

S:\Projects\Newburgh ECSD\Walk Gate E3 Admin & Reno\0 CAD\Revit\GENERAL FILES

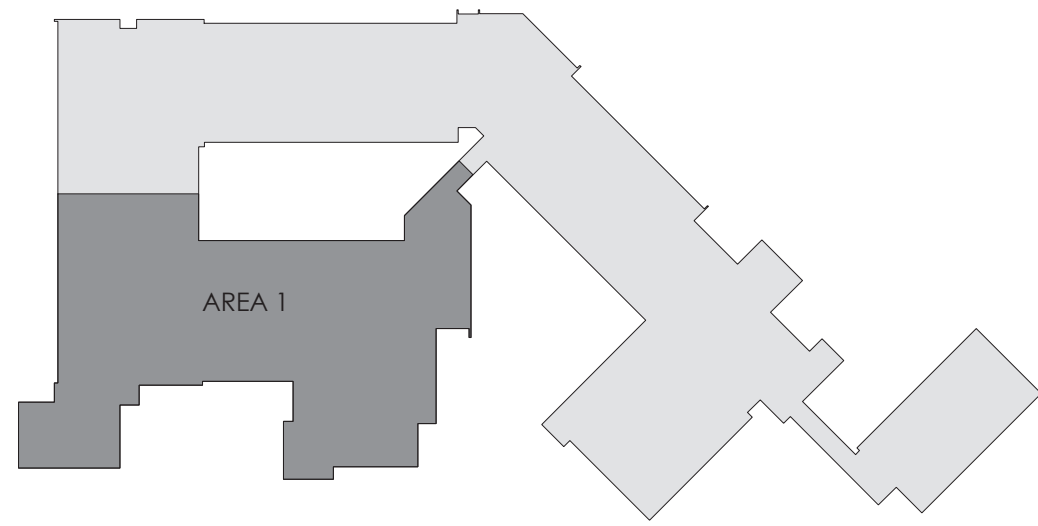
HVAC SYMBOLS LIST											
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AAD	AUTOMATIC AIR DAMPER		CONNECTION - TOP		DOUBLE WALL LINED DUCT		SUPPLY / RETURN / EXHAUST AIR TAKEOFFS		ELECTRIC/PNEUMATIC SWITCH OR RELAY		
ACC	AIR-COOLED CONDENSING UNIT		CONNECTION - BOTTOM		DUCT SECTION - SUPPLY		DUCT SECTION - RETURN/EXHAUST		PNEUMATIC/ELECTRIC SWITCH OR RELAY		
AD	ACCESS DOOR		DIRECTION OF FLOW		DUCT SECTION - ROUND DUCT IN INCHES		DUCT SECTION - FLAT OVAL DUCT IN INCHES		OPEN/CLOSED		
AFF	ABOVE FINISHED FLOOR		REDUCER		CAP OR PLUG		ACOUSTIC THERMAL LINING		START/STOP		
AHU	AIR HANDLING UNIT		ELBOW DOWN		ACOUSTIC THERMAL LINING		FLEXIBLE DUCTWORK		ENABLE/DISABLE		
BBD	BOILER BLOW DOWN		ELBOW UP		FLEXIBLE CONNECTION		UNION		TEMPERATURE SENSOR (DUCT OR PIPE MOUNTED)		
BD	BACKDRAFT DAMPER		TEE OUTLET - UP		FIRE DAMPER		SMOKE DAMPER		HUMIDITY SENSOR (DUCT MOUNTED)		
CA	COMPRESSED AIR		TEE OUTLET - DOWN		GATE VALVE		BALL VALVE		FLOW TRANSMITTER		
CD	COOLING COIL CONDENSATE DRAIN		UNION		GATE VALVE		BALL VALVE		PRESSURE TRANSMITTER		
CFM	CUBIC FEET PER MINUTE		BALANCING VALVE		GATE VALVE		BALL VALVE		DIFFERENTIAL PRESSURE TRANSMITTER		
CHWR	CHILLED WATER RETURN		STRAINER		GATE VALVE		BALL VALVE		ELECTRIC/PNEUMATIC TRANSDUCER		
CHWS	CHILLED WATER SUPPLY		STRAINER WITH BLOW-DOWN		GATE VALVE		BALL VALVE		ELECTRIC/ELECTRONIC TRANSDUCER		
CR	CONDENSER WATER RETURN		BUTTERFLY VALVE		GATE VALVE		BALL VALVE		DUCT SMOKE DETECTOR		
CS	CONDENSER WATER SUPPLY		BUTTERFLY CONTROL VALVE, PNEUMATIC 2-WAY		GATE VALVE		BALL VALVE		SPACE THERMOSTAT		
CW	DOMESTIC COLD WATER		BUTTERFLY CONTROL VALVE, ELECTRIC ACTUATOR		GATE VALVE		BALL VALVE		SPACE TEMPERATURE SENSOR		
D	DRAIN		GLOBE VALVE		GATE VALVE		BALL VALVE		SPACE CARBON DIOXIDE SENSOR		
(E)	EXISTING		CHECK VALVE		GATE VALVE		BALL VALVE		SPACE NATURAL GAS SENSOR		
EA	EXHAUST AIR		TRIPLE DUTY VALVE		GATE VALVE		BALL VALVE		SPACE CARBON MONOXIDE SENSOR		
EC	ELECTRICAL CONTRACTOR		GAS COCK, PLUG VALVE		GATE VALVE		BALL VALVE		SPACE SENSOR WITH GUARD		
EF	EXHAUST FAN		UNDERCUT DOOR 1"		GATE VALVE		BALL VALVE		SPACE HUMIDISTAT		
ERHC	ELECTRIC REHEAT COIL		LOUVERED DOOR W/ SQ. FT. OF FREE AREA		GATE VALVE		BALL VALVE		WATER FLOW SENSOR		
ETR	EXISTING TO REMAIN		AIR VENT - MANUAL		GATE VALVE		BALL VALVE		PNEUMATIC ACTUATOR		
EUH	ELECTRIC UNIT HEATER		AIR VENT - AUTOMATIC		GATE VALVE		BALL VALVE		ELECTRIC ACTUATOR		
