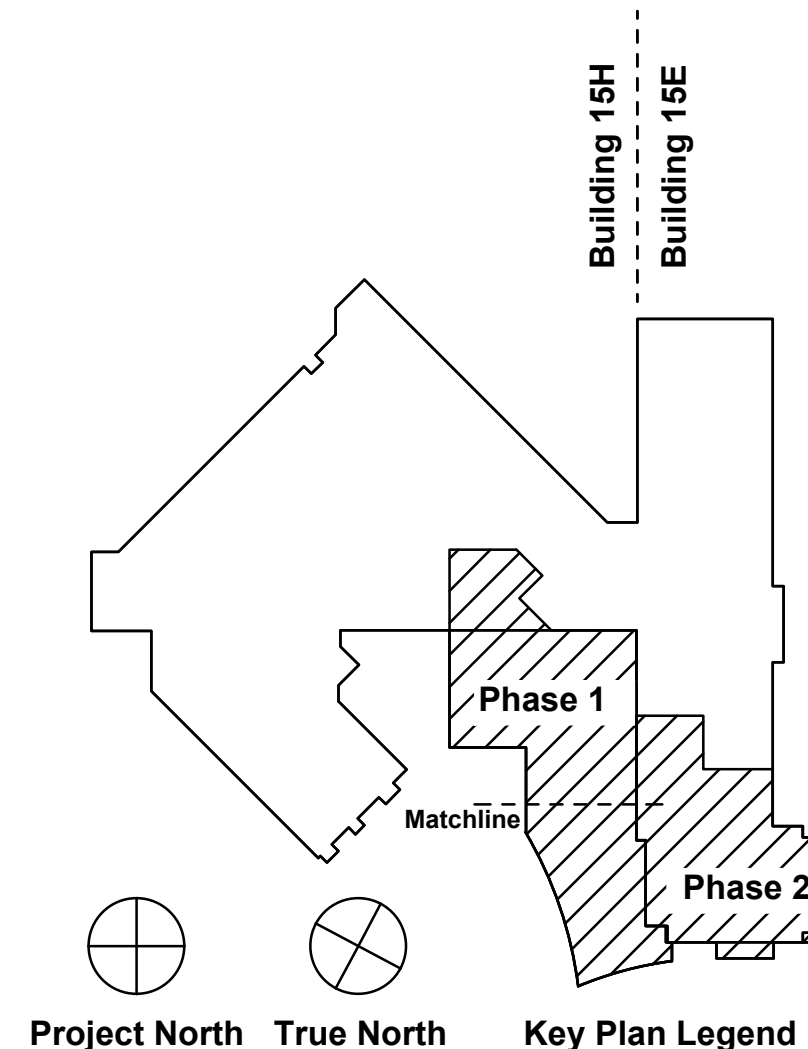
REGISTERED PROFESSIONAL
ARCHITECT
No. 10284
STATE OF NEW YORK

Drawing Title PARTIAL BASEMENT FLOOR - PHASE I - HVAC DUCTWORK PLAN	Project Title Expand and Renovate Urgent Care Area - 15E at Castle Point	Date March 22, 2013
Scale As Noted	Building Number 15	Checked Andres
Issued For Final Contract Documents	Drawn Jennings	Drawn No. MH-102
	Location 100 Route 9D Castle Point, NY 12511	

Department of
Veterans Affairs



1 PARTIAL BASEMENT FLOOR - PHASE II - HVAC DUCTWORK PLAN
SCALE: 1/4"=1'-0"




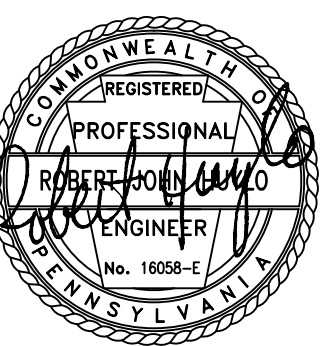
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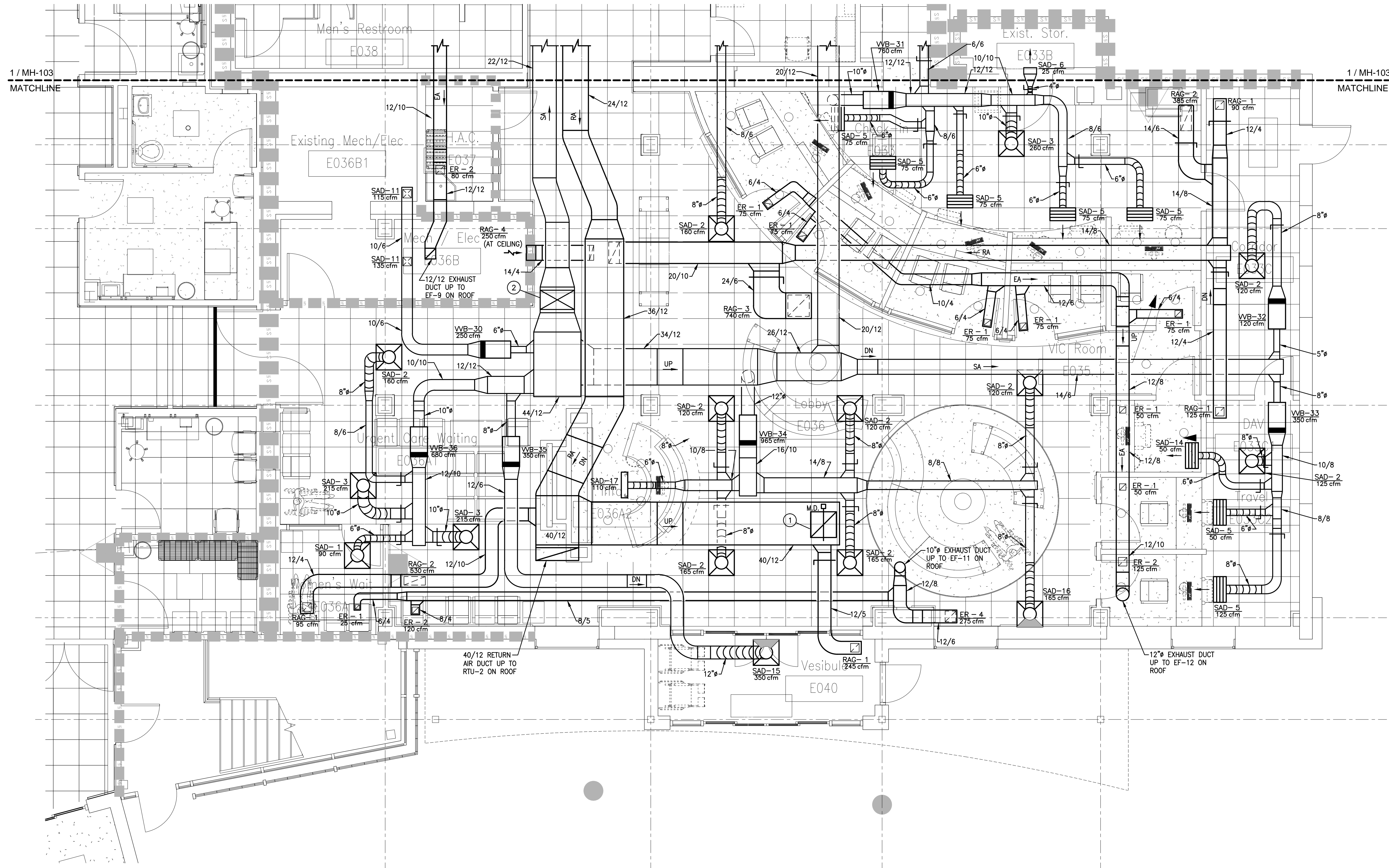
Architect/Engineer:

Seal:


Architecture
SERVICE DISABLED VETERAN OWNED SMALL BUSINESS



Drawing Title PARTIAL BASEMENT FLOOR - PHASE II - HVAC DUCTWORK PLAN	Project Title Expand and Renovate Urgent Care Area - 15E at Castle Point	Date March 22, 2013
Scale As Noted	Building Number 15	Checked Andres
Issued For Final Contract Documents	Location 100 Route 9D Castle Point, NY 12511	Drawn Jennings
Project No. 620-332		Drawing No. MH-103



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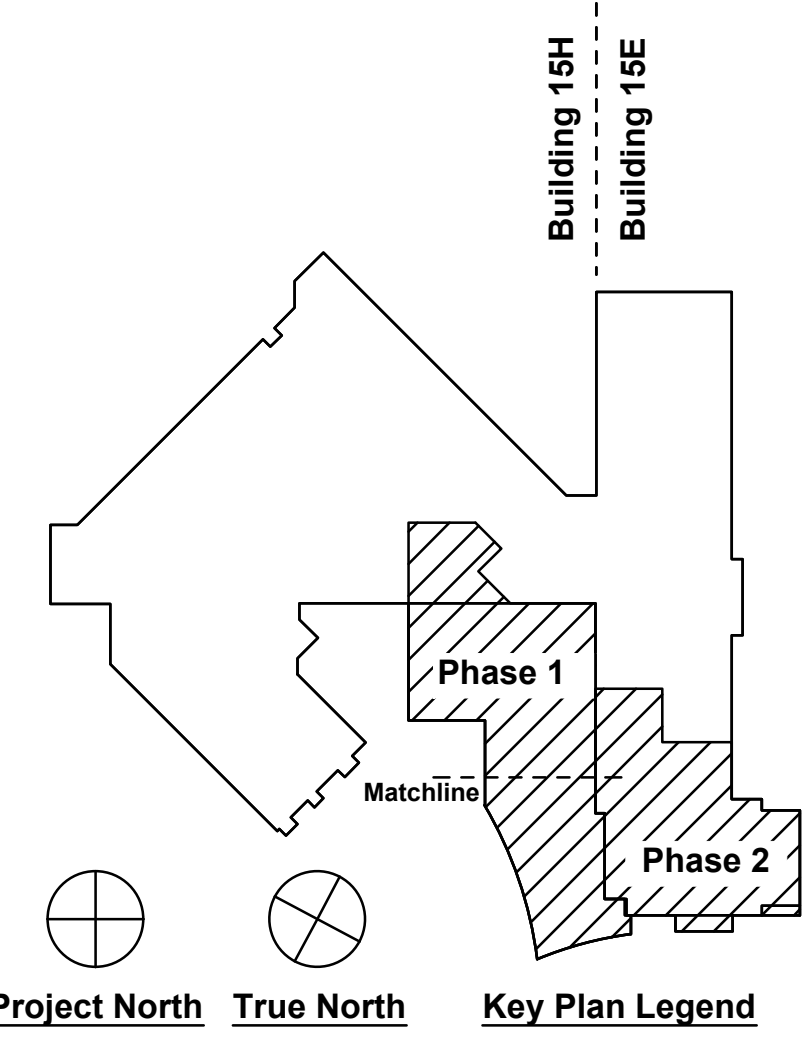
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B3

B4

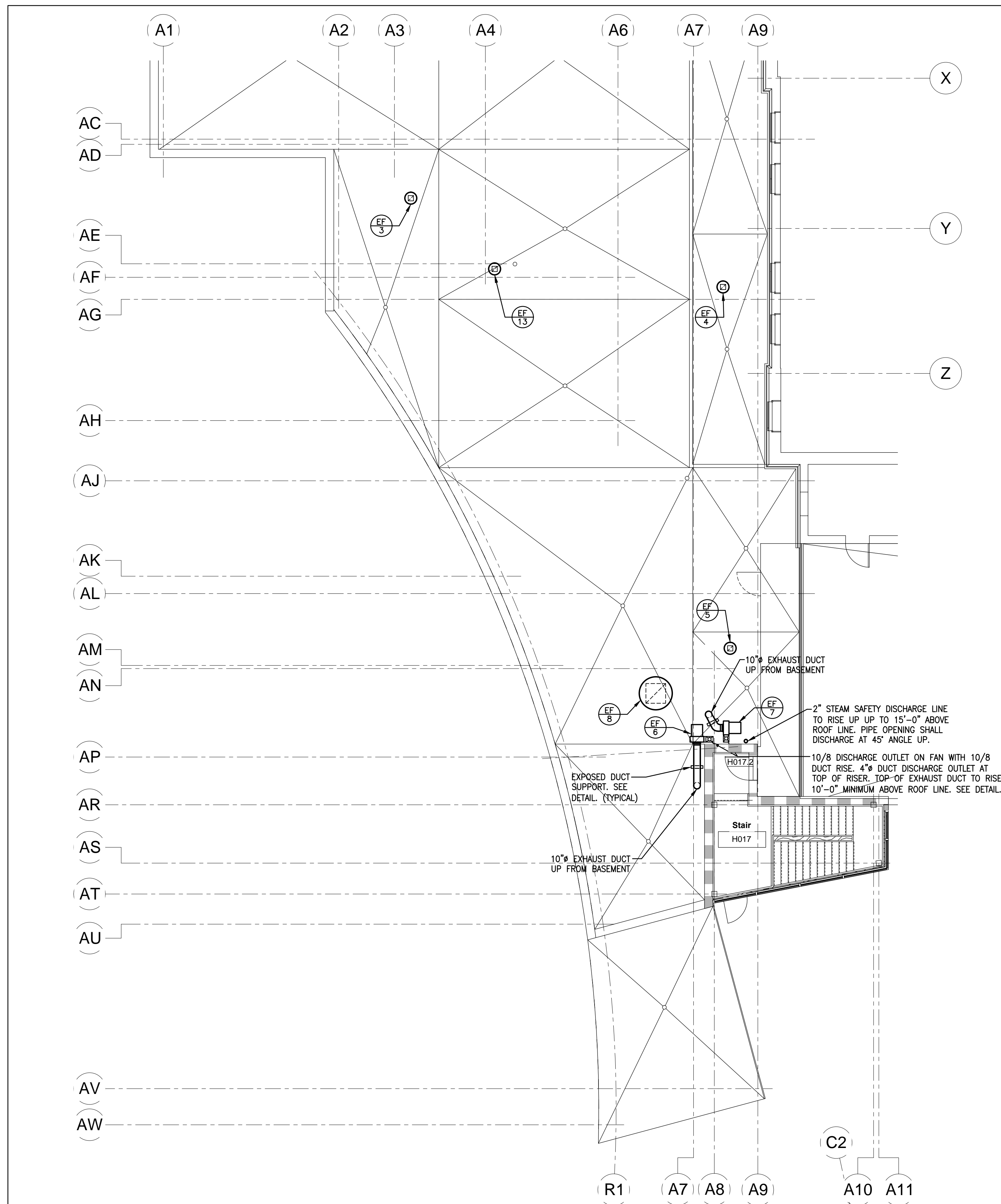
1 PARTIAL BASEMENT FLOOR - PHASE II - HVAC DUCTWORK PLAN
MH104 SCALE: 1/4"=1'-0"

- PARTIAL BASEMENT FLOOR - PHASE II - HVAC DUCTWORK PLAN NOTES:
- 24/24 EXHAUST DUCT WITH MOTORIZED DAMPER TO CONNECT INTO RTU-2 RETURN AIR DUCT MAIN FOR EMERGENCY MODE OPERATION AND RELIEF AIR MODE. EXHAUST DUCT SHALL RISE UP TO EF-10 ON ROOF.
 - 32/18 SUPPLY AIR DUCT DOWN FROM RTU-2 ON ROOF. PROVIDE DUCT MOUNTED TURNING VANES.

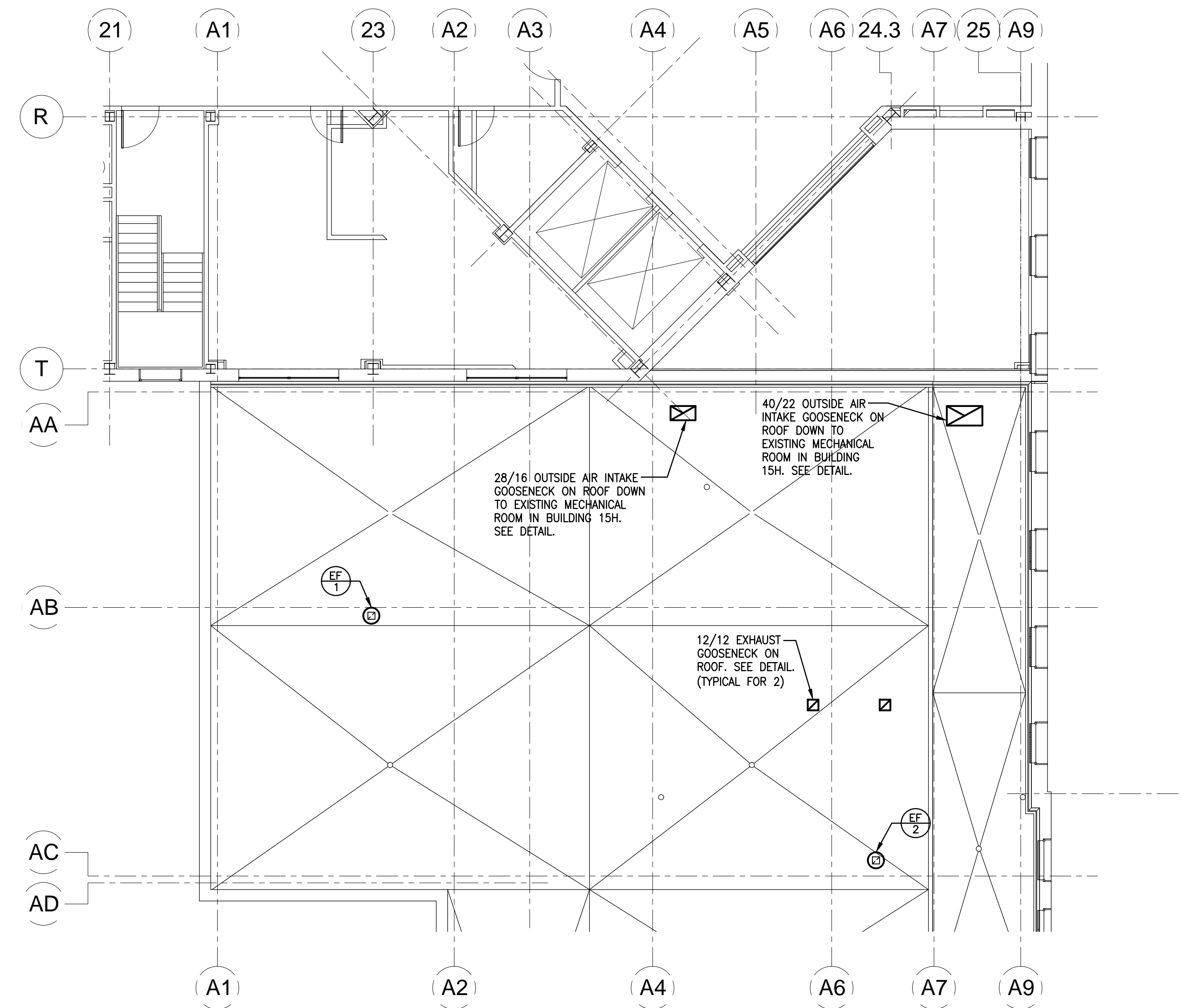


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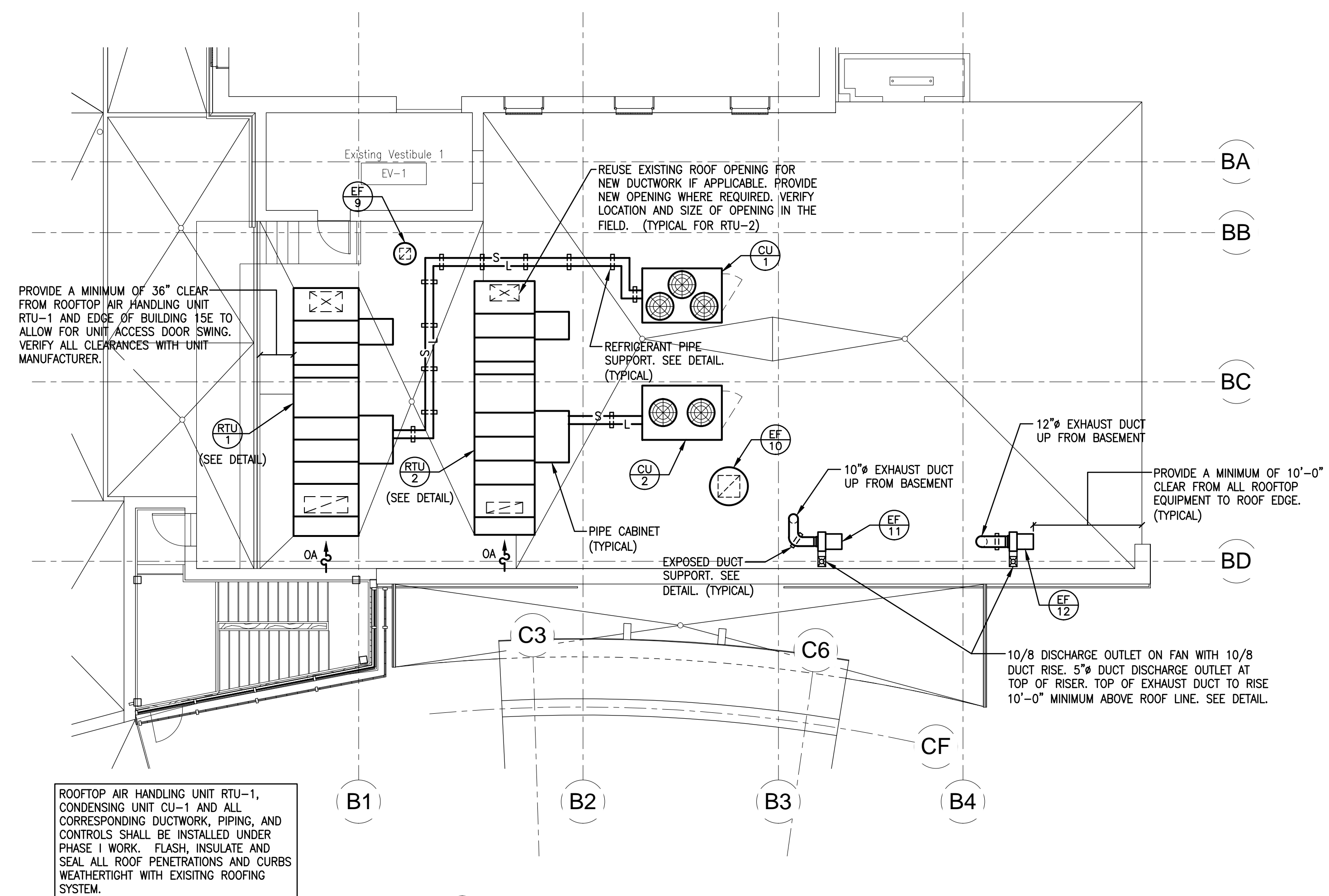
Revisions:	Date	Architect/Engineer:	Seal:	Drawing Title	Project Title	Date	
		 Architecture SERVICE DISABLED VETERAN OWNED SMALL BUSINESS		PARTIAL BASEMENT FLOOR - PHASE II - HVAC DUCTWORK PLAN	Expand and Renovate Urgent Care Area - 15E at Castle Point	March 22, 2013	
				As Noted	Building Number	Checked	Drawn
				Final Contract Documents	15	Andres	Huylo
					Location	100 Route 9D Castle Point, NY 12511	
						MH-104	