FAT	FLOAT AND THERMOSTATIC TRAP		FLANGE		GATE VALVE		BALL VALVE		VARIABLE SPEED / FREQUENCY DRIVE		
FCU	FAN-COIL UNIT		CONTROL/SOLENOID VALVE, ELECTRIC 2-WAY		GATE VALVE		BALL VALVE		COOLING COIL		
FFM	FEET PER MINUTE		CONTROL VALVE, ELECTRIC 3-WAY		GATE VALVE		BALL VALVE		HEATING COIL		
FT	FIN-TUBE		CONTROL VALVE, PNEUMATIC 2-WAY		GATE VALVE		BALL VALVE		GAS FURNACE		
GC	GENERAL CONTRACTOR		CONTROL VALVE, PNEUMATIC 3-WAY		GATE VALVE		BALL VALVE		HUMIDIFIER		
GR	GLYCOL RETURN		RELIEF / SAFETY VALVE		GATE VALVE		BALL VALVE		ALARM		
GS	GLYCOL SUPPLY		PRESSURE REDUCING VALVE		GATE VALVE		BALL VALVE		STATUS		
HC	HVAC CONTRACTOR		VACUUM BREAKER		GATE VALVE		BALL VALVE		FLOW SWITCH		
HHWR	HEATING HOT WATER RETURN		FLEXIBLE PIPE CONNECTOR		GATE VALVE		BALL VALVE		DIFFERENTIAL STATIC PRESSURE SWITCH		
HHWS	HEATING HOT WATER SUPPLY		EXPANSION COMPENSATOR W/ GUIDES		GATE VALVE		BALL VALVE		RELAY		
HP	HEAT PUMP		EXPANSION JOINT		GATE VALVE		BALL VALVE		PRESSURE GAUGE		
HPC	HIGH PRESSURE CONDENSATE		PIPE ANCHOR		GATE VALVE		BALL VALVE		FREEZE-STAT		
HPS	HIGH PRESSURE STEAM		PIPE GUIDE		GATE VALVE		BALL VALVE		DIGITAL INPUT (TO BUILDING MANAGEMENT SYSTEM)		
LF	LINEAR FOOTAGE OF FIN-TUBE RADIATION		THERMOSTATIC TRAP		GATE VALVE		BALL VALVE		DIGITAL OUTPUT (FROM BUILDING MANAGEMENT SYSTEM)		
LPC	LOW PRESSURE CONDENSATE		FLOAT & THERMOSTATIC TRAP		GATE VALVE		BALL VALVE		ANALOG OUTPUT (FROM BUILDING MANAGEMENT SYSTEM)		
LPG	LIQUEFIED PROPANE GAS		BUCKET TRAP		GATE VALVE		BALL VALVE		ANALOG INPUT (TO BUILDING MANAGEMENT SYSTEM)		
LPS	LOW PRESSURE STEAM		THERMODYNAMIC TRAP		GATE VALVE		BALL VALVE		ELECTRICAL INTERFACE		
MBH	1,000 BTU/HR		THERMOMETER		GATE VALVE		BALL VALVE		SPEED FEED BACK		
MC	MECHANICAL CONTRACTOR		WELL		GATE VALVE		BALL VALVE		END SWITCH		
MPC	MEDIUM PRESSURE CONDENSATE		PRESSURE GAUGE		GATE VALVE		BALL VALVE		POSITION FEEDBACK		
MPS	MEDIUM PRESSURE STEAM		STEAM PRESSURE GAUGE WITH 1/4" NEEDLE VALVE		GATE VALVE		BALL VALVE		TRAVERSE AVERAGING SENSOR		
MRD	MONOFLO FITTING DOWN - HHWR		SQUARE CEILING DIFFUSER (4 WAY)		GATE VALVE		BALL VALVE		PROBE SENSOR		
MSD	MONOFLO FITTING DOWN - HHWS		ROUND CEILING DIFFUSER		GATE VALVE		BALL VALVE		FREEZE STAT SENSOR		
MUW	MAKE-UP WATER		SQUARE OR RECTANGULAR CEILING GRILLE		GATE VALVE		BALL VALVE				
NC	NORMALLY CLOSED		SUPPLY REGISTER, RETURN OR EXHAUST GRILLE		GATE VALVE		BALL VALVE				
NG	NATURAL GAS		AIR TERMINAL UNIT-DUCTWORK U - UNIT TYPE		GATE VALVE		BALL VALVE				