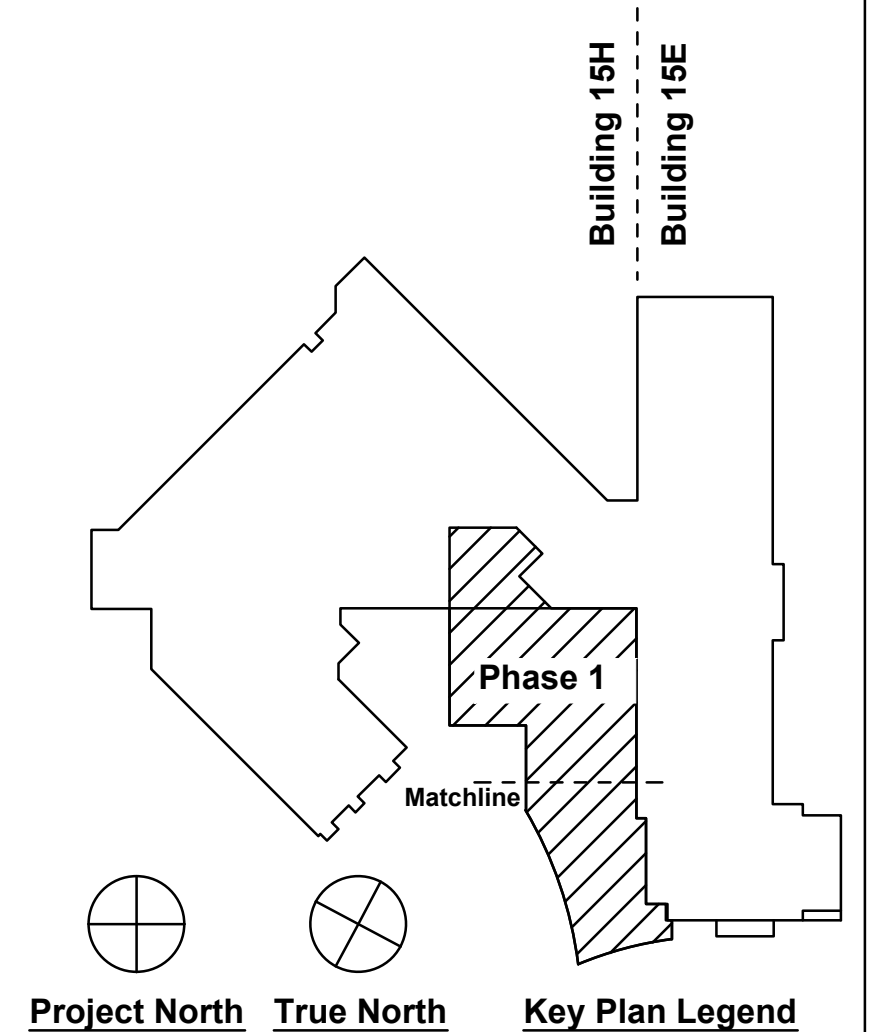
1 PARTIAL ROOF - PHASE I - HVAC PLAN
 WH20/SCALE: 1/8"=1'-0"



2 PARTIAL ROOF - PHASE I - HVAC PLAN
 WH20/SCALE: 1/8"=1'-0"



3 ROOF - PHASE II - HVAC PLAN
 WH20/SCALE: 1/8"=1'-0"



Revisions:	Date

Architect/Engineer:

Seal:

willow
 Architecture
 SERVICE DISABLED VETERAN OWNED SMALL BUSINESS

REGISTERED PROFESSIONAL ARCHITECT
 No. 10267
 STATE OF NEW YORK

Drawing Title ROOF - PHASE I AND II - HVAC PLANS Scale As Noted Issued For Final Contract Documents	Project Title Expand and Renovate Urgent Care Area - 15E at Castle Point Building Number 15 Location 100 Route 9D Castle Point, NY 12511	Date March 22, 2013 Project No. 620-332 Drawing No. MH-201
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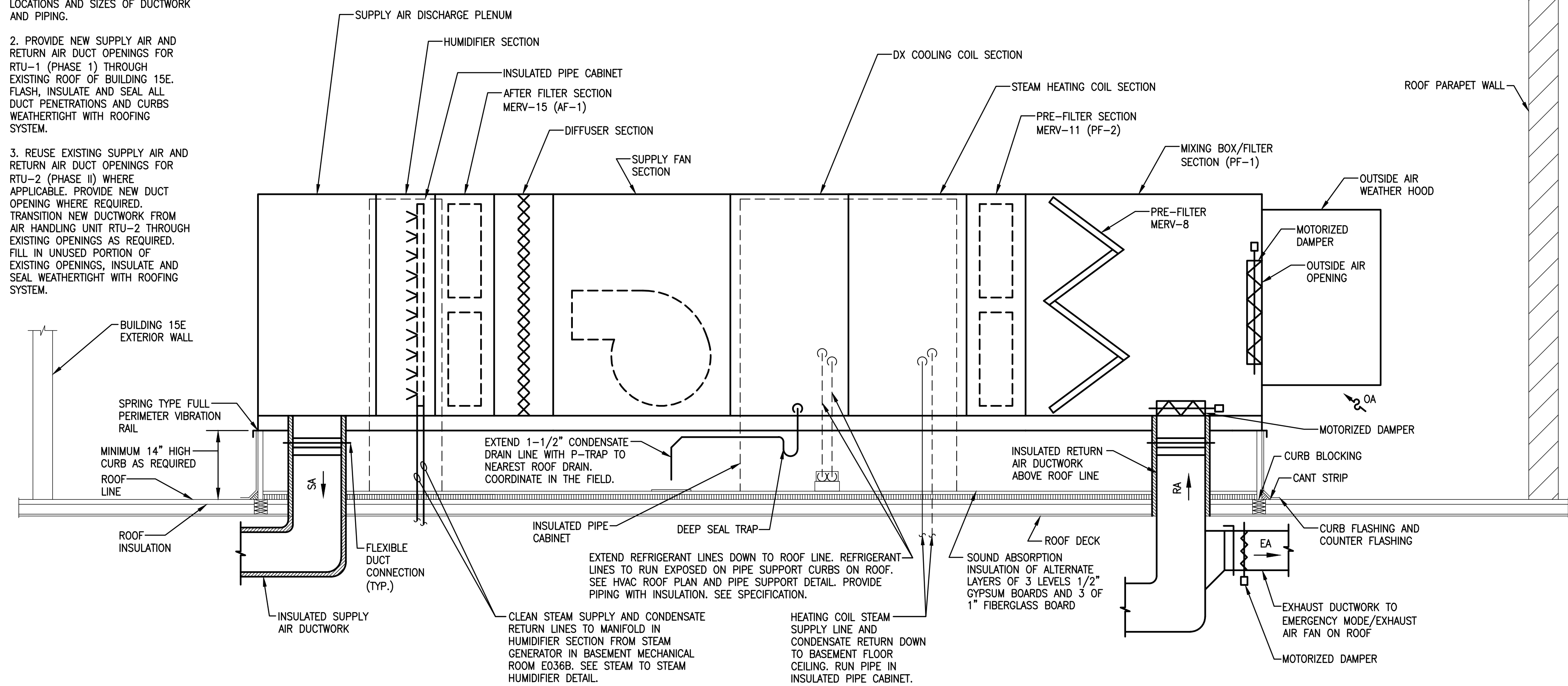


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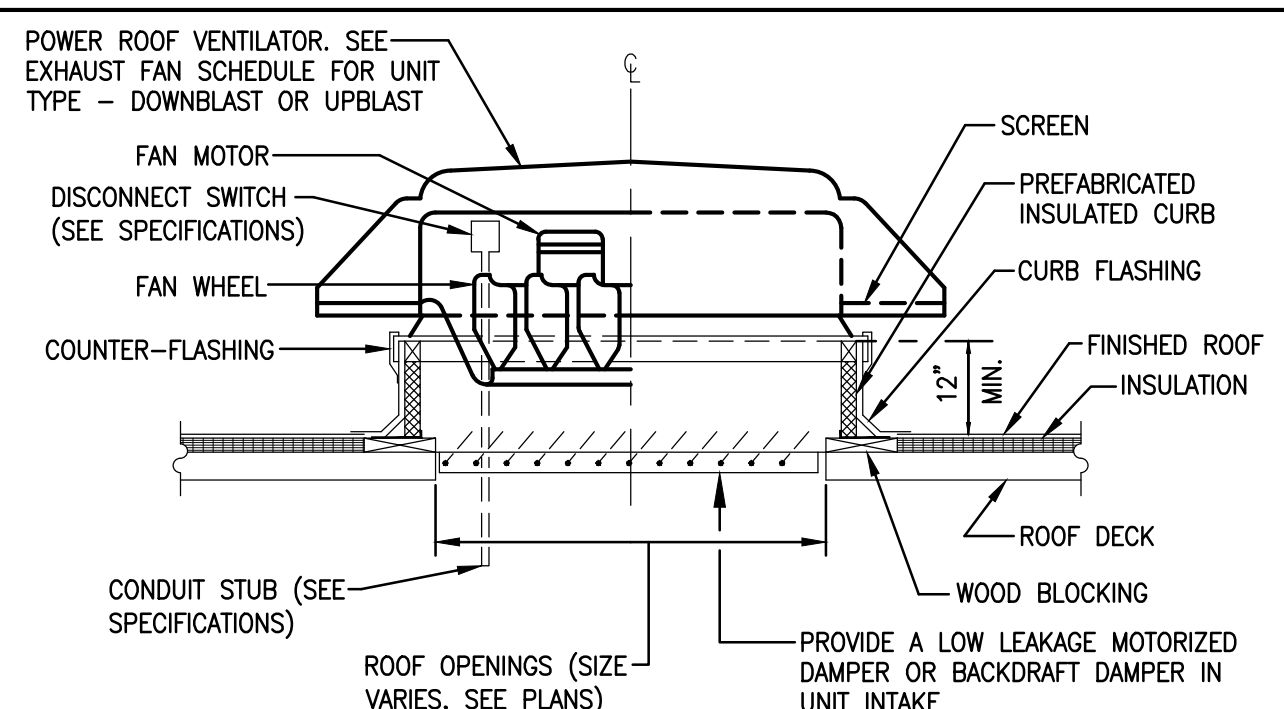
1. SEE HVAC PLANS FOR EXACT LOCATIONS AND SIZES OF DUCTWORK AND PIPING.

2. PROVIDE NEW SUPPLY AIR AND RETURN AIR DUCT OPENINGS FOR RTU-1 (PHASE I) THROUGH EXISTING ROOF OF BUILDING 15E. FLASH, INSULATE AND SEAL ALL DUCT PENETRATIONS AND CURBS WEATHERTIGHT WITH ROOFING SYSTEM.

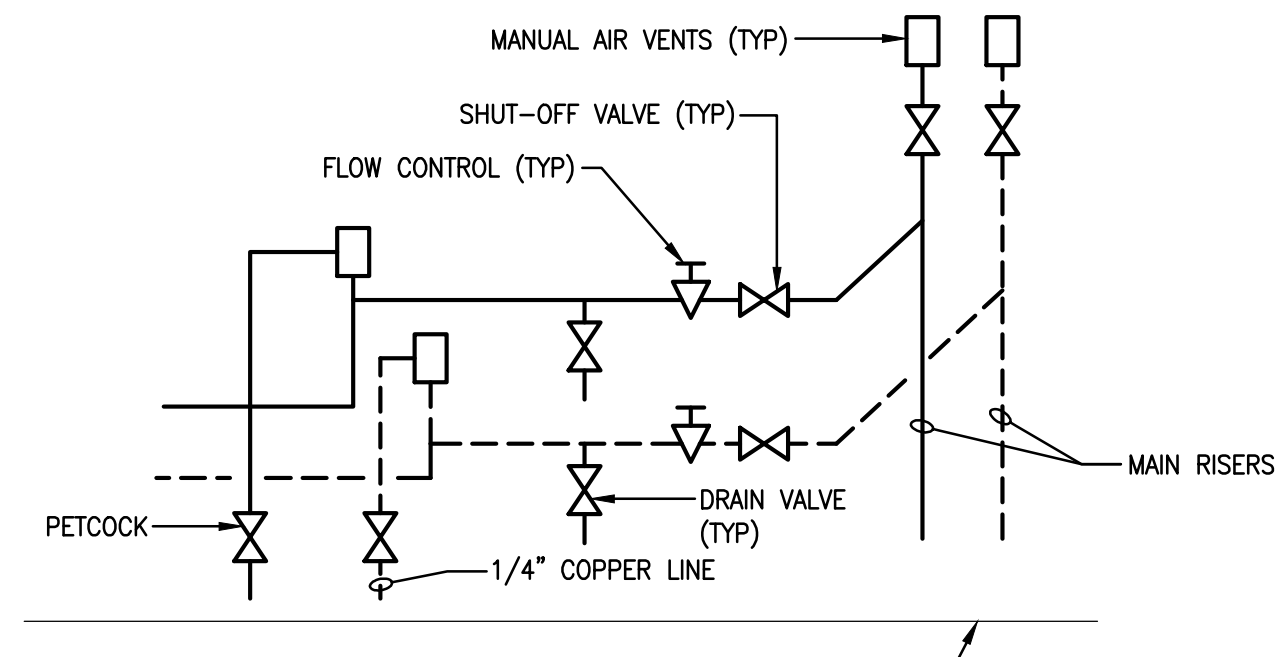
3. REUSE EXISTING SUPPLY AIR AND RETURN AIR DUCT OPENINGS FOR RTU-2 (PHASE II) WHERE APPLICABLE. PROVIDE NEW DUCT OPENING WHERE REQUIRED. TRANSITION NEW DUCTWORK FROM AIR HANDLING UNIT RTU-2 THROUGH EXISTING OPENINGS AS REQUIRED. FILL IN UNUSED PORTION OF EXISTING OPENINGS, INSULATE AND SEAL WEATHERTIGHT WITH ROOFING SYSTEM.



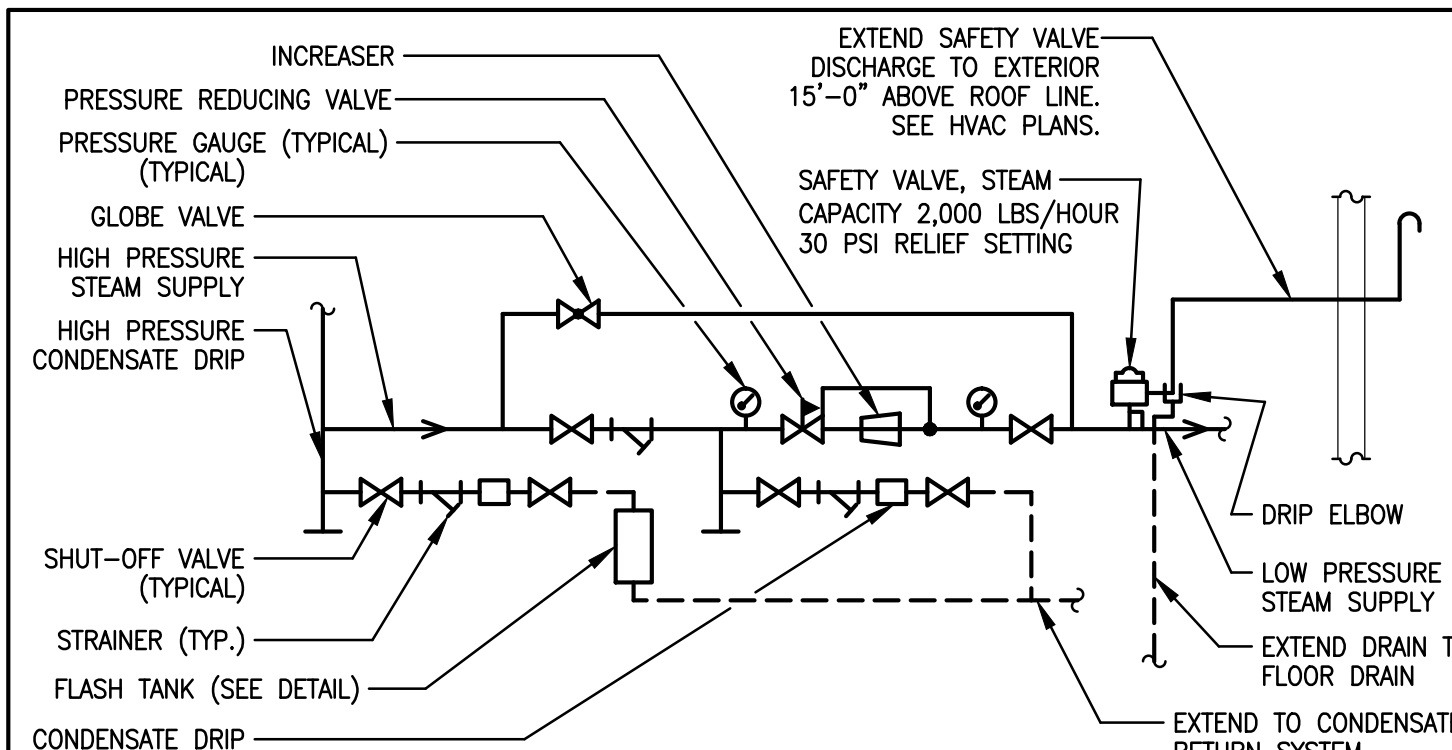
ROOFTOP AIR HANDLING UNIT RTU-1 & 2 DETAIL
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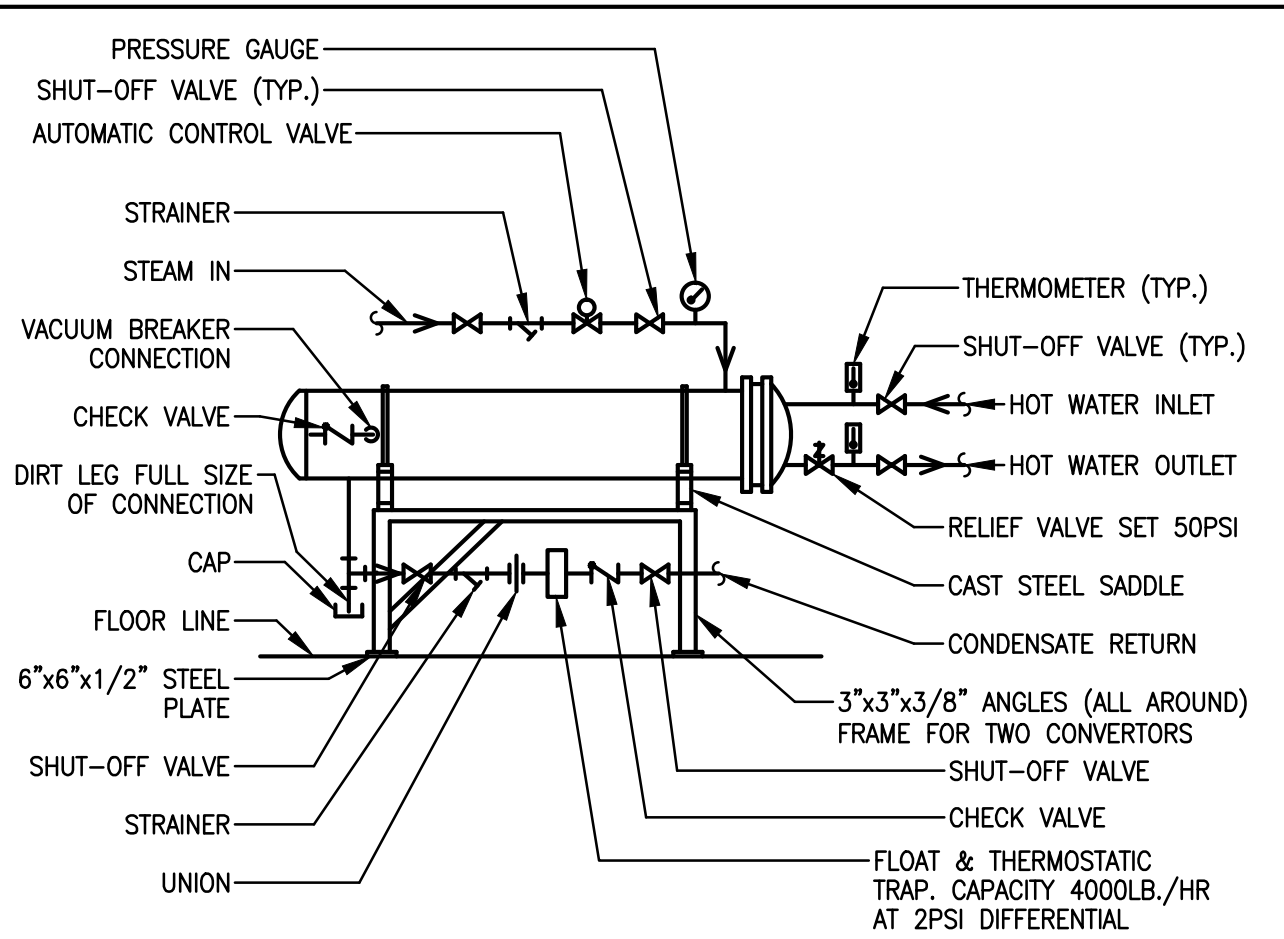
POWER ROOF VENTILATOR DETAIL
SCALE: NOT TO SCALE



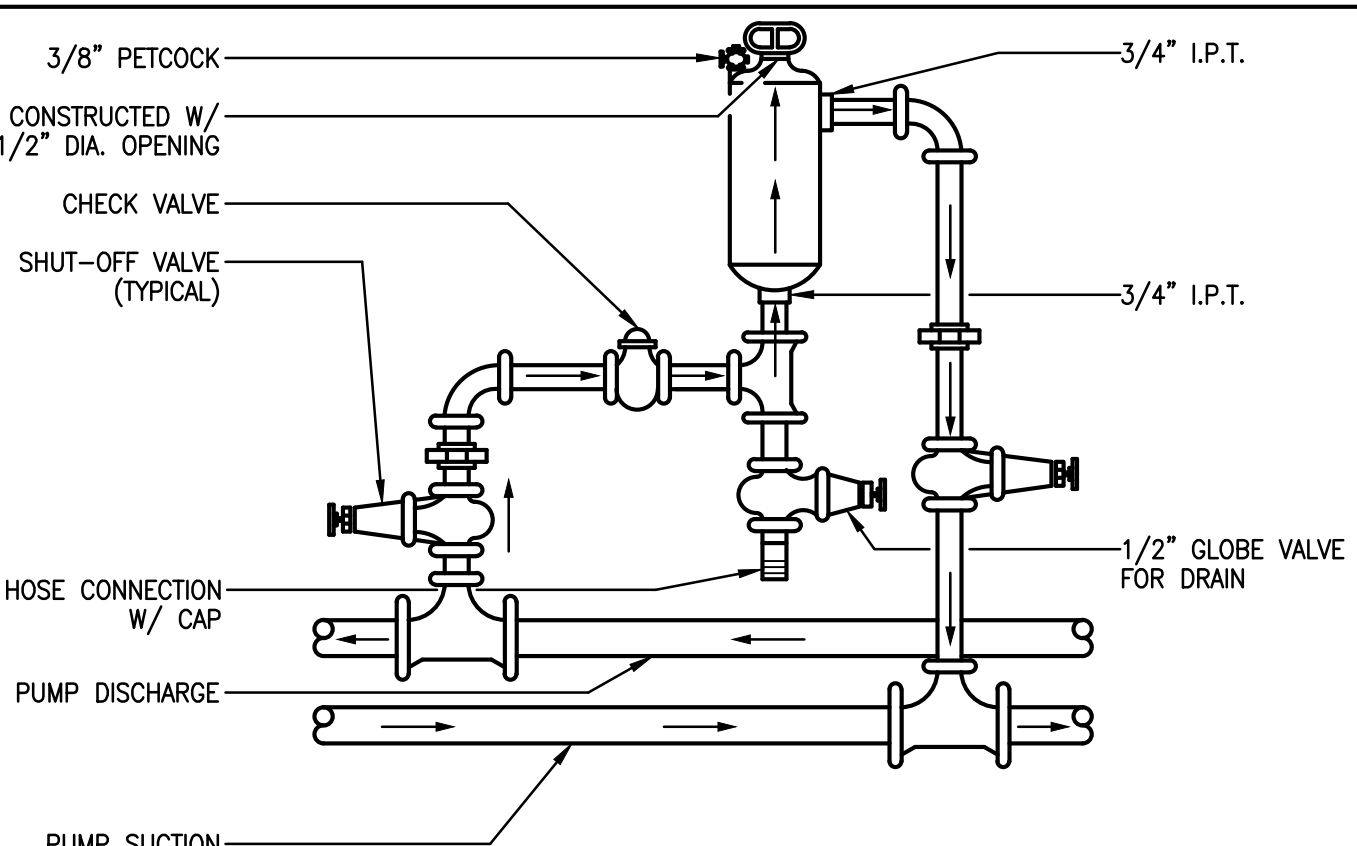
MANUAL AIR VENT AT PIPE DROPS & RISERS
SCALE: NOT TO SCALE



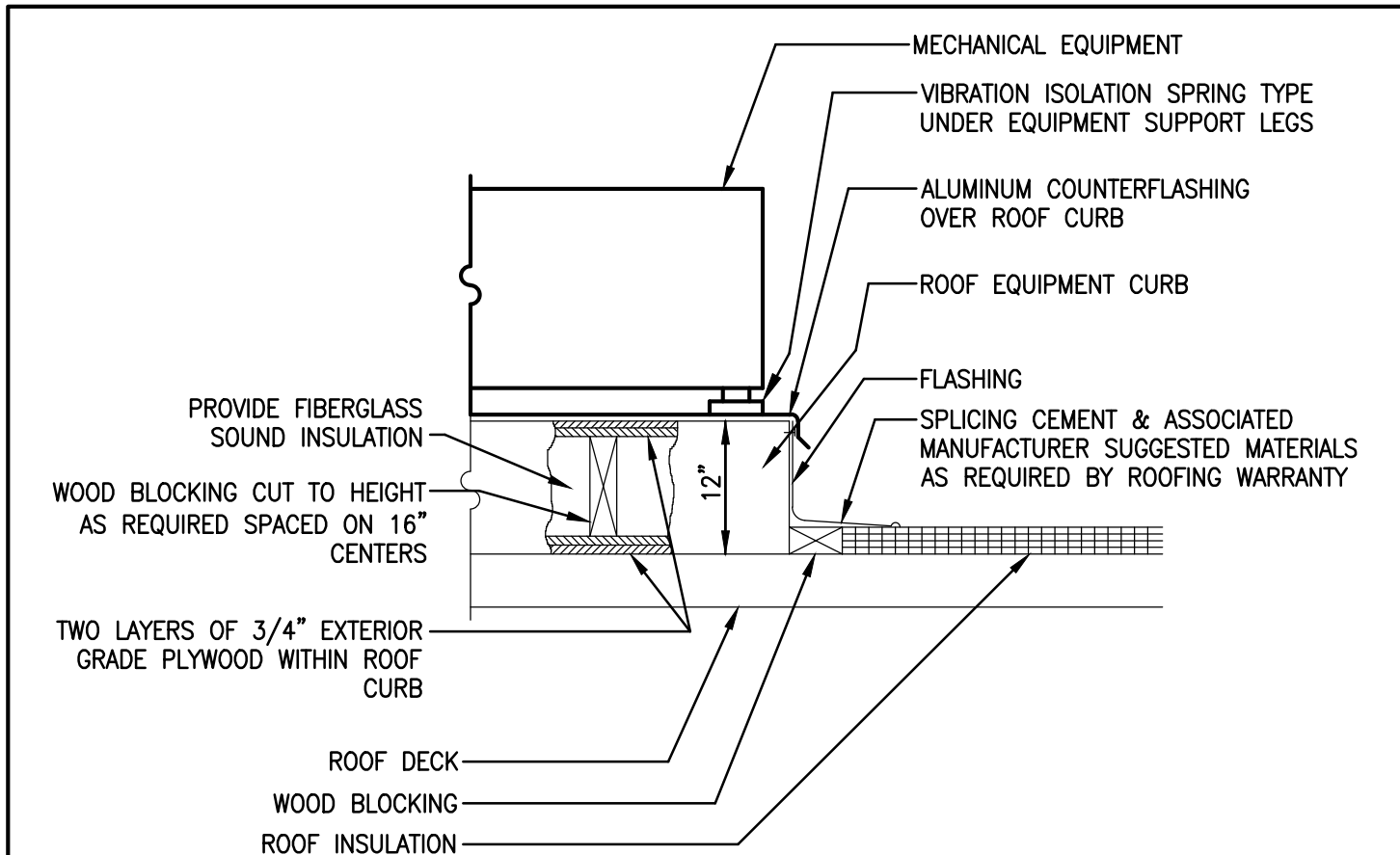
SINGLE STAGE STEAM PRESSURE REDUCING STATION DETAIL
SCALE: NOT TO SCALE



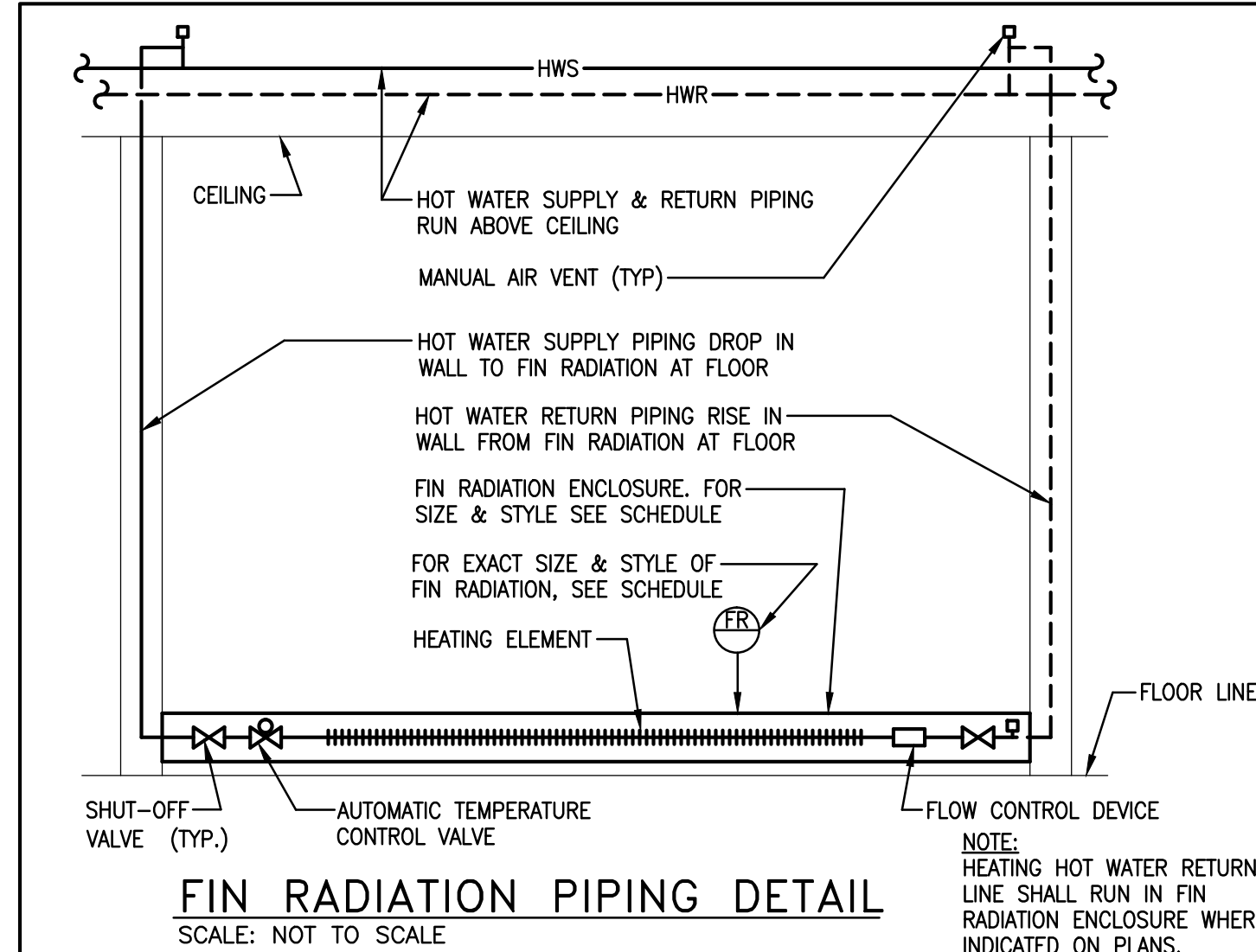
STEAM TO WATER CONVERTER DETAIL
SCALE: NOT TO SCALE



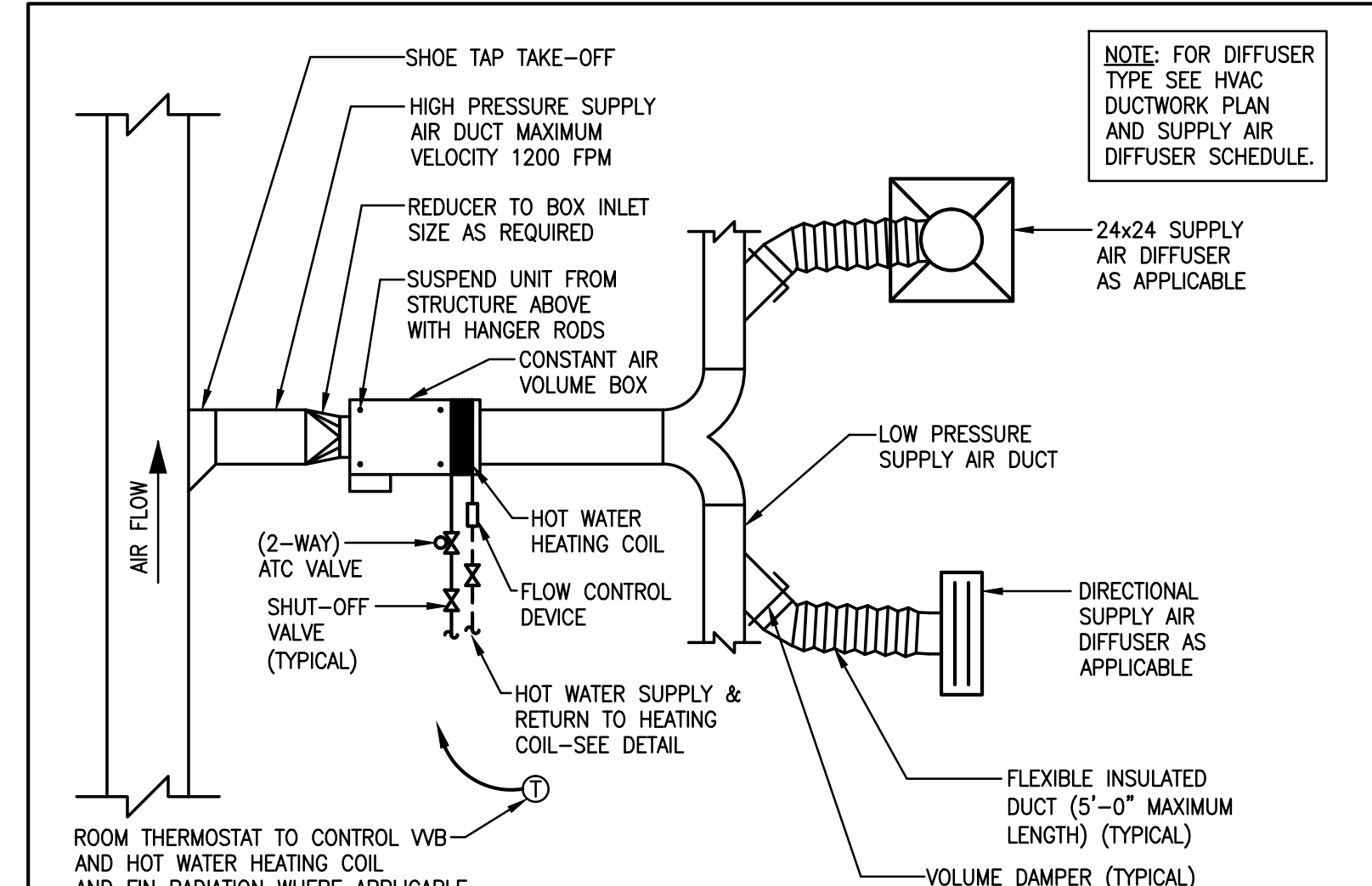
ONE SHOT CHEMICAL FEEDER
SCALE: NOT TO SCALE



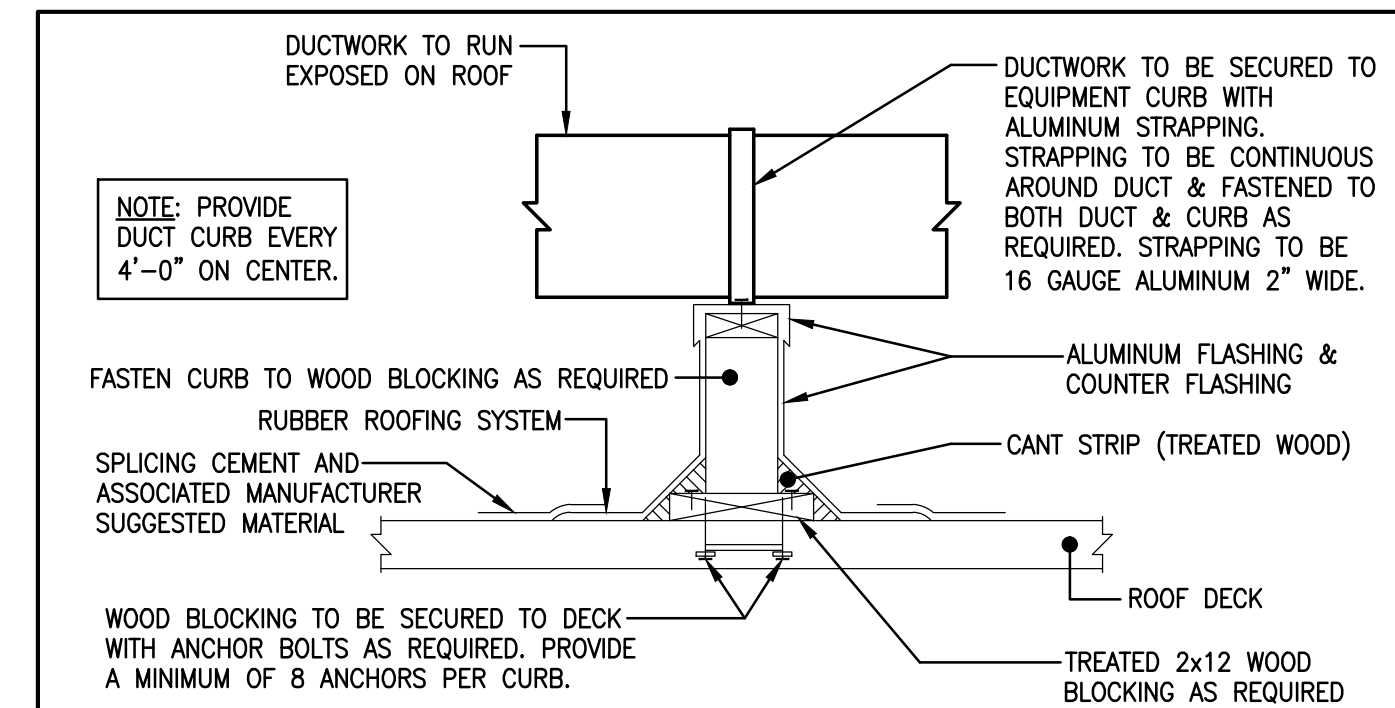
DETAIL AT UTILITY SET, CONDENSING UNIT AND EXHAUST FAN CURBS ON ROOF
SCALE: NOT TO SCALE