NO	NORMALLY OPEN		AIR TERMINAL UNIT-DUCTWORK MAX = MAXIMUM CFM MIN = MINIMUM CFM		GATE VALVE		BALL VALVE				
NTS	NOT TO SCALE		AIR TERMINAL UNIT-DUCTWORK U - UNIT TYPE		GATE VALVE		BALL VALVE				
OA	OUTSIDE AIR		AIR TERMINAL UNIT-DUCTWORK GPM = GALLONS PER MIN MAX = MAXIMUM GPM		GATE VALVE		BALL VALVE				
PC	PLUMBING CONTRACTOR		AIR TERMINAL UNIT-DUCTWORK U - UNIT TYPE		GATE VALVE		BALL VALVE				
PD	PUMP DISCHARGE		AIR TERMINAL UNIT-DUCTWORK MAX = PRIMARY MAX CFM MIN = PRIMARY MIN CFM FAN = FAN CFM		GATE VALVE		BALL VALVE				
PHWR	PRIMARY HEATING HOT WATER RETURN		AIR TERMINAL UNIT-DUCTWORK TYPE = VALANCE TYPE COIL SIZE = COIL LENGTH CLNG GPM = COOLING GPM HTNG GPM = HEATING GPM		GATE VALVE		BALL VALVE				
PHWS	PRIMARY HEATING HOT WATER SUPPLY		AIR TERMINAL UNIT-DUCTWORK X = DIFFUSER OR GRILLE TYPE XX = AIR FLOW VALUE (CFM)		GATE VALVE		BALL VALVE				
RA	RETURN AIR		AIR TERMINAL UNIT-DUCTWORK L1		GATE VALVE		BALL VALVE				
RD	REFRIGERANT DISCHARGE		AIR TERMINAL UNIT-DUCTWORK L2		GATE VALVE		BALL VALVE				
RHC	HOT WATER REHEAT COIL		AIR TERMINAL UNIT-DUCTWORK PL1		GATE VALVE		BALL VALVE				
RLL	REFRIGERANT LIQUID PIPE		AIR TERMINAL UNIT-DUCTWORK PL2		GATE VALVE		BALL VALVE				
RSL	REFRIGERANT SUCTION PIPE		AIR TERMINAL UNIT-DUCTWORK W/W ENCL		GATE VALVE		BALL VALVE				
RTU	ROOFTOP UNIT		AIR TERMINAL UNIT-DUCTWORK L1		GATE VALVE		BALL VALVE				
RV	ROOF VENT		AIR TERMINAL UNIT-DUCTWORK L2		GATE VALVE		BALL VALVE				
SA	SUPPLY AIR		AIR TERMINAL UNIT-DUCTWORK PL1		GATE VALVE		BALL VALVE				
SHWR	SECONDARY HEATING HOT WATER RETURN		AIR TERMINAL UNIT-DUCTWORK PL2		GATE VALVE		BALL VALVE				
SHWS	SECONDARY HEATING HOT WATER SUPPLY		AIR TERMINAL UNIT-DUCTWORK W/W ENCL		GATE VALVE		BALL VALVE				
SSI	SPLIT SYSTEM INDOOR SECTION (EVAPORATOR SECTION)		AIR TERMINAL UNIT-DUCTWORK L1		GATE VALVE		BALL VALVE				
SSO	SPLIT SYSTEM OUTDOOR SECTION (CONDENSING UNIT)		AIR TERMINAL UNIT-DUCTWORK L2		GATE VALVE		BALL VALVE				
TC	TEMPERATURE CONTROLS CONTRACTOR		AIR TERMINAL UNIT-DUCTWORK PL1		GATE VALVE		BALL VALVE				
UH	UNIT HEATER		AIR TERMINAL UNIT-DUCTWORK PL2		GATE VALVE		BALL VALVE				
UV	UNIT VENTILATOR		AIR TERMINAL UNIT-DUCTWORK W/W ENCL		GATE VALVE		BALL VALVE				
V	VENT		AIR TERMINAL UNIT-DUCTWORK L1		GATE VALVE		BALL VALVE				
WAHP	WATER-TO-AIR HEAT PUMP		AIR TERMINAL UNIT-DUCTWORK L2		GATE VALVE		BALL VALVE				
WWHP	WATER-TO-WATER HEAT PUMP		AIR TERMINAL UNIT-DUCTWORK PL1		GATE VALVE		BALL VALVE				