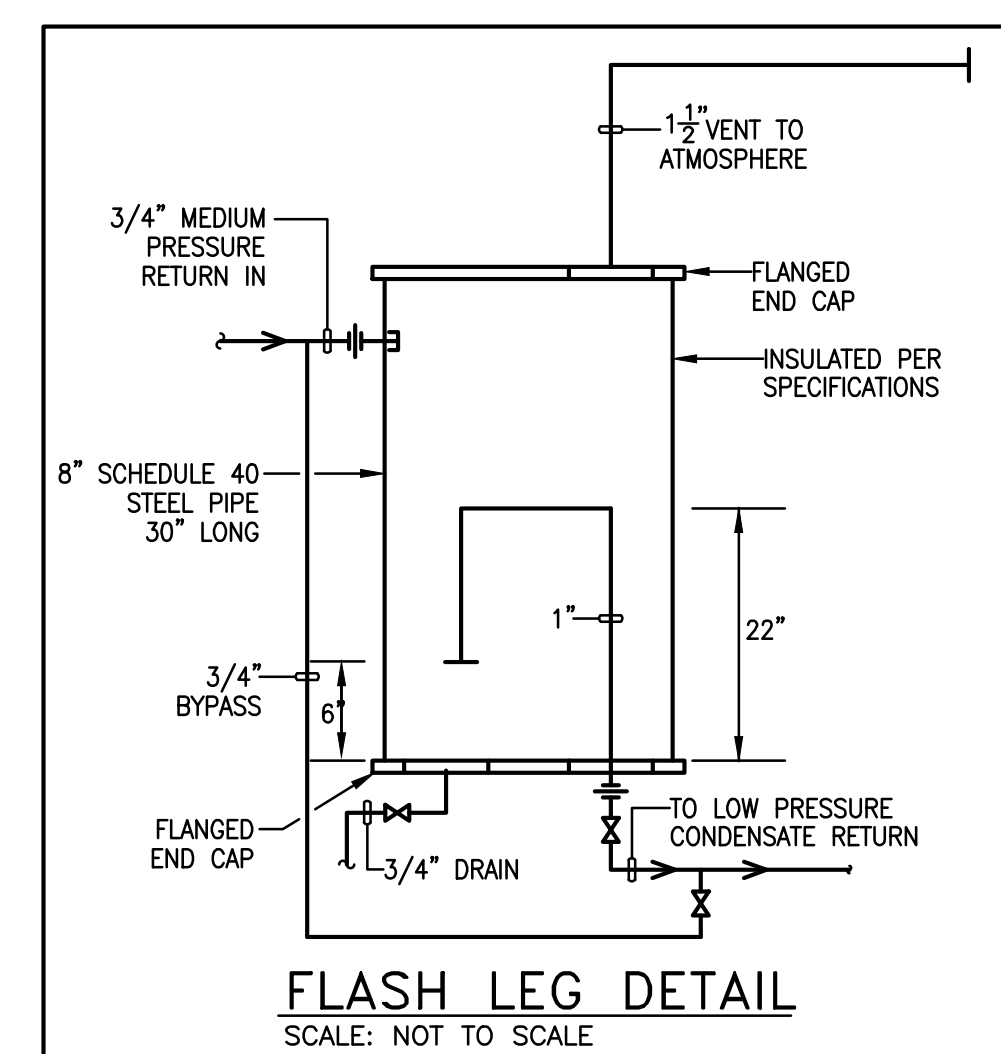
FIN RADIATION PIPING DETAIL
SCALE: NOT TO SCALE



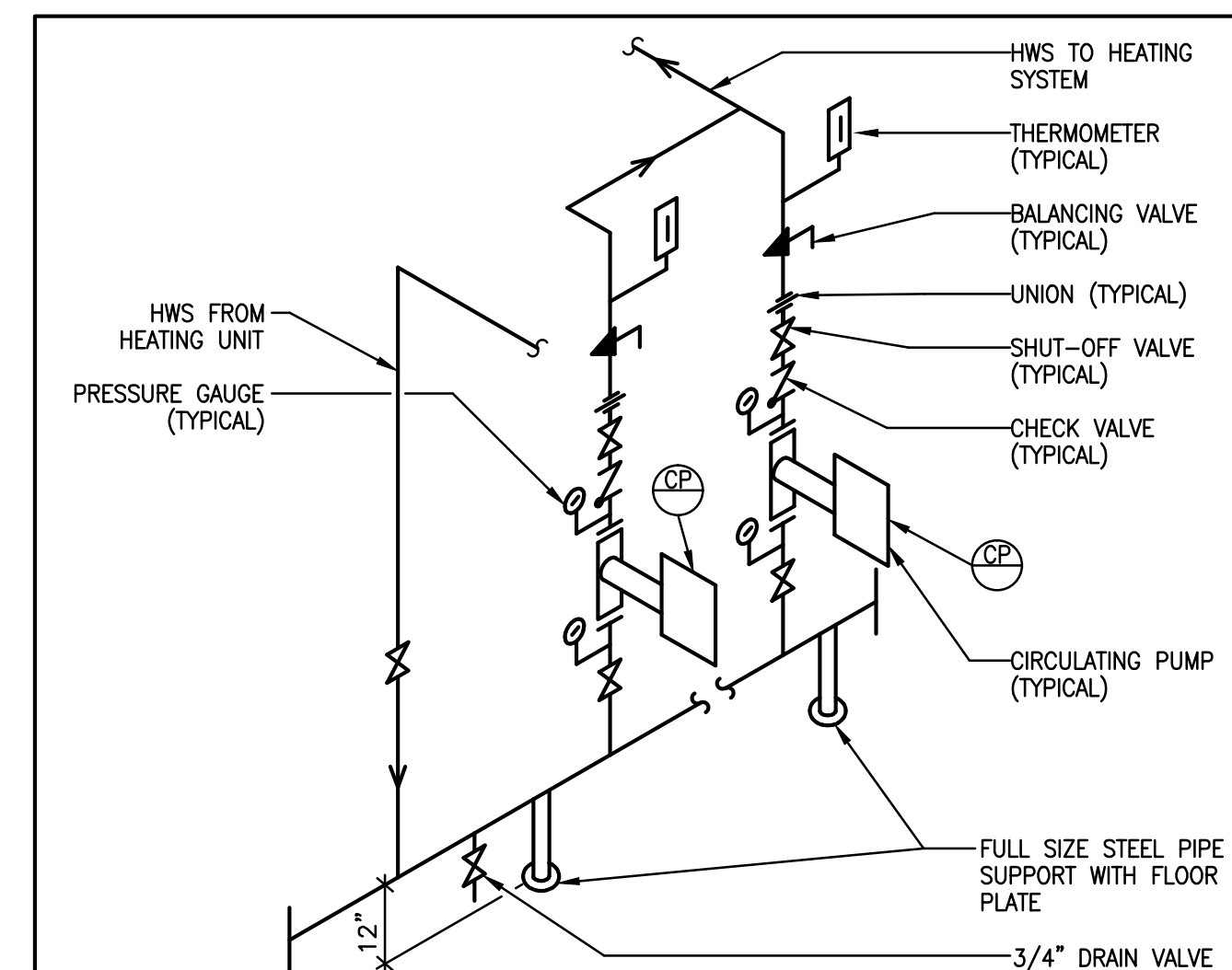
TYPICAL CONSTANT AIR VOLUME BOX INSTALLATION
SCALE: NOT TO SCALE



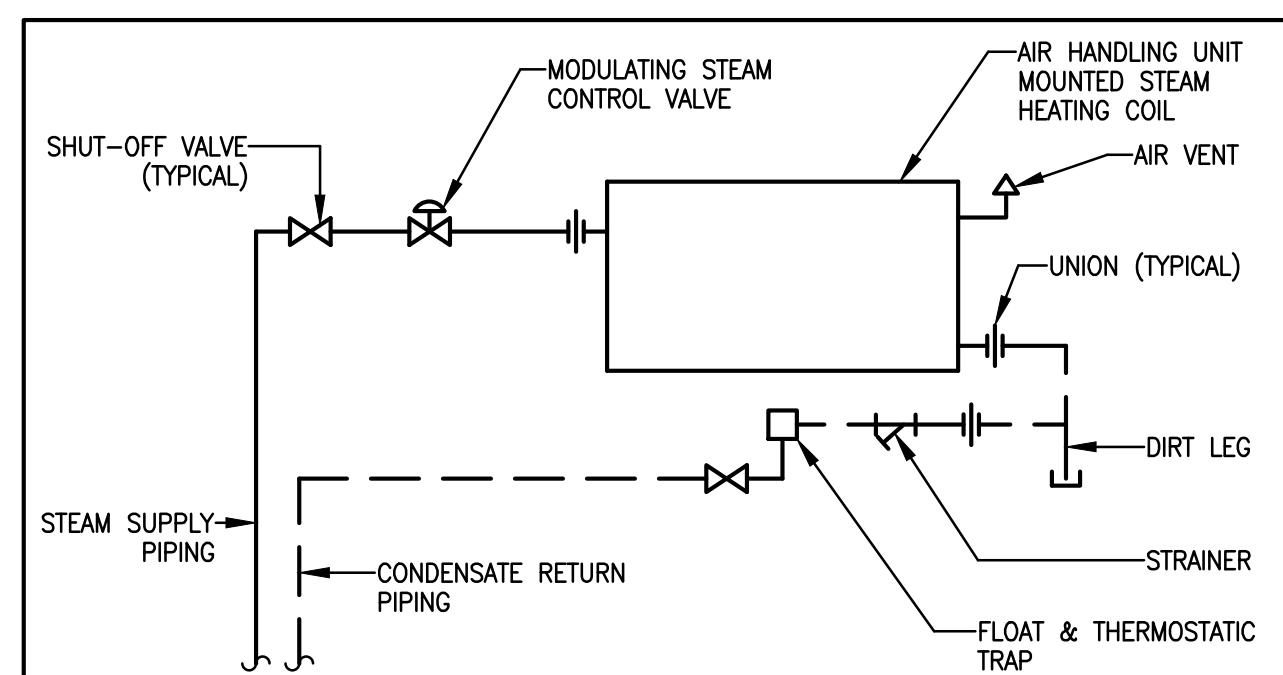
DETAIL AT EQUIPMENT SUPPORT CURB
SCALE: NOT TO SCALE



FLASH LEG DETAIL
SCALE: NOT TO SCALE



PIPING CONNECTIONS AT CIRCULATING PUMPS
SCALE: NOT TO SCALE



PIPING DETAIL AT HEATING COIL - STEAM
SCALE: NOT TO SCALE

Revisions:	Date

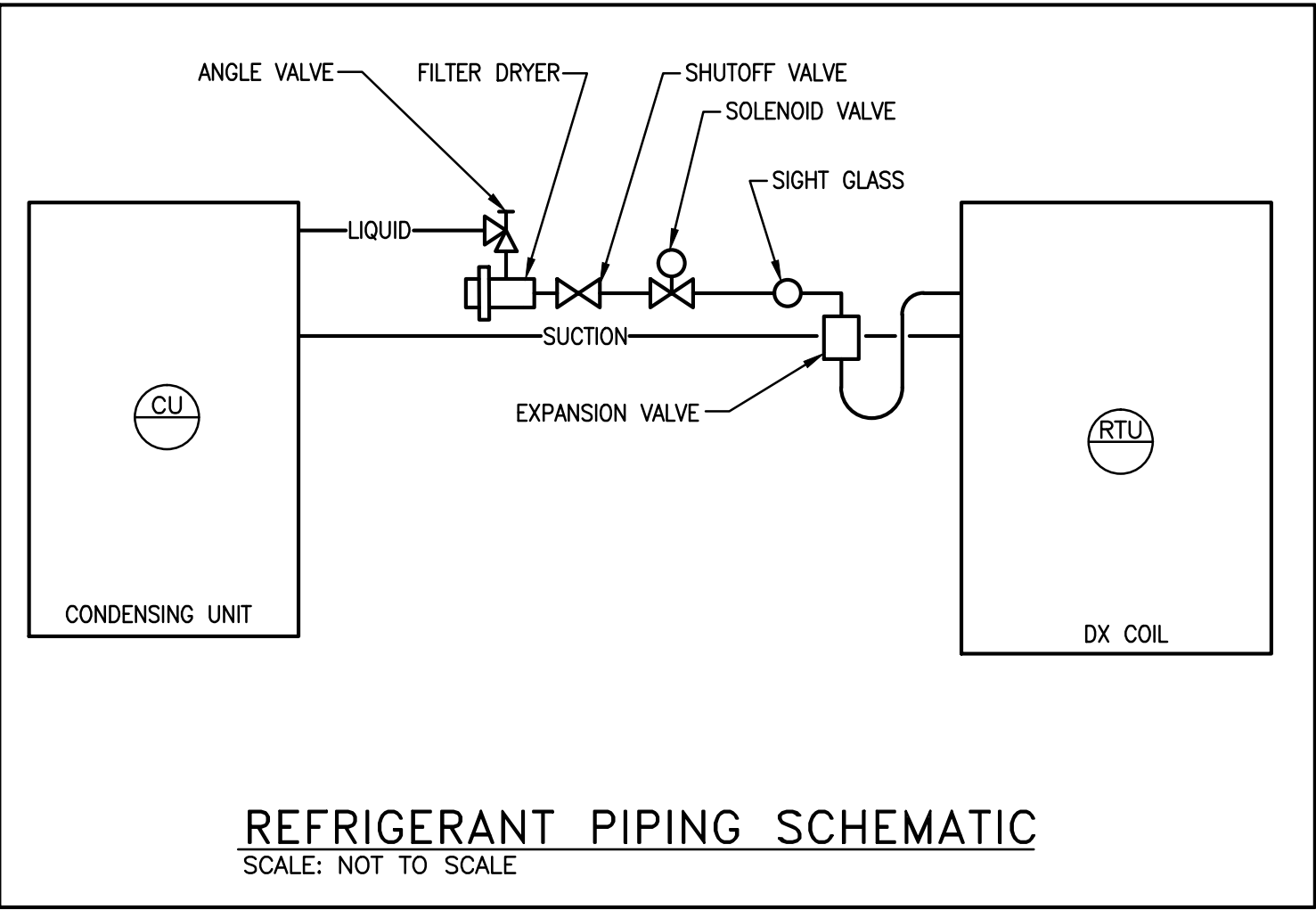
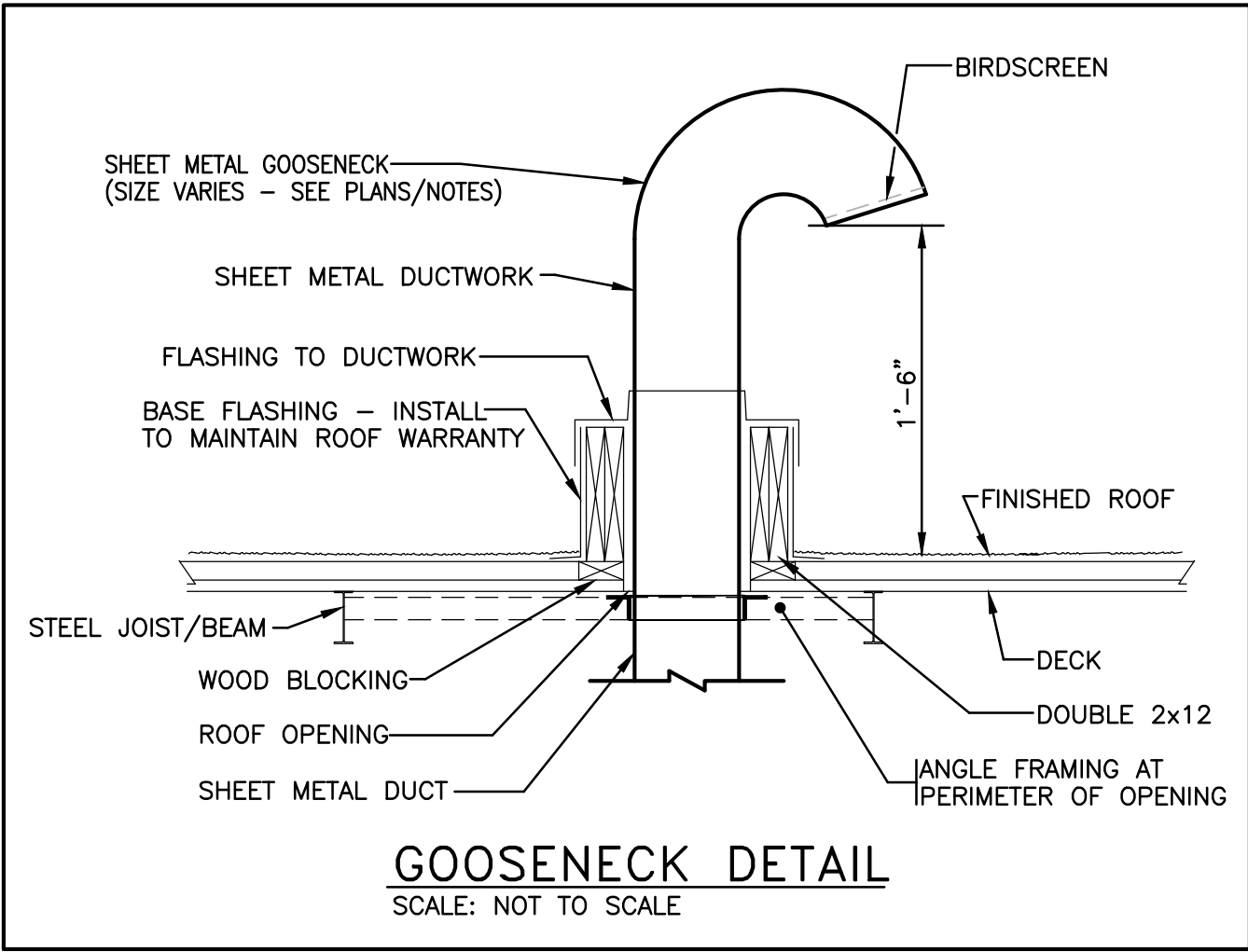
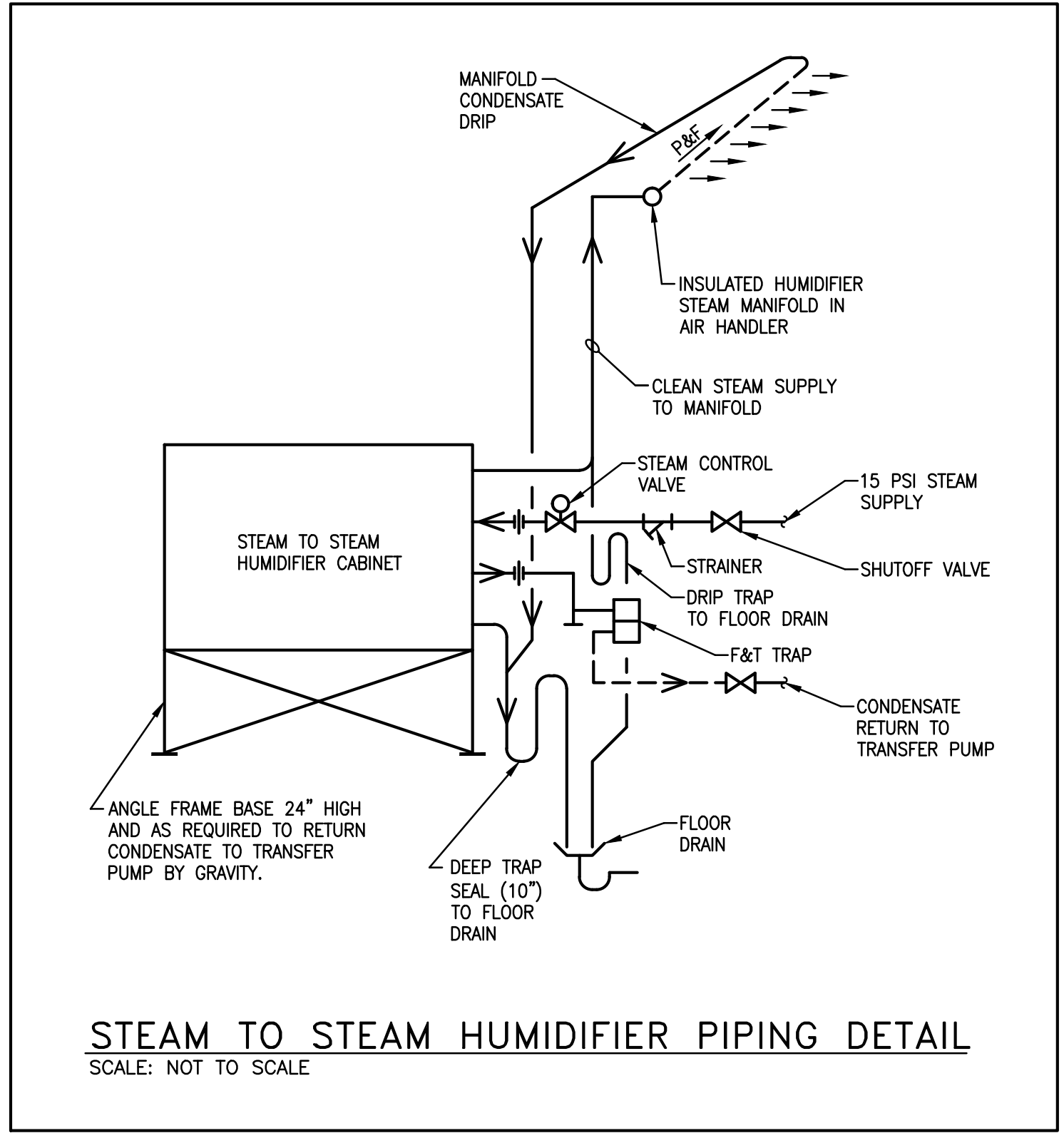
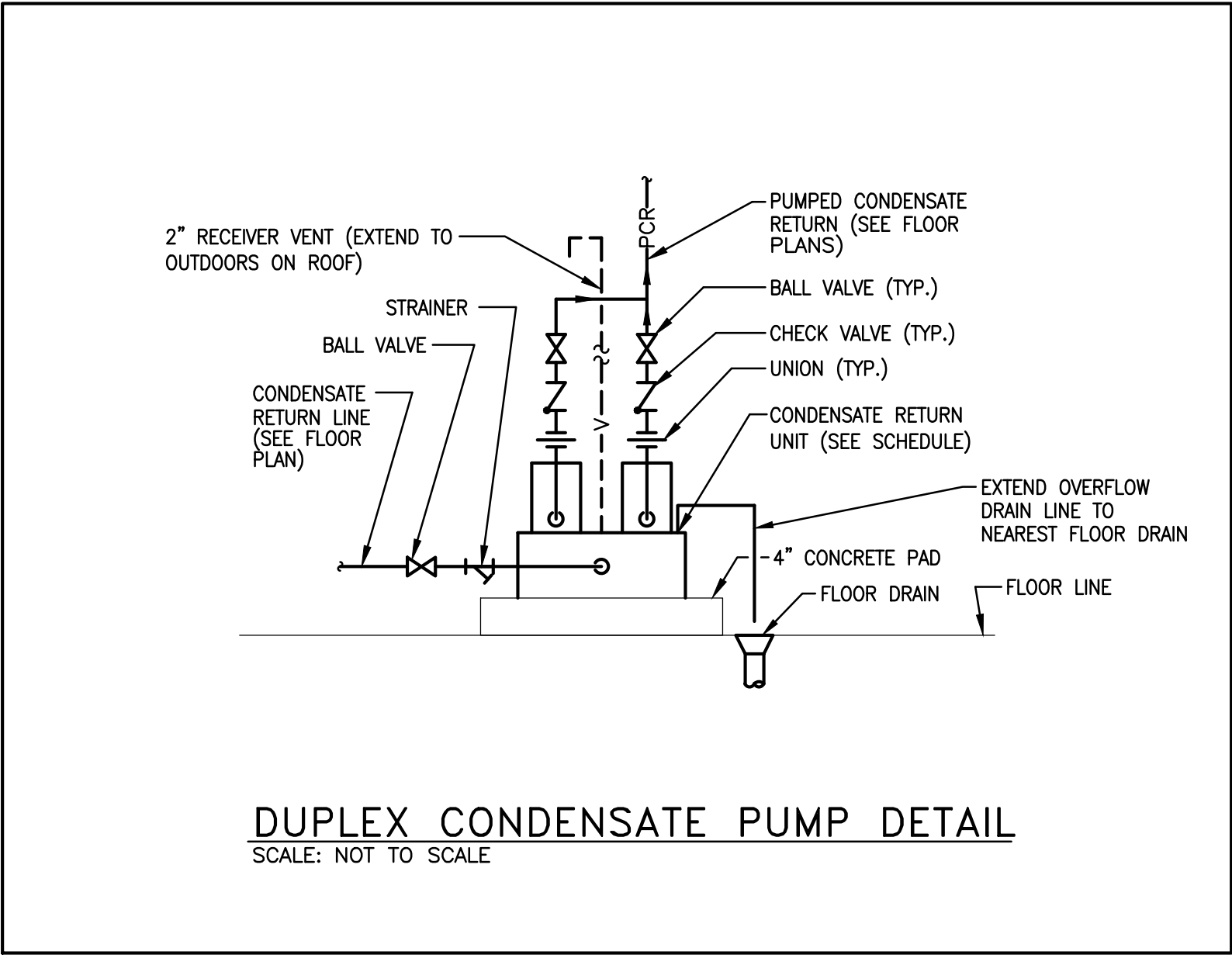
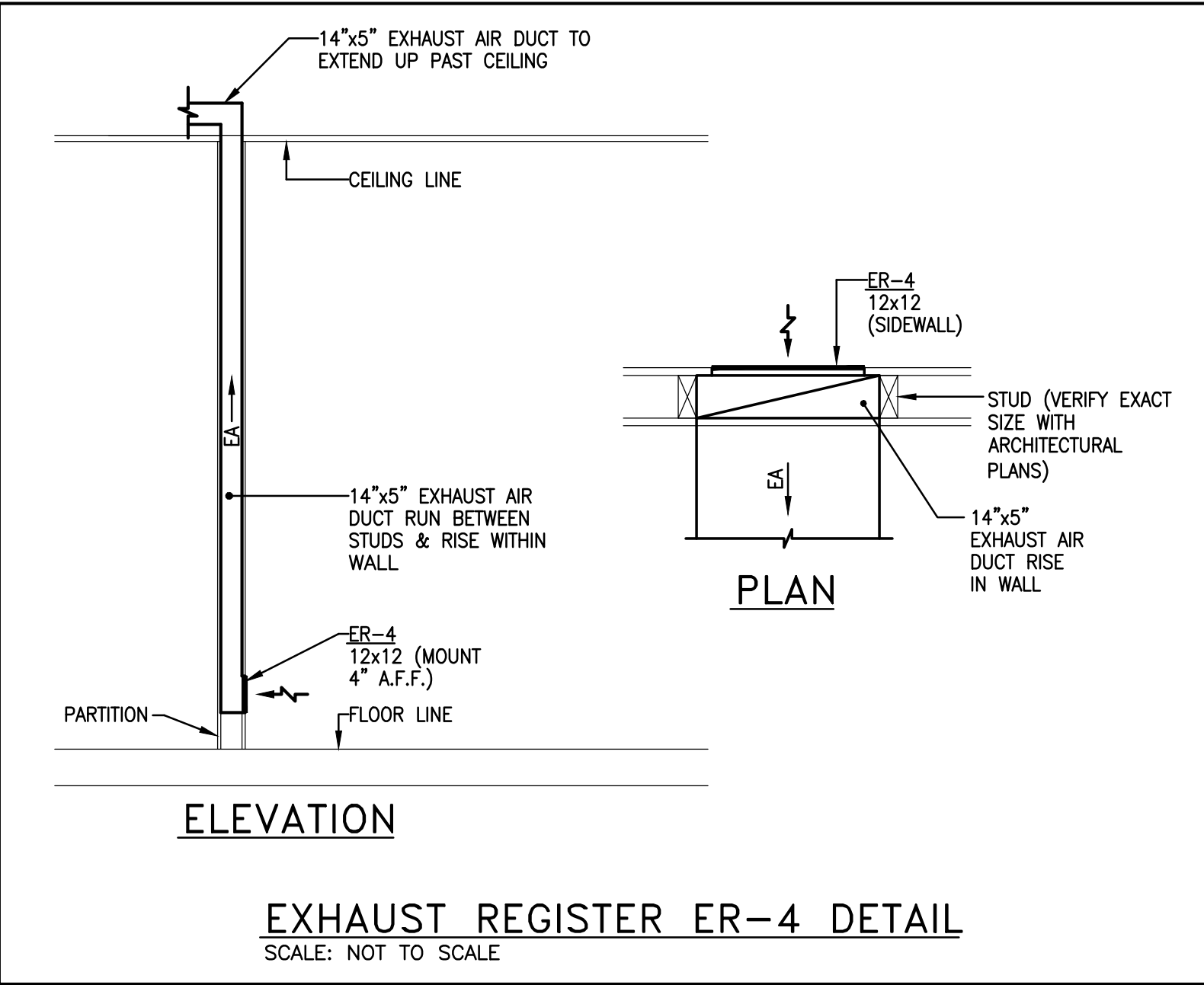
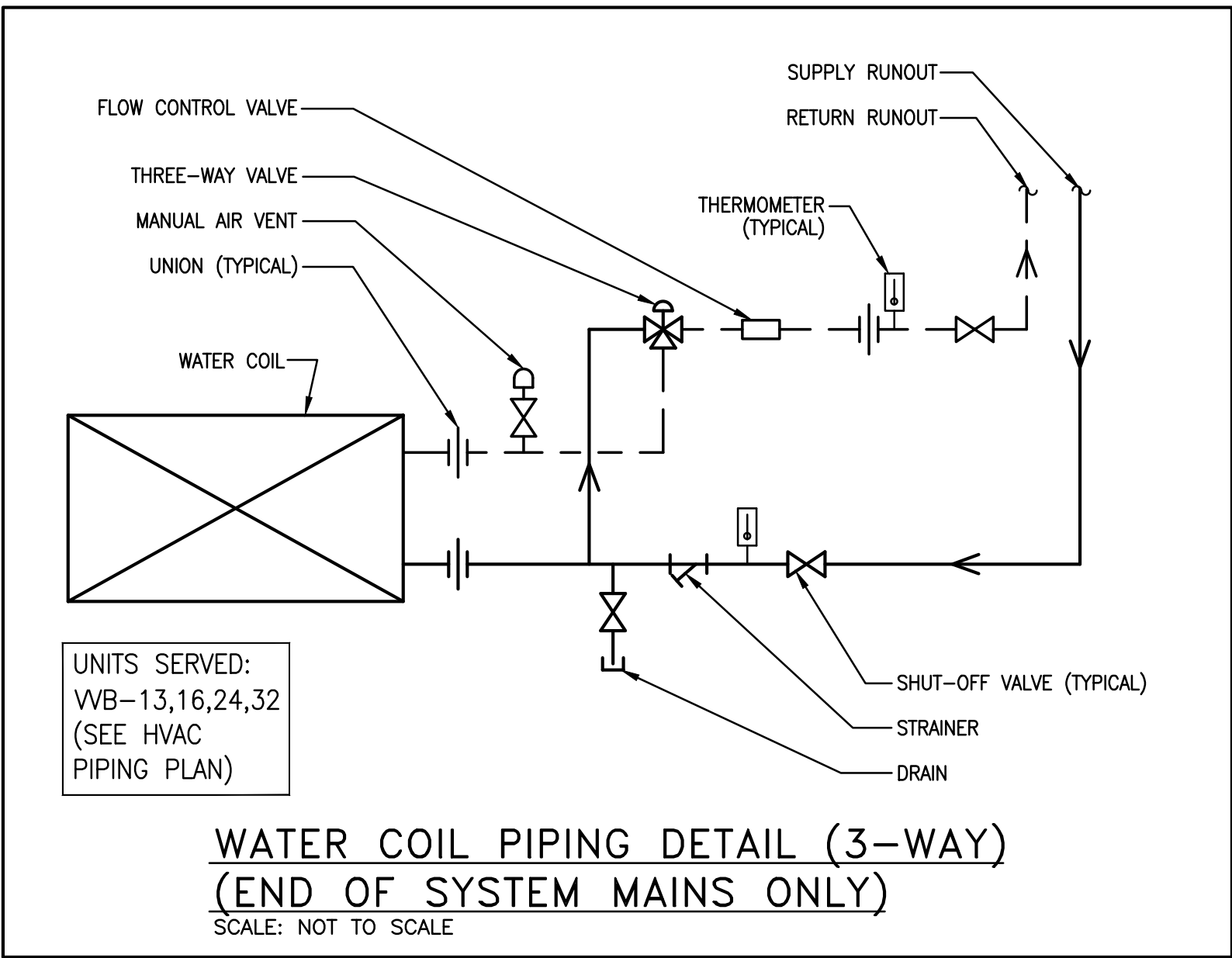
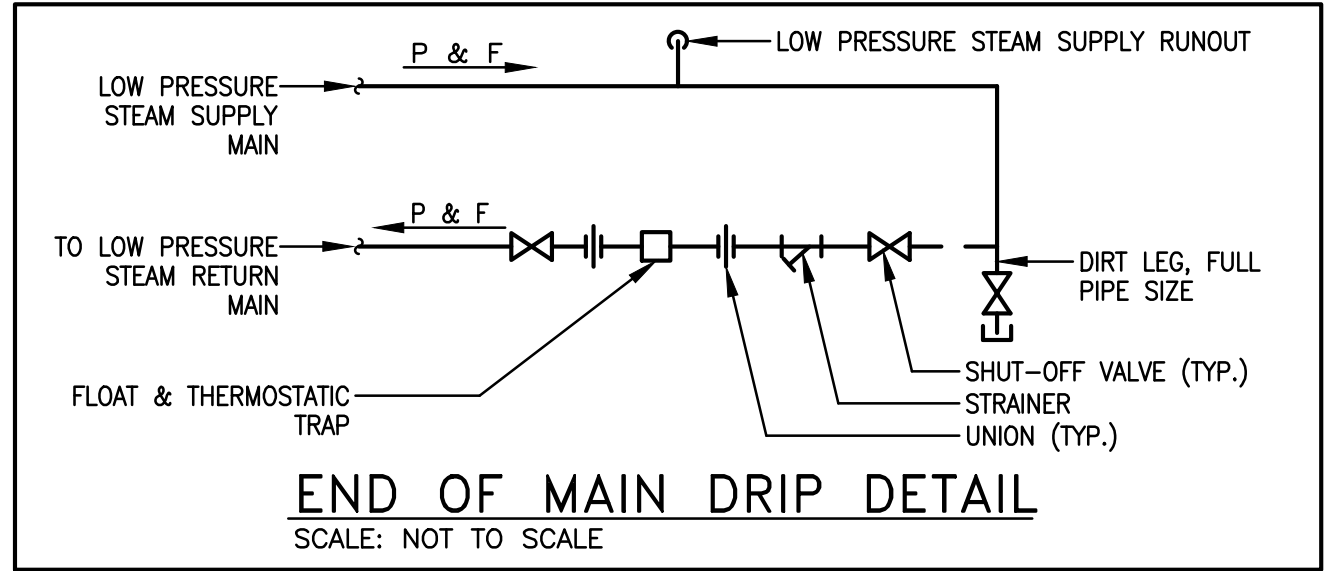
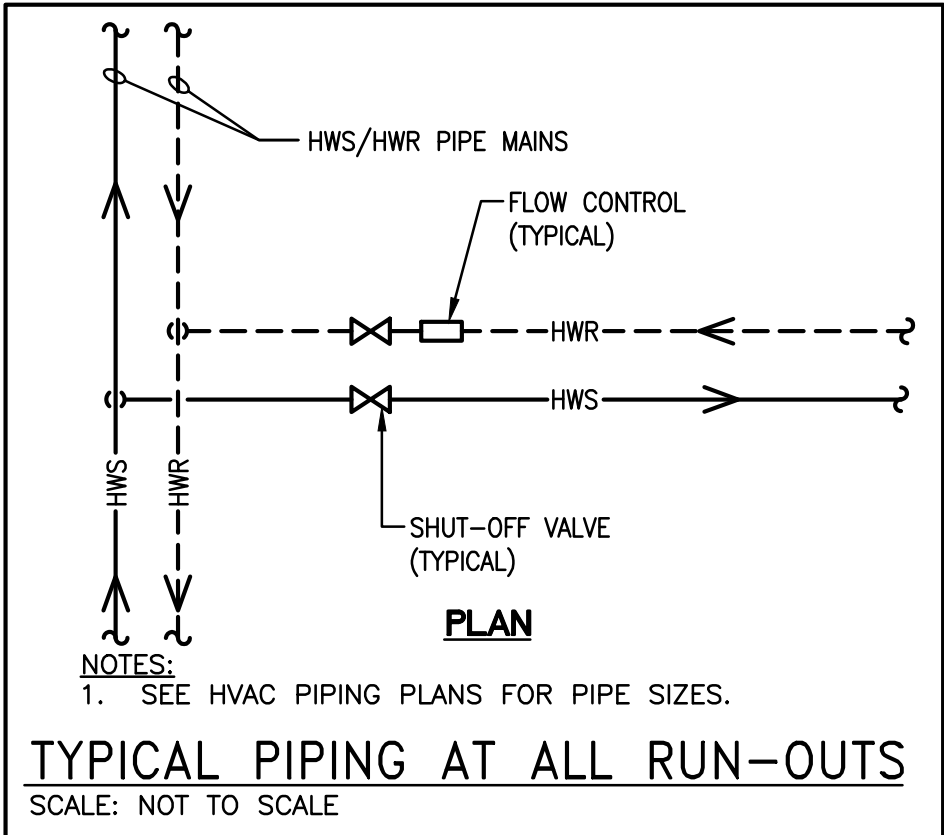
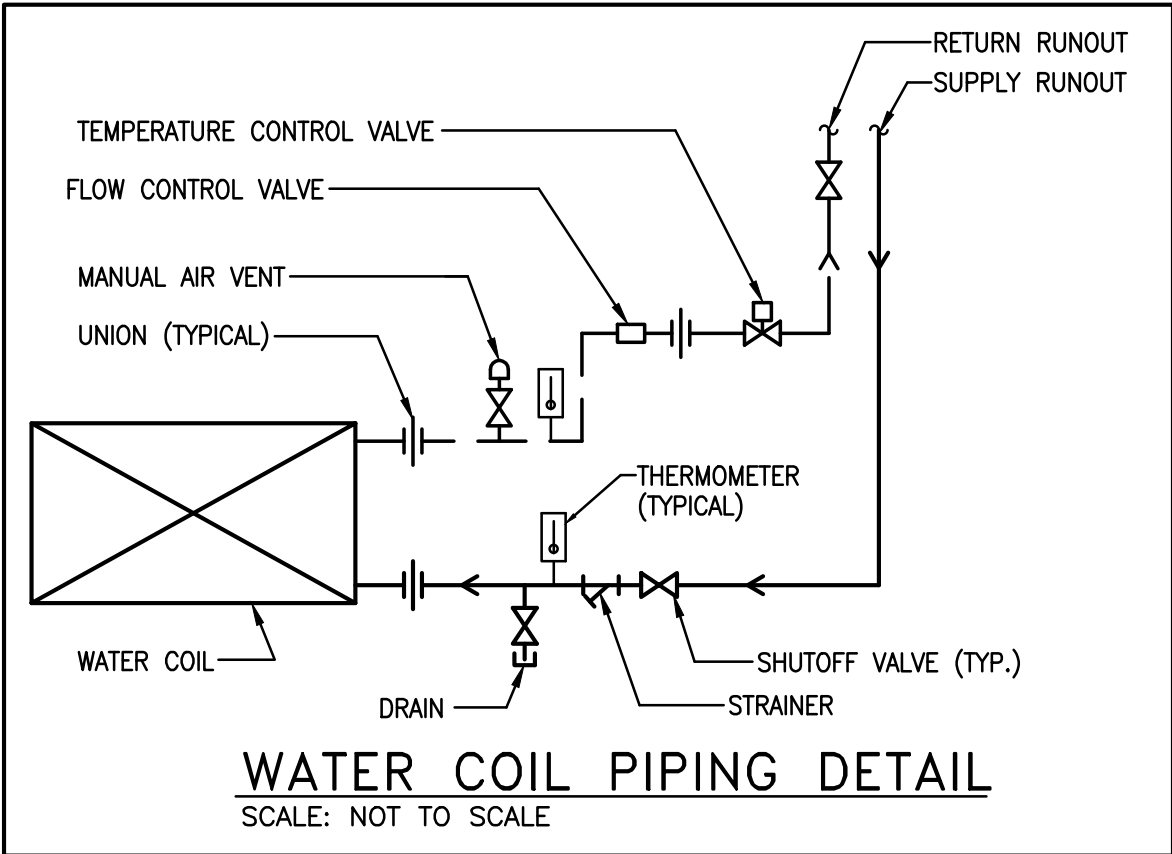
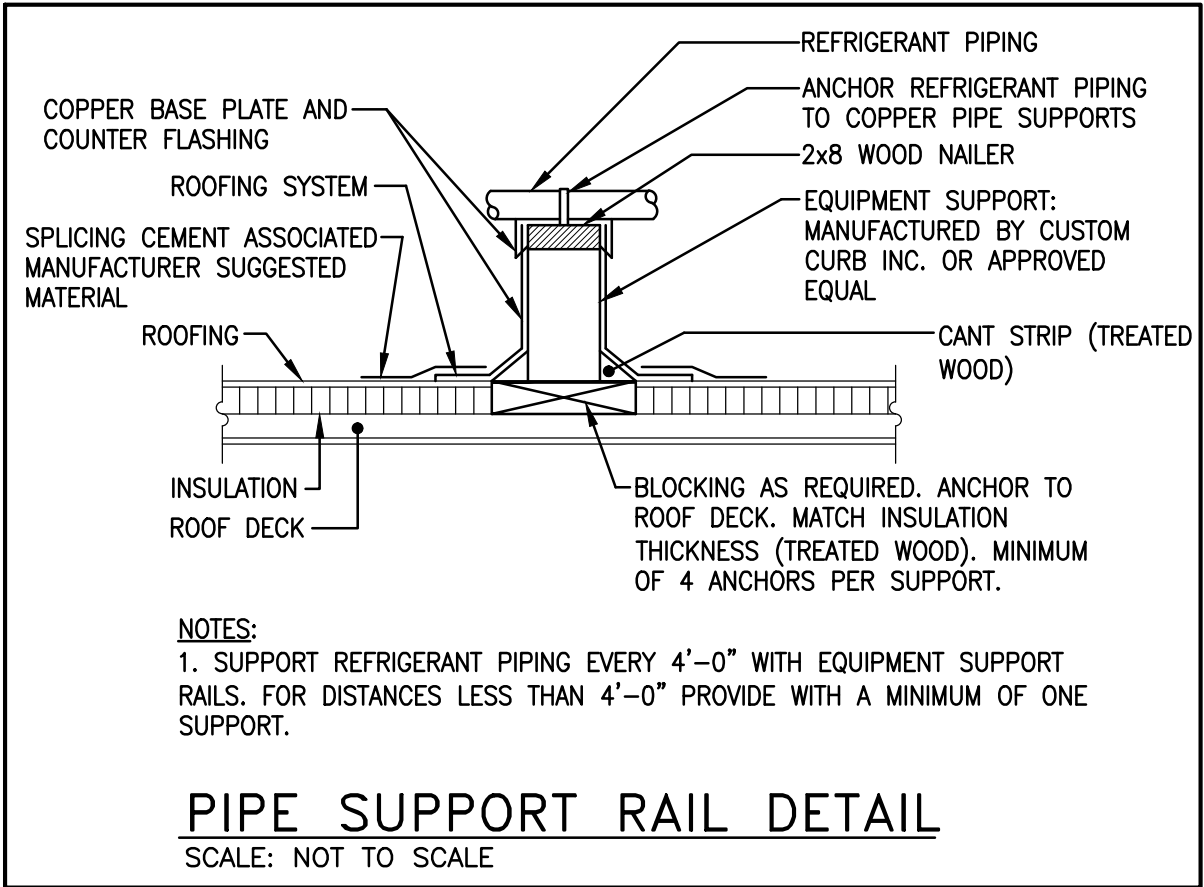
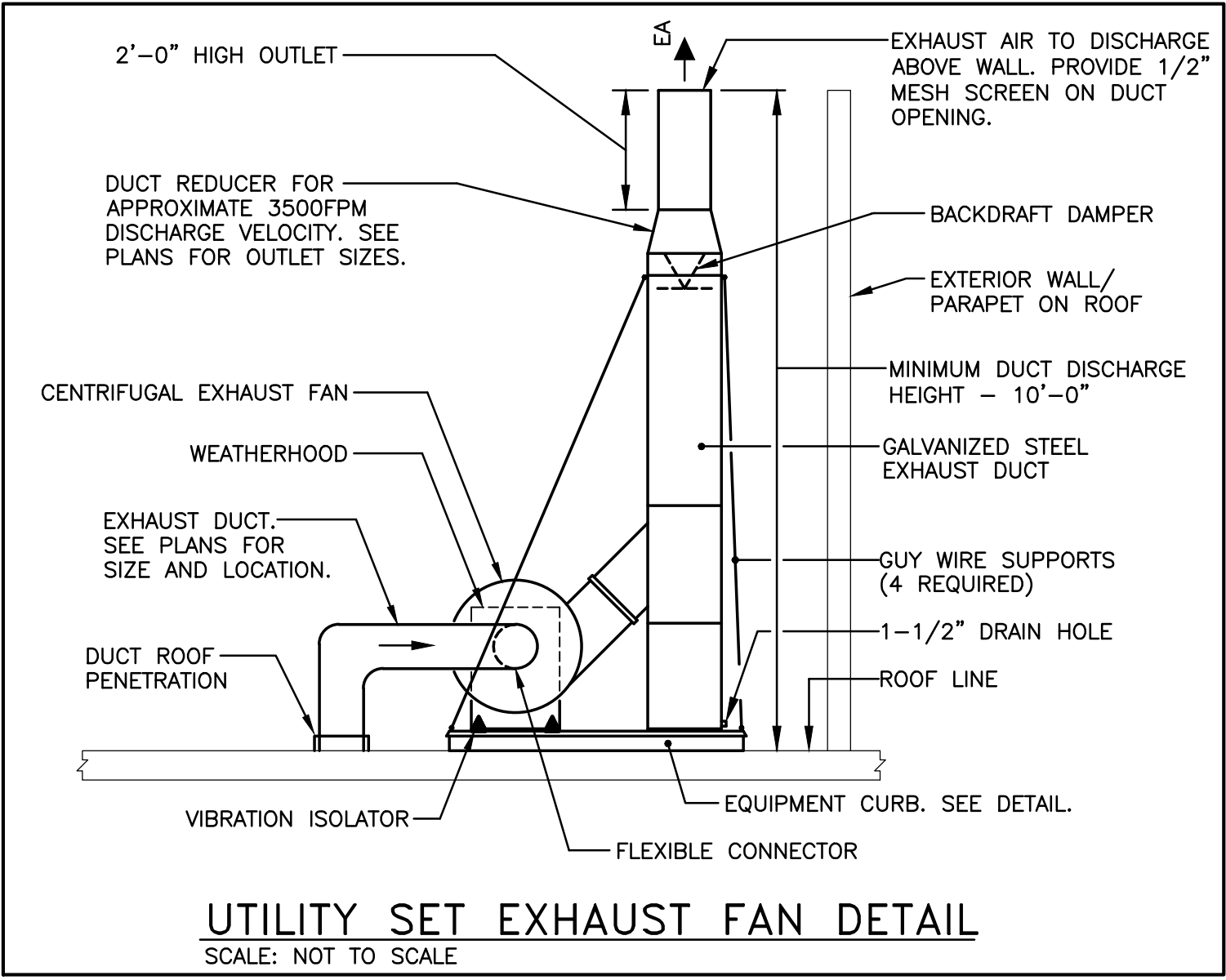
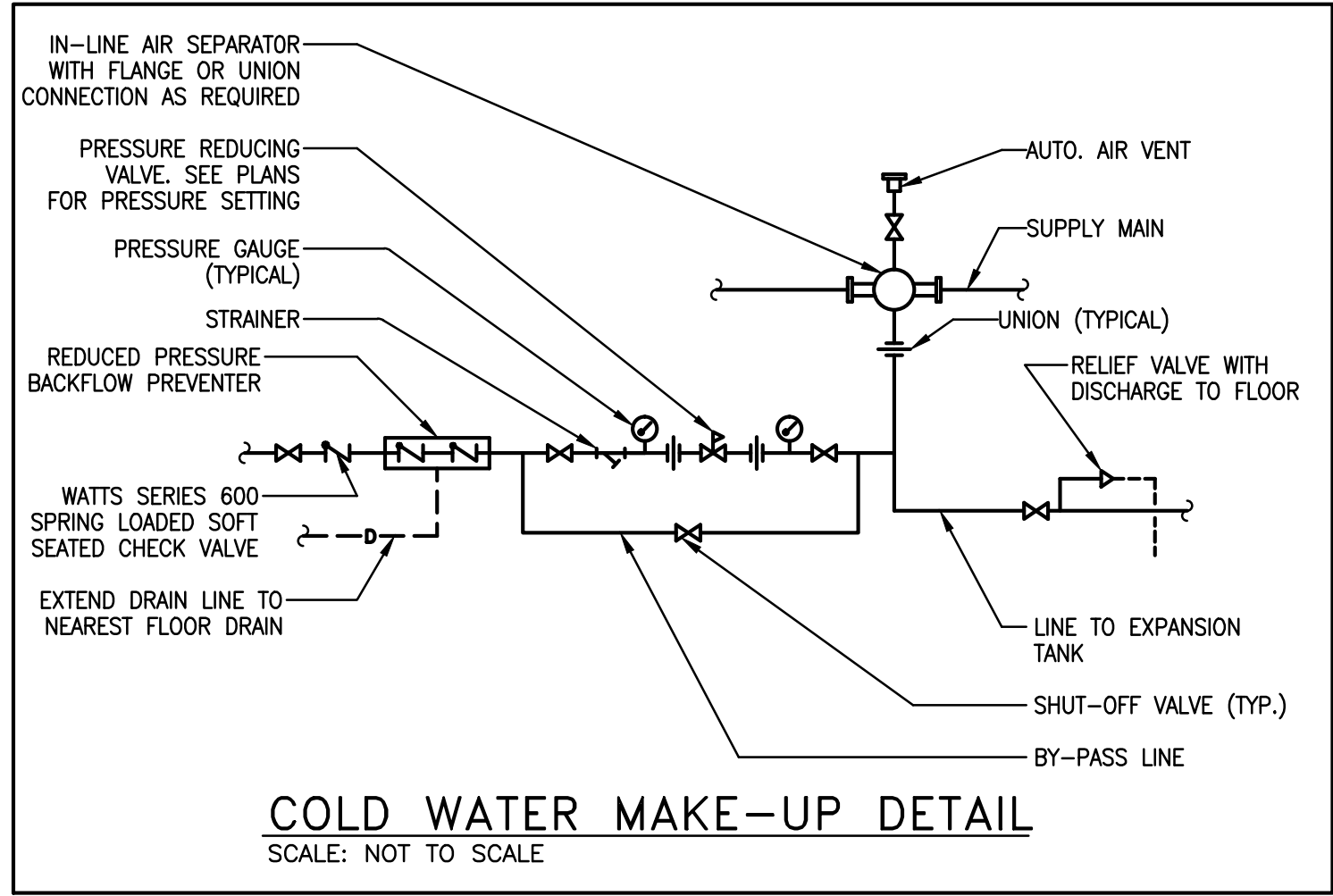
Architect/Engineer:

Seal:

willow
Architecture
SERVICE DISABLED VETERAN OWNED SMALL BUSINESS

REGISTERED PROFESSIONAL ARCHITECT
No. 1026
NEW YORK STATE


Drawing Title HVAC DETAILS	Project Title Expand and Renovate Urgent Care Area - 15E at Castle Point	Date March 22, 2013
Scale As Noted	Building Number 15	Checked Andres
Issued For Final Contract Documents	Drawn Huylo	Project No. 620-332
	Location 100 Route 9D Castle Point, NY 12511	Drawing No. MI-101



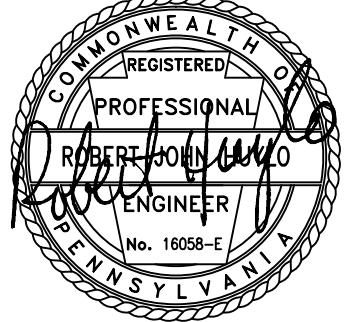
Revisions:	Date

Architect/Engineer:

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Architecture
SERVICE DISABLED VETERAN OWNED SMALL BUSINESS



Drawing Title	HVAC DETAILS			Project Title	Expand and Renovate Urgent Care Area - 15E at Castle Point			Date	March 22, 2013		
Scale	As Noted			Building Number	15	Checked	Andres	Drawn	Huylo	Project No.	620-332
Issued For	Final Contract Documents			Location	100 Route 9D Castle Point, NY 12511			Drawn No.	MI-102		

Department of Veterans Affairs

ROOFTOP AIR HANDLING UNIT SCHEDULE		
TAG	RTU-1	RTU-2
TYPE	25 TON PERFORMANCE CLIMATE CHANGER #17 HORIZONTAL DRAW-THRU DOWNFLOW DISCHARGE VAV SYSTEM SERVING BUILDING 15H BASEMENT PHASE I	20 TON PERFORMANCE CLIMATE CHANGER #12 HORIZONTAL DRAW-THRU DOWNFLOW DISCHARGE VAV SYSTEM SERVING BUILDING 15E BASEMENT PHASE II
TOTAL AIR CFM	8,600	6,500
OUTDOOR AIR CFM		
MINIMUM	2,300	2,400
MAXIMUM	8,600	6,500
STATIC PRESSURE		
EXT. STATIC PRESSURE IN. H2O	2.30	2.50
TOTAL STATIC PRESSURE IN. H2O	5.63	5.85
COIL FACE AREA SQ. FT.		
COOLING	16.81	12.30
HEATING	13.75	11.25
COOLING (DX COIL)		
TOTAL MBTUH	298.5	256.6
SENS. MBTUH	227.3	182.4
ENT. AIR D.B. °F	79.1	80.6
ENT. AIR W.B. °F	65.1	66.1
L.V.G. AIR D.B. °F	55.0	55.0
L.V.G. AIR W.B. °F	53.0	53.0
REFRIGERANT SUCTION TEMP °F	44.0	40.0
REFRIGERANT TYPE	R-410A	R-410A
NO. OF ROWS	4	3
FINS PER FOOT	103	105
P.D. IN. H2O - AIRSIDE	0.543	0.494
HEATING (STEAM COIL)		
MODE	STANDARD/EMERGENCY	STANDARD/EMERGENCY
TOTAL MBTUH	94.6/587.6	107.3/429.0
ENT. AIR D.B. °F	45.0/-5.0	40.0/-5.0
L.V.G. AIR D.B. °F	55.0	55.0
PRESSURE (PSI)	10.0	10.0
CONDENSATE RATE (LB./HR)	386.6	443.5
P.D. IN. H2O - AIRSIDE	0.197	0.163
NO. OF ROWS	1	2
FINS PER FOOT	85	62
HUMIDIFIER SECTION		
SOURCE	STEAM GENERATOR, SEE HUMIDIFIER SCHEDULE AND SPECIFICATION	STEAM GENERATOR, SEE HUMIDIFIER SCHEDULE AND SPECIFICATION
DIFFUSER SECTION		
P.D. IN. H2O - AIRSIDE	0.054	0.104
DISCHARGE PLENUM		
P.D. IN. H2O - AIRSIDE	0.066	0.082
SUPPLY FAN		
SIZE (IN.)/TYPE	18"/AF	15"/AF
MOTOR H.P.	15.0	15.0
FLA	48.30	48.30
CONTROL	VFD	VFD
RPM	2406	2703
ELECTRICAL		
VOLTAGE	208V-3ø	208V-3ø
MINIMUM CIRCUIT AMPACITY	60.38	60.38
MAXIMUM FUSE SIZE	100.0	100.0
MIXING BOX WITH PRE-FILTER (PF-1)		
TYPE	2" PLEATED MEDIA	2" PLEATED MEDIA
RATING	MERV-8	MERV-8
P.D. IN. H2O - AIRSIDE	0.573	0.607
P.D. IN. H2O - AIRSIDE (FILTER OPENING)	0.420	0.471
PRE-FILTER (PF-2)		
TYPE	12" SHORT BAG/ CARTRIDGE	12" SHORT BAG/ CARTRIDGE
RATING	MERV-11	MERV-11
P.D. IN. H2O - AIRSIDE	0.719	0.746
AFTER-FILTER (AF-1)		
TYPE	12" SHORT BAG/ CARTRIDGE	12" SHORT BAG/ CARTRIDGE
RATING	MERV-15	MERV-15
P.D. IN. H2O - AIRSIDE	0.754	0.785
NOTES:		
1. SEE ROOFTOP AIR HANDLING UNIT DETAIL FOR UNIT ARRANGEMENT.		
2. PROVIDE (2) INSULATED PIPE CABINETS WITH ACCESS DOORS FOR HUMIDIFIER SECTION AND STEAM COIL AND DX COIL SECTIONS.		

AIR-COOLED CONDENSER/COMPRESSOR UNIT SCHEDULE		
TAG	CU-1	CU-2
UNIT SERVED	RTU-1	RTU-2
NOMINAL CAPACITY MBH	321.9	271.4
AMBIENT TEMPERATURE °F	95.0	95.0
REFRIGERANT	R-410A	R-410A
ER	12.1	11.7
COMPRESSOR		
NUMBER/TYPE	2/SCROLL	2/SCROLL
TONS (E.A.)	10/13.5	10.0
NO. OF CIRCUITS	1	1
R.L.A. (E.A.)	41.4/52.0	41.4
U.R.A. (E.A.)	267.0/315.0	267.0
VOLTAGE	208V-3ø	208V-3ø
CONDENSER		
FANS (NUMBER/TYPE)	3/PROP	2/PROP
SIZE (DIA.)	26"	26"
H.P. (E.A.)	1.0	1.0
NOMINAL TOTAL CFM	20,700	14,600
COIL AREA SQ. FT.	47.3	47.3
ROWS	3	3
FINS/FOOT	132	144
VOLTAGE	208V-3ø	208V-3ø
FLA	4.1	4.1
ELECTRICAL		
MINIMUM CIRCUIT AMPACITY	119.0	102.0
MAXIMUM OVERCURRENT PROTECTION	150.0	125.0
REFRIGERANT PIPE SIZE		
LIQUID LINE	7/8"	5/8"
SUCTION LINE (VERTICAL RISE)	1-5/8"	1-5/8"
SUCTION LINE (HORIZONTAL RUN AND VERTICAL DROPS)	2-1/8"	1-5/8"
NOTES:		
1. VERIFY EXACT SIZE OF REFRIGERANT LINES WITH UNIT MANUFACTURER.		

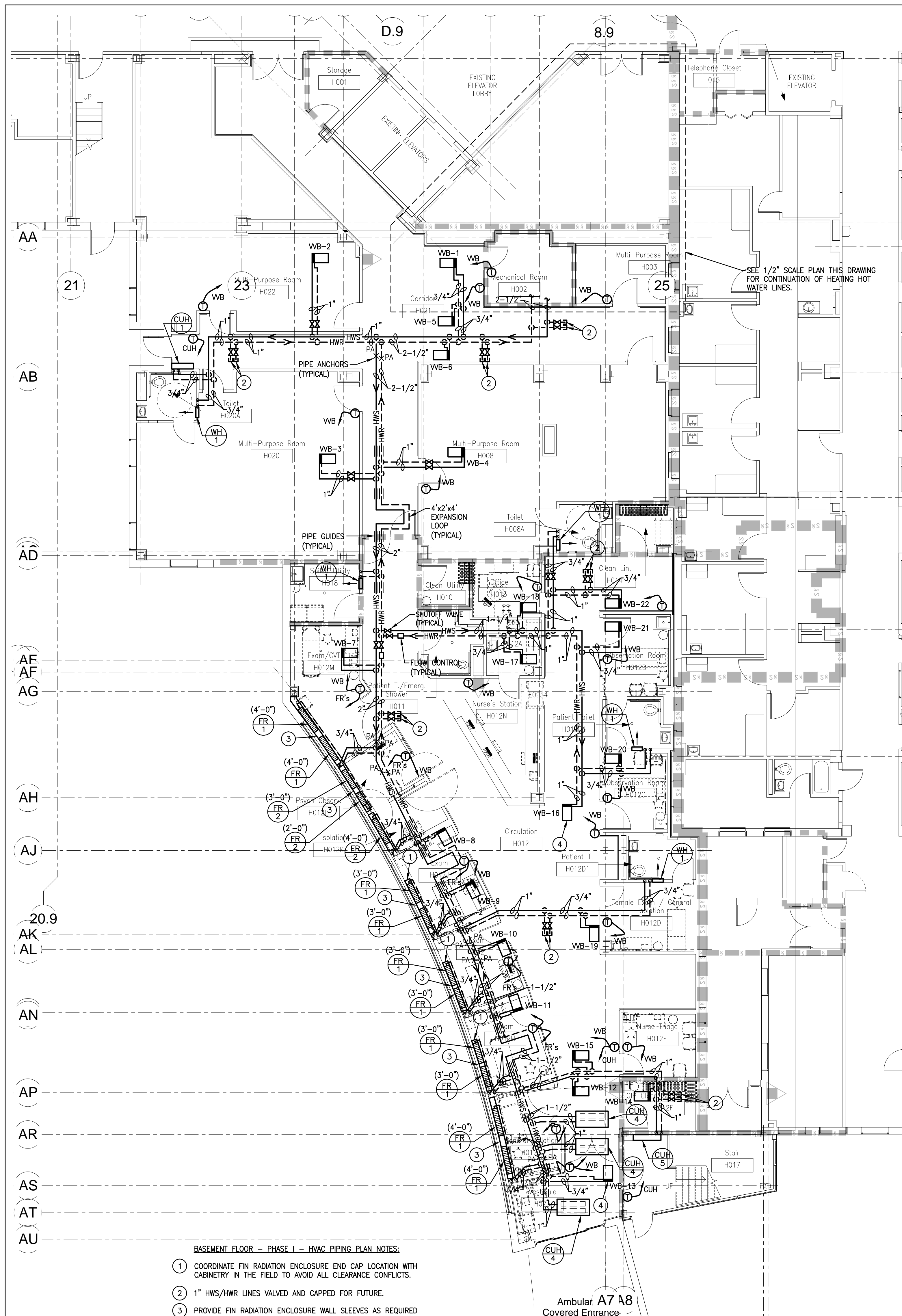
VARIABLE AIR VOLUME BOX SCHEDULE															
TAG	NOMINAL CFM BOX SIZE	MAXIMUM (COOL) CFM SETTING	MINIMUM (HEAT) CFM SETTING	DUCT INLET BOX SIZE	EMERGENCY MODE		STANDARD MODE		GPM	E.A.T. °F	ROW	P.D. FLUID FT. WATER	P.D. AIR IN. WATER	PIPE RUNOUT SIZE	VAV BOX FLOW STATUS
					MBH	L.A.T.	MBH	L.A.T.							
VVB-1	500	250	250	6"	8.3	85.0	8.3	85.0	0.8	55.0	1	1.28	0.11	3/4"	CONSTANT
VVB-2	1400	700	300	10"	27.0	90.0	14.9	100.0	2.0	55.0	2	0.69	0.21	1"	VARIABLE
VVB-3	1400	700	350	10"	30.8	95.0	21.2	110.0	2.5	55.0	2	1.15	0.21	1"	VARIABLE
VVB-4	1400	700	300	10"	27.0	90.0	13.2	95.0	2.0	55.0	2	0.69	0.21	1"	VARIABLE
VVB-5	350	125	80	5"	4.1	85.0	3.5	90.0	0.4	55.0	1	0.44	0.02	3/4"	VARIABLE
VVB-6	1400	800	800	10"	30.8	90.0	30.8	90.0	2.5	55.0	2	1.15	0.26	1"	CONSTANT
VVB-7	900	350	125	8"	13.5	90.0	7.6	110.0	1.4	55.0	2	0.15	0.14	3/4"	VARIABLE
VVB-8	900	320	125	8"	12.3	90.0	6.2	100.0	1.2	55.0	2	0.05	0.12	3/4"	VARIABLE
VVB-9	900	265	110	8"	10.2	90.0	6.6	110.0	1.0	55.0	1	2.36	0.05	3/4"	VARIABLE
VVB-10	900	265	110	8"	10.2	90.0	6.6	110.0	1.0	55.0	1	2.36	0.05	3/4"	VARIABLE
VVB-11	900	265	110	8"	10.2	90.0	6.6	110.0	1.0	55.0	1	2.36	0.05	3/4"	VARIABLE
VVB-12	900	265	265	8"	10.2	90.0	10.2	90.0	1.0	55.0	1	2.36	0.05	3/4"	CONSTANT
VVB-13	900	350	350	8"	17.3	100.0	17.3	100.0	1.7	55.0	2	0.20	0.14	3/4"	CONSTANT
VVB-14	500	180	180	6"	7.0	90.0	7.0	90.0	0.7	55.0	1	1.03	0.07	3/4"	CONSTANT
VVB-15	900	290	290	8"	11.2	90.0	11.2	90.0	1.1	55.0	1	2.85	0.07	3/4"	CONSTANT
VVB-16	1400	720	720	10"	31.6	95.0	31.6	95.0	2.5	55.0	2	1.15	0.22	1"	CONSTANT
VVB-17	500	275	100	6"	9.1	85.0	4.4	95.0	0.9	55.0	1	1.52	0.14	3/4"	VARIABLE
VVB-18	350	90	80	5"	3.5	90.0	3.1	90.0	0.4	55.0	1	0.44	0.01	3/4"	VARIABLE
VVB-19	500	200	200	6"	7.7	90.0	7.7	90.0	0.8	55.0	1	1.28	0.08	3/4"	CONSTANT
VVB-20	350	110	80	5"	4.2	90.0	3.1	90.0	0.4	55.0	1	0.44	0.01	3/4"	VARIABLE
VVB-21	350	110	80	5"	4.2	90.0	3.1	90.0	0.4	55.0	1	0.44	0.01	3/4"	VARIABLE
VVB-22	900	400	400	8"	17.6	95.0	17.6	95.0	1.8	55.0	2	0.20	0.17	3/4"	CONSTANT
VVB-23	500	150	80	6"	5.0	85.0	2.7	85.0	0.5	55.0	1	0.55	0.05	3/4"	VARIABLE
VVB-24	900	330	330	8"	10.9	85.0	10.9	85.0	1.1	55.0	1	2.85	0.08	3/4"	CONSTANT
VVB-25	900	270	80	8"	9.0	85.0	2.7	85.0	0.9	55.0	1	2.03	0.06	3/4"	VARIABLE
VVB-26	350	85	85	5"	3.3	90.0	3.3	90.0	0.3	55.0	1	0.33	0.01	3/4"	VARIABLE
VVB-27	350	85	85	5"	3.3	90.0	3.3	90.0	0.3	55.0	1	0.33	0.01	3/4"	VARIABLE
VVB-28	350	85	85	5"	3.3	90.0	3.3	90.0	0.3	55.0	1	0.33	0.01	3/4"	VARIABLE
VVB-29	350	85	85	5"	3.3	90.0	3.3	90.0	0.3	55.0	1	0.33	0.01	3/4"	VARIABLE
VVB-30	500	250	250	6"	8.3	85.0	8.3	85.0	0.8	55.0	1	1.28	0.11	3/4"	CONSTANT
VVB-31	1400	760	375	10"	25.1	85.0	14.5	90.0	2.0	55.0	2	0.69	0.24	3/4"	VARIABLE
VVB-32	350	120	120	5"	7.2	110.0	7.2	110.0	0.7	55.0	1	1.03	0.02	3/4"	CONSTANT
VVB-33	900	350	225	8"	17.3	100.0	13.7	110.0	1.7	55.0	2	0.20	0.14	3/4"	VARIABLE
VVB-34	2000	965	275	12"	31.8	85.0	13.6	100.0	3.2	55.0	2	1.00	0.27	1"	VARIABLE
VVB-35	900	350	350	8"	19.3	105.0	19.3	105.0	1.9	55.0	2	0.23	0.14	3/4"	CONSTANT
VVB-36	1400	680	680	10"	22.5	85.0	22.5	85.0	2.0	55.0	2	0.69	0.19	1"	CONSTANT
VVB-37	1400	550	550	10"	21.2	90.0	21.2	90.0	2.0	55.0	2	0.69	0.15	1"	CONSTANT
NOTES:															
1. HEATING CAPACITIES BASED ON 180°F ENTERING WATER TEMPERATURE.															
2. PROVIDE HEATING UNITS WITH A SHUT-OFF VALVE AND AN AUTOMATIC TEMPERATURE CONTROL VALVE ON THE SUPPLY LINE AND A SHUT-OFF VALVE, FLOW CONTROL DEVICE, AND A MANUAL AIR VENT ON THE RETURN LINE.															
3. VARIABLE AIR VOLUME BOXES VOLTAGE, 120V-1ø. PROVIDE EACH VAV BOX WITH A POWER TRANSFORMER AND A TOGGLE DISCONNECT SWITCH.															

CIRCULATING PUMP SCHEDULE									
TAG	TYPE	GPM	HEAD IN. FT.	H.P.	RPM	VOLTAGE	DESIGN	SERVICE	
CP-1	CENTRIFUGAL IN-LINE	60	34	1.5	1750	208V-3ø	B&G	HEATING HOT WATER SYSTEM DISTRIBUTION PUMP - PHASE I	
CP-2	CENTRIFUGAL IN-LINE	60	34	1.5	1750	208V-3ø	B&G	STAND-BY FOR CP-1	
CP-3	CENTRIFUGAL IN-LINE	38	30	1.0	1750	208V-3ø	B&G	HEATING HOT WATER SYSTEM DISTRIBUTION PUMP - PHASE II	
CP-4	CENTRIFUGAL IN-LINE	38	30	1.0	1750	208V-3ø	B&G	STAND-BY FOR CP-3	
NOTES:									
1. SEE DETAILS FOR PIPING COMPONENTS.									
2. PROVIDE VARIABLE FREQUENCY DRIVES FOR PUMPS CP-1, CP-2, CP-3 AND CP-4.									

SUPPLY AIR DIFFUSER SCHEDULE				
TAG	NECK SIZE	CFM	BLOW PATTERN	TYPE
SAD-1	6"	0 TO 115	4-WAY	24"x24" SQUARE FACE ADJUSTABLE DIFFUSER LAY-IN TYPE
SAD-2	8"	116 TO 195	4-WAY	24"x24" SQUARE FACE ADJUSTABLE DIFFUSER LAY-IN TYPE
SAD-3	10"	196 TO 320	4-WAY	24"x24" SQUARE FACE ADJUSTABLE DIFFUSER LAY-IN TYPE
SAD-4	12"	321 TO 470	4-WAY	24"x24" SQUARE FACE ADJUSTABLE DIFFUSER LAY-IN TYPE
SAD-5	6" x 6"	0 TO 125	1-WAY	24"x12" RECTANGULAR DIRECTIONAL DIFFUSER LAY-IN TYPE
SAD-6	6" x 4"	25	WIDE	SIDEWALL DOUBLE DEFLECTION SUPPLY AIR DIFFUSER WITH HORIZONTAL BARS SET AT 0° SPACED ON 1/2" CENTERS
SAD-7	6"	0 TO 115	4-WAY	24"x24" SQUARE FACE ADJUSTABLE SURFACE MOUNTED DIFFUSER WITH VOLUME DAMPER
SAD-8	8"	116 TO 195	4-WAY	24"x24" SQUARE FACE ADJUSTABLE SURFACE MOUNTED DIFFUSER WITH VOLUME DAMPER
SAD-9	10"	196 TO 320	4-WAY	24"x24" SQUARE FACE ADJUSTABLE SURFACE MOUNTED DIFFUSER WITH VOLUME DAMPER
SAD-10	12"	321 TO 470	4-WAY	24"x24" SQUARE FACE ADJUSTABLE SURFACE MOUNTED DIFFUSER WITH VOLUME DAMPER
SAD-11	8" x 8"	0 TO 150	1-WAY	HORIZONTAL BARS SET AT 45° SPACED ON 3/4" CENTERS WITH VOLUME DAMPER
SAD-12	10" x 10"	250	1-WAY	HORIZONTAL BARS SET AT 45° SPACED ON 3/4" CENTERS WITH VOLUME DAMPER
SAD-13	6"	0 TO 115	4-WAY	12"x12" SQUARE FACE ADJUSTABLE SURFACE MOUNTED DIFFUSER WITH VOLUME DAMPER
SAD-14	6" x 6"	0 TO 125	1-WAY	24"x12" RECTANGULAR DIRECTIONAL DIFFUSER SURFACE MOUNTED TYPE
SAD-15	12"	350	3-WAY	24"x24" SQUARE FACE ADJUSTABLE SURFACE MOUNTED DIFFUSER WITH VOLUME DAMPER
SAD-16	8"	165	3-WAY	24"x24" SQUARE FACE ADJUSTABLE DIFFUSER LAY-IN TYPE
SAD-17	6"	110	2-WAY	2"-0" ADJUSTABLE SURFACE MOUNTED LINEAR SLOT DIFFUSER WITH (2) TWO 3/4" SLOTS PROVIDE 8" HIGH INSULATED PLENUM BOX WITH DIFFUSER WITH VOLUME DAMPER
NOTE:				
1. ARCHITECT SHALL SELECT COLOR OF ALL DIFFUSERS.				

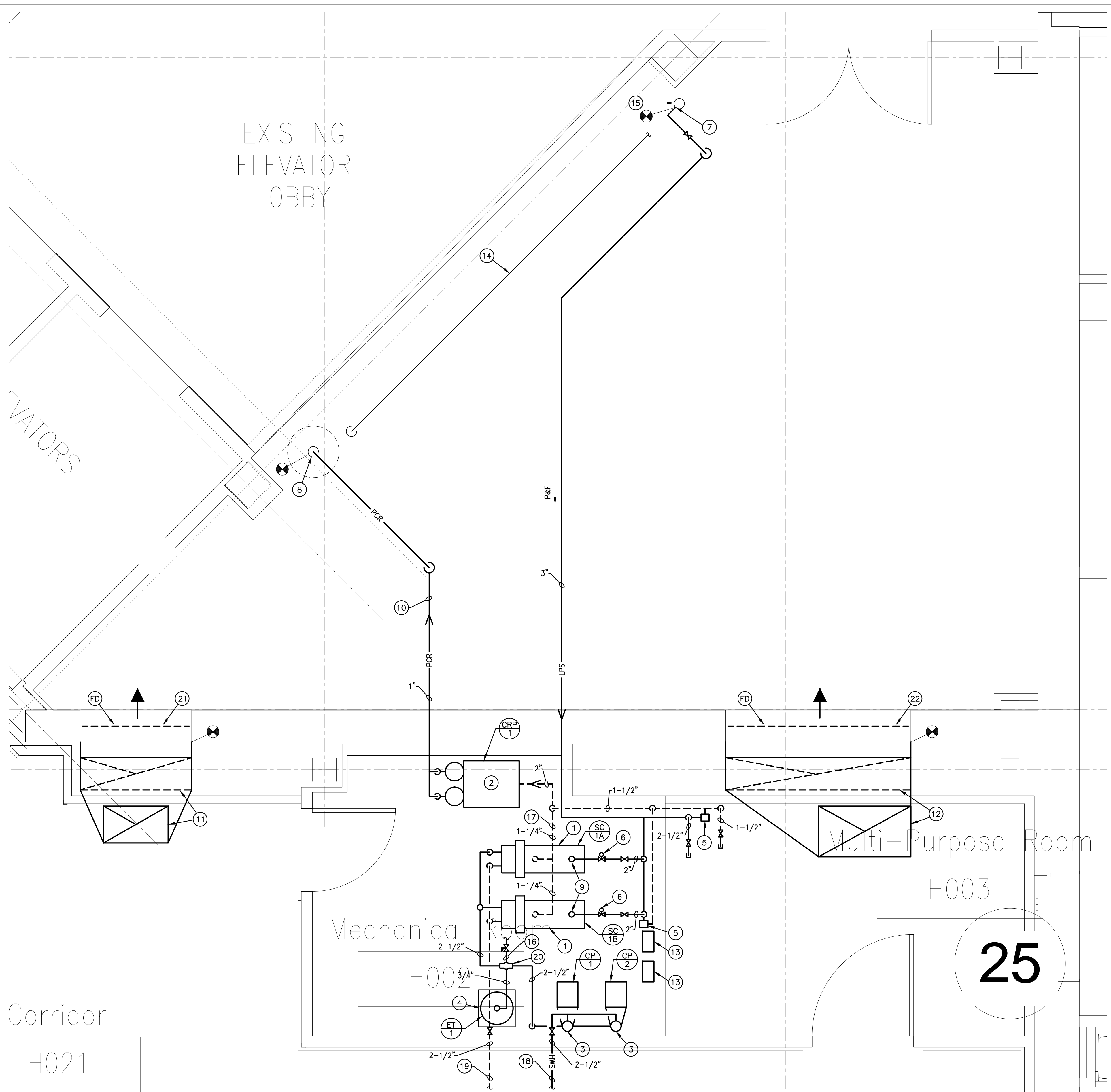
FIN RADIATION SCHEDULE							
TAG	LIN. FT.	TUBE	ELEMENT FIN	TIERS	TOTAL BTU/HR	ENCLOSURE	RUNOUT SIZE FOR SINGLE UNIT
FR-1	SEE DRAWINGS	1"	2-3/4" x 5" AL. FIN. .020-50 FIN./FT	1	745	11" H. x 3-9/16" D. SLIMLINE TYPE WITH SLOPING TOP MOUNT 2" A.F.F.	3/4"
FR-2	SEE DRAWINGS	3/4"	4-1/4" x 3-5/8" AL. FIN. .020-50 FIN./FT	1	870	12" H. x 5-5/16" D. SECURITY TYPE WITH SLOPING TOP AND PARTIALLY PERFORATED MOUNT 4" A.F.F.	3/4"
FR-3	SEE DRAWINGS	3/4"	3-1/4" x 3-1/4" AL. FIN. .020-50 FIN./FT	1	880	14" H. x 4-3/8" D. WITH SLOPING TOP MOUNT 4" A.F.F.	3/4"
NOTES:							
1. ABOVE CAPACITIES BASED ON 170°F AVERAGE WATER TEMPERATURE AND 65°F ENTERING AIR TEMPERATURE.							
2. RADIATION TO BE MANUFACTURED WITH ALUMINUM FINS AND COPPER TUBING.							
3. UNITS SHALL BE PROVIDED WITH A SHUT-OFF VALVE AND AUTOMATIC TEMPERATURE CONTROL VALVE ON THE SUPPLY LINE AND FLOW CONTROL DEVICE, SHUT-OFF VALVE, AND MANUAL VENT ON THE RETURN LINE.							
4. ARCHITECT SHALL SELECT ENCLOSURE COLOR.							

EXPANSION TANK SCHEDULE								
TAG	TYPE	"EXTROL" MODEL OR EQUAL	SIZE	TANK VOLUME GALLONS	ACCEPTANCE VOLUME GALLONS	INITIAL FILL PRESSURE	RELIEF VALVE SETTING	LOCATION SERVED
ET-1	VERTICAL	SX-60V	15" DIA. x 46" HEIGHT	32.0	11.5	12 PSI	30 PSI	PHASE I BUILDING 15H
ET-2	VERTICAL	SX-40V	15" DIA. x 32" HEIGHT	20.0	11.5	12 PSI	30 PSI	PHASE II BUILDING 15E



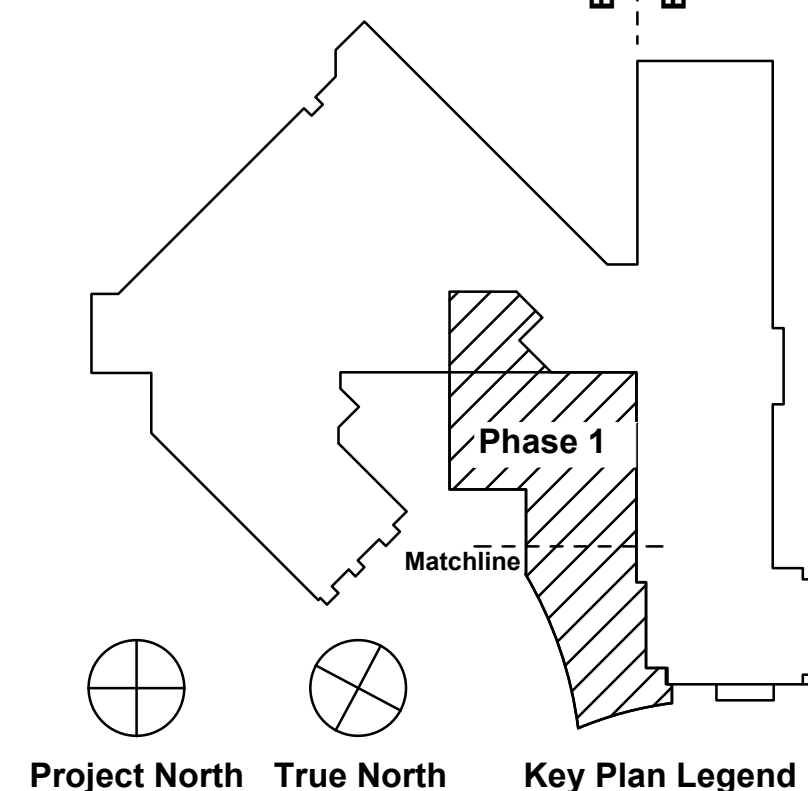
- BASEMENT FLOOR - PHASE I - HVAC PIPING PLAN NOTES:**
- COORDINATE FIN RADIATION ENCLOSURE END CAP LOCATION WITH CABINETRY IN THE FIELD TO AVOID ALL CLEARANCE CONFLICTS.
 - 1" HWS/HWR LINES VALVED AND CAPPED FOR FUTURE.
 - PROVIDE FIN RADIATION ENCLOSURE WALL SLEEVES AS REQUIRED TO ACCOMMODATE FOR THE CURVATURE OF THE EXTERIOR WALL. VERIFY QUANTITY AND LOCATIONS IN THE FIELD.
 - PROVIDE 3-WAY VALVE ON VARIABLE AIR VOLUME BOX AT THE END OF HEATING HOT WATER MAIN. SEE DETAIL.

1 BASEMENT FLOOR - PHASE I - HVAC PIPING PLAN
WP10/SCALE: 1/8"=1'-0"



- PARTIAL BASEMENT FLOOR - PHASE I - NEW MECHANICAL ROOM NOTES:**
- STEAM TO WATER CONVERTOR. SEE DETAIL.
 - CONDENSATE RETURN PUMP. SEE DETAIL.
 - HOT WATER CIRCULATING PUMPS. SEE DETAIL.
 - EXPANSION TANK ET-1.
 - STEAM LINE CONDENSATE DRIP OR END OF MAIN DRIP. SEE DETAIL.
 - CONVERTOR STEAM CONTROL VALVES. SEE DETAIL.
 - NEW CONNECTION TO EXISTING LOW PRESSURE STEAM SUPPLY LINE.
 - NEW CONNECTION TO EXISTING CONDENSATE RETURN SYSTEM FROM CONDENSATE RETURN PUMP.
 - LOW PRESSURE STEAM SUPPLY TO CONVERTORS.
 - CONDENSATE RETURN PUMP DISCHARGE TO EXISTING PUMPED CONDENSATE RETURN SYSTEM.
 - NEW 48/14 OUTDOOR AIR SUPPLY DUCT DOWN FROM 28/16 ROOF OUTDOOR AIR INTAKE TO EXISTING MECHANICAL ROOM VENTILATION SYSTEM. REMOVE EXISTING WALL LOUVER IN EXISTING WALL AND CONNECT TO EXISTING AIR INTAKE.
 - NEW 80/14 OUTDOOR AIR SUPPLY DUCT DOWN FROM 40/22 ROOF OUTDOOR AIR INTAKE TO EXISTING AIR HANDLING UNIT OUTDOOR AIR INTAKE CONNECTION. REMOVE EXISTING LOUVER AND MAKE NEW DUCT CONNECTION TO EXISTING AIR HANDLING UNIT MIXING BOX.

- PARTIAL BASEMENT FLOOR - PHASE I - NEW MECHANICAL ROOM NOTES, CONTINUED:**
- VARIABLE FREQUENCY DRIVE SERVING CIRCULATING PUMP.
 - EXISTING STEAM PRESSURE REDUCING STATION.
 - EXISTING LOW PRESSURE STEAM (20 PSI) RISER.
 - 3/4" HEATING HOT WATER SYSTEM COLD WATER MAKE UP LINE (CONTINUED ON PLUMBING PLANS). SEE DETAIL.
 - CONDENSATE RETURN MAIN AT ELEVATION TO DRAIN TO TANK INLET.
 - NEW HOT WATER SUPPLY LINE TO NEW HEATING SYSTEM.
 - NEW HOT WATER RETURN LINE FROM NEW HEATING SYSTEM.
 - IN LINE AIR SEPARATOR.
 - REMOVE AND REINSTALL EXISTING DUCTWORK AS REQUIRED IN ORDER TO INSTALL NEW 48/32 FIRE DAMPER. VERIFY EXACT SIZE IN THE FIELD.
 - REMOVE AND REINSTALL EXISTING DUCTWORK AS REQUIRED IN ORDER TO INSTALL NEW 80/32 FIRE DAMPER. VERIFY EXACT SIZE IN THE FIELD.



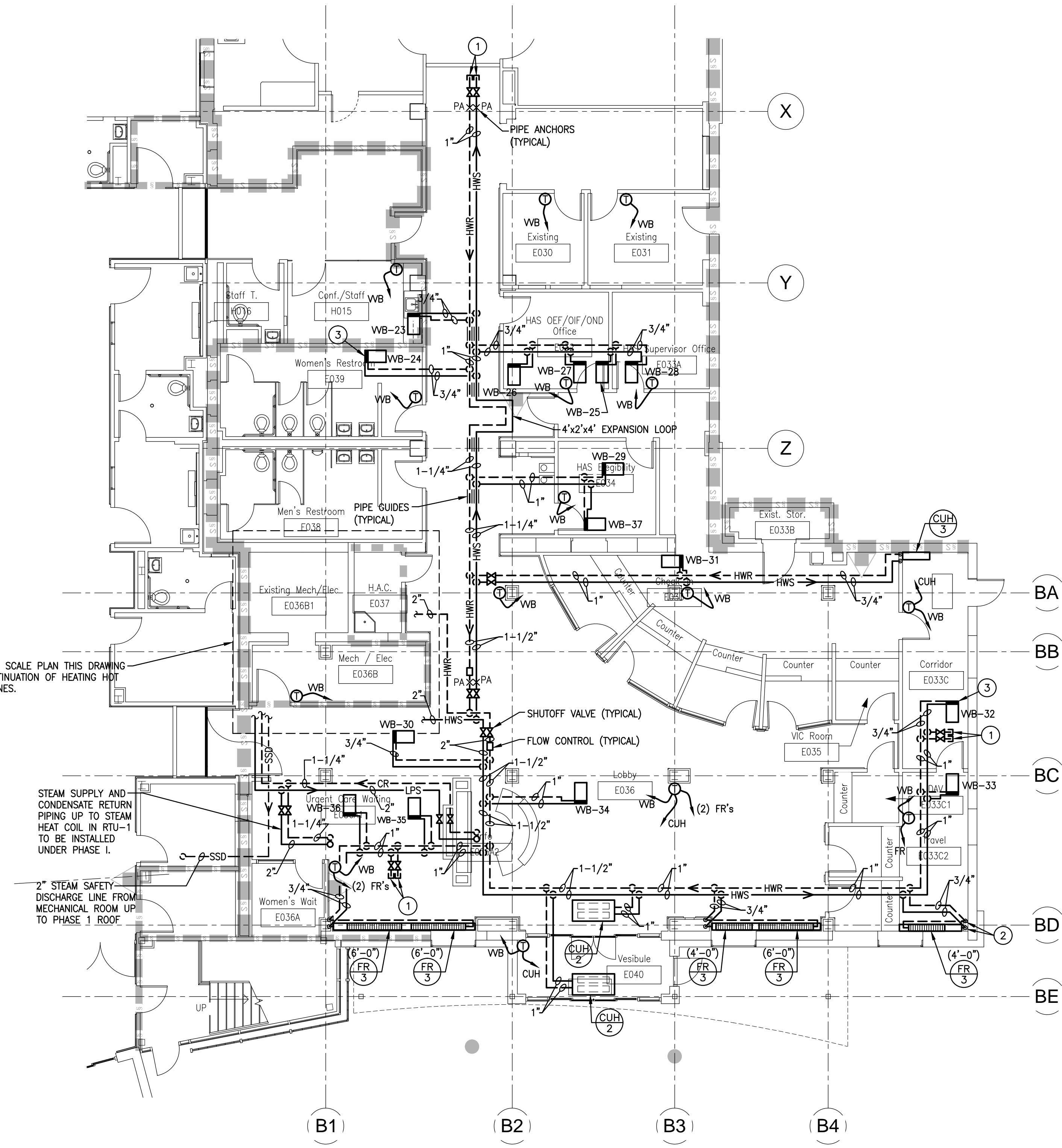
FULLY SPRINKLERED

Revisions:	Date

Architect/Engineer:
willow
Architecture
SERVICE DISABLED VETERAN OWNED SMALL BUSINESS

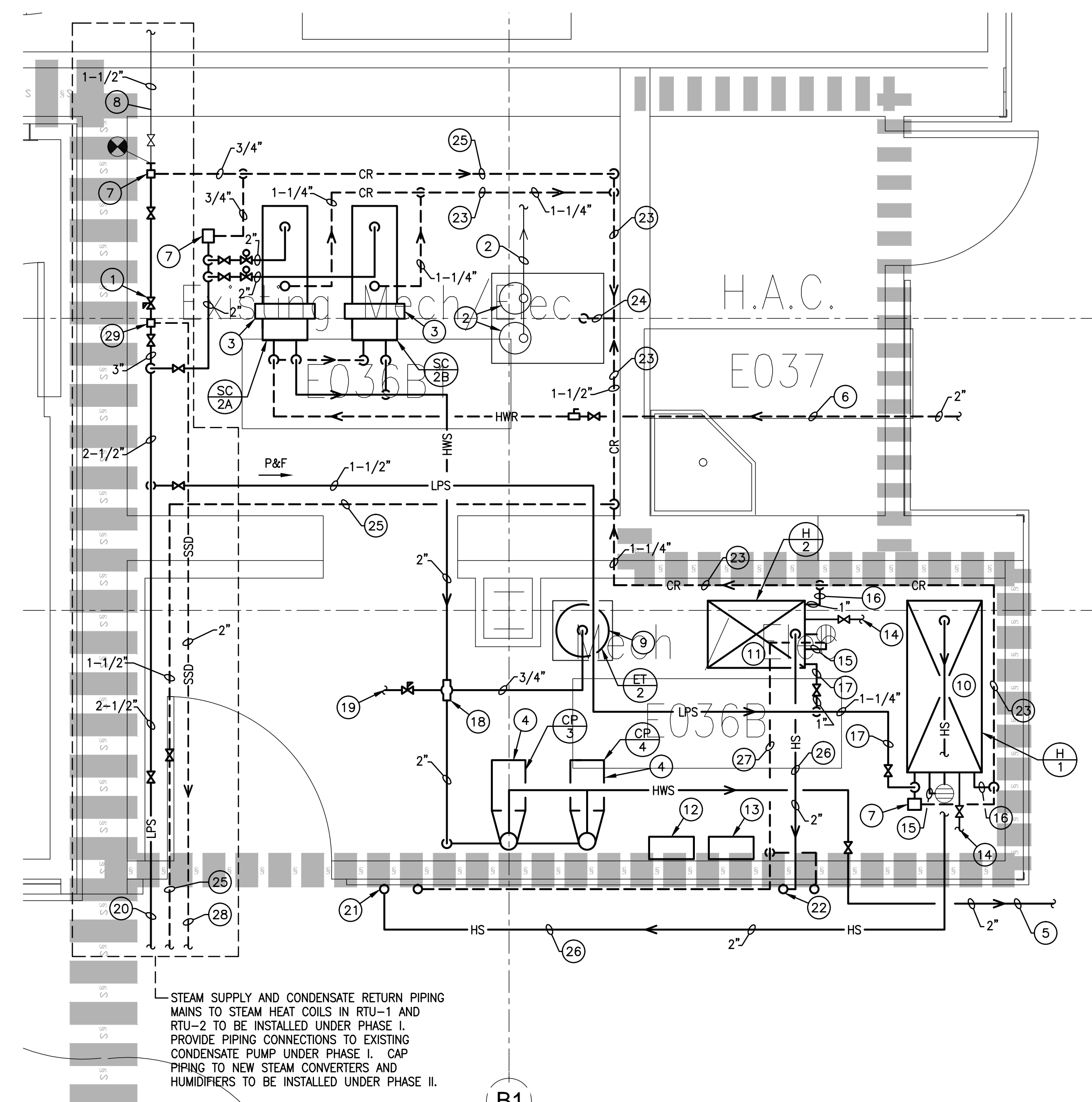
Seal:

BASEMENT FLOOR - PHASE I - HVAC PIPING PLANS	Expand and Renovate Urgent Care Area - 15E at Castle Point	Date March 22, 2013
Scale As Noted	Building Number 15	Project No. 620-332
Issued For Final Contract Documents	Location 100 Route 9D Castle Point, NY 12511	Drawing No. MP-101



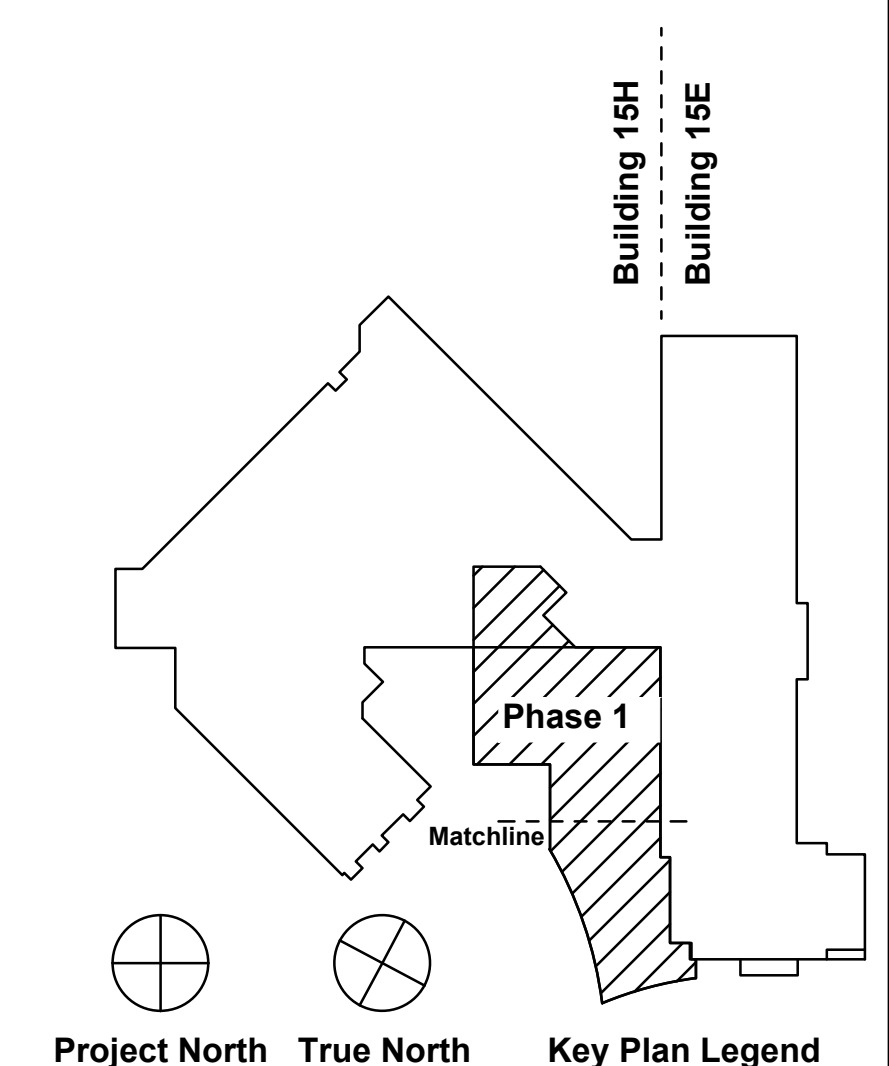
1 BASEMENT FLOOR - PHASE II - HVAC PIPING PLAN
MP102 SCALE: 1/8"=1'-0"

- BASEMENT FLOOR - PHASE II - HVAC PIPING PLAN NOTES:
- 1" HWS/HWR LINES VALVED AND CAPPED FOR FUTURE.
 - DROP HWS/HWR LINES WITHIN PIPE ENCLOSURE. SEE ARCHITECTURAL PLANS FOR ENCLOSURE.
 - PROVIDE 3-WAY VALVE ON VARIABLE AIR VOLUME BOX AT THE END OF HEATING HOT WATER MAIN. SEE DETAIL.



2 PARTIAL BASEMENT FLOOR - PHASE II - MECHANICAL ROOM PLAN
MP102 SCALE: 1/2"=1'-0"

- PARTIAL BASEMENT FLOOR - PHASE II - MECHANICAL ROOM NOTES:
- NEW STEAM PRESSURE REDUCING STATION 1420 #/HR FROM 50 PSI TO 20 PSI. SEE DETAIL.
 - EXISTING CONDENSATE RETURN UNIT AND PUMPED CONDENSATE RETURN PIPING TO REMAIN AND BE REUSED.
 - NEW STEAM TO WATER CONVERTERS. SEE DETAIL.
 - NEW HOT WATER CIRCULATING PUMPS. SEE DETAIL.
 - NEW HOT WATER SUPPLY LINE TO NEW HEATING SYSTEM.
 - NEW HOT WATER RETURN LINE FROM NEW HEATING SYSTEM.
 - STEAM CONDENSATE LINE DRIP. SEE "END OF MAIN" MAIN CONDENSATE DRIP DETAIL.
 - EXISTING 1-1/2" - 50 PSI STEAM SUPPLY LINE.
 - EXPANSION TANK ET-2.
 - STEAM GENERATOR FOR HUMIDIFIER IN ROOFTOP AIR HANDLING UNIT RTU-1 INSTALLED UNDER PHASE II. SET ON 24" HIGH 3x3x3/8" HIGH ANGLE BASE.
 - STEAM GENERATOR FOR HUMIDIFIER IN ROOFTOP AIR HANDLING UNIT RTU-2. SET ON 24" HIGH 3x3x3/8" HIGH ANGLE BASE.
 - VARIABLE FREQUENCY DRIVE SERVING CIRCULATING PUMP CP-3.
 - VARIABLE FREQUENCY DRIVE SERVING CIRCULATING PUMP CP-4.
 - 1/2" COLD WATER TO HUMIDIFIER.
 - HUMIDIFIER OVERFLOW/DRAIN TO FLOOR DRAIN.
 - 1-1/4" CONDENSATE RETURN.
 - STEAM SUPPLY TO STEAM TO STEAM HUMIDIFIER GENERATOR.
 - IN LINE AIR SEPARATOR.
 - 3/4" HEATING HOT WATER SYSTEM COLD WATER MAKE UP LINE (CONTINUED ON PLUMBING PLANS). SEE DETAIL.
 - LOW PRESSURE STEAM SUPPLY TO STEAM HEATING COILS IN RTU-1 AND RTU-2. SEE PLANS.
 - HUMIDIFIER STEAM UP TO RTU-1.
 - HUMIDIFIER STEAM UP TO RTU-2.
 - CONDENSATE RETURN MAIN AT ELEVATION TO DRAIN TO TANK INLET.
 - CONNECTION TO EXISTING CONDENSATE RETURN UNIT.
 - CONDENSATE RETURN LINE AT CEILING.
 - HUMIDIFIER STEAM - 2" TYPE "L" COPPER WITH 1/2" FLEXIBLE FOAM INSULATION.
 - 1" TYPE "L" COPPER DRAIN.
 - STEAM SAFETY DISCHARGE LINE UP TO ROOF.
 - RELIEF VALVE 2000#/HR @ 30 PSI TO DISCHARGE UP TO ROOF.



Revisions:		Date	Architect/Engineer:		Seal:	Drawing Title		Project Title		Date
			willow			BASEMENT FLOOR - PHASE II - HVAC PIPING PLANS		Expand and Renovate Urgent Care Area - 15E at Castle Point		March 22, 2013
			Architecture			Scale		Building Number		Project No.
			SERVICE DISABLED VETERAN OWNED SMALL BUSINESS			As Noted		15		620-332
						Issued For		Checked		Drawing No.
						Final Contract Documents		Andres		MP-102
								Drawn		
								Huylo		
								Location		
								100 Route 9D		
								Castle Point, NY 12511		