SYMBOLS GENERAL NOTES:

1) VALVE AND DAMPER ACTUATOR TYPES (ELECTRIC OR PNEUMATIC) WHICH ARE INDICATED IN HVAC TEMPERATURE CONTROL DRAWINGS SHALL SUPERSEDE TYPE INDICATED ON ALL OTHER HVAC DRAWINGS.

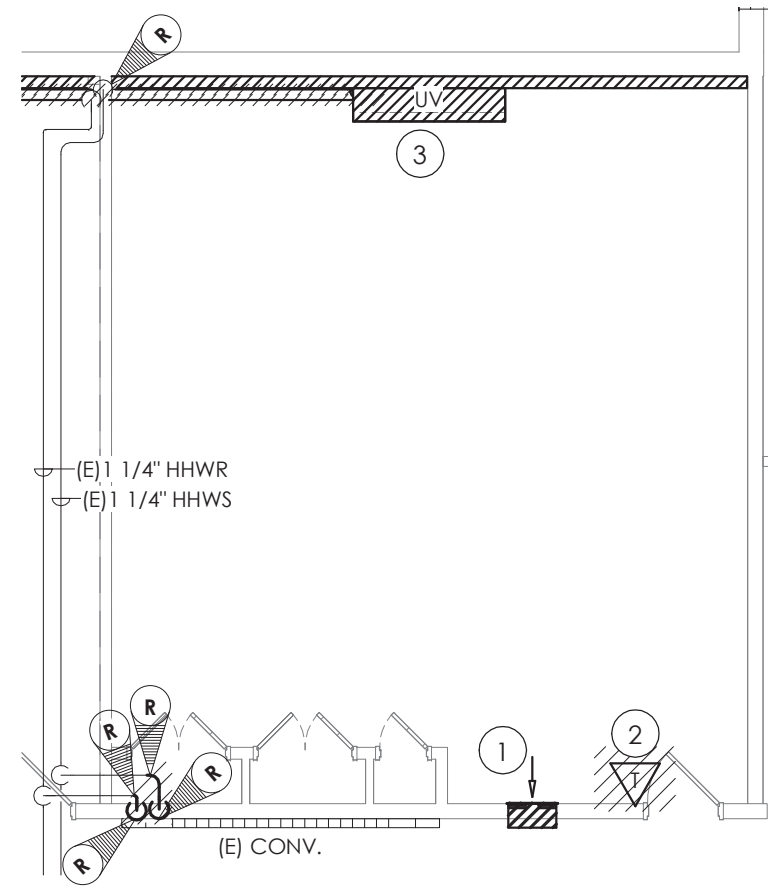
HVAC CONTRACTOR GENERAL NOTES:

A. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS WITHIN THE BUILDING PRIOR TO COMMENCE



KEYPLAN - AREA 1

1" = 100'-0"



2 HVAC DEMOLITION PLAN - AREA C ALTERNATE

H101.1

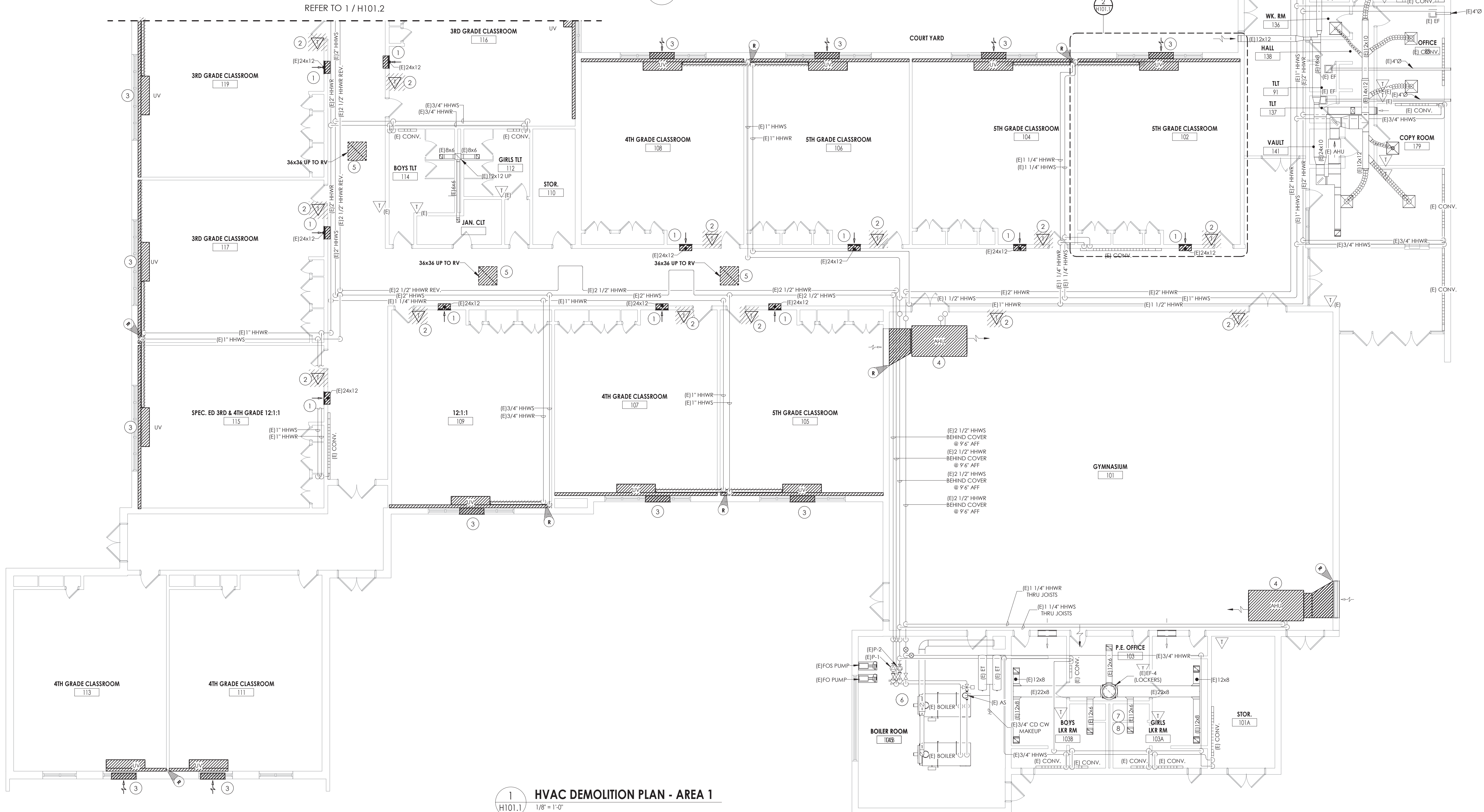
1/8" = 1'-0"

GENERAL NOTES

1. REFER TO H000 FOR GENERAL NOTES.

KEYNOTES

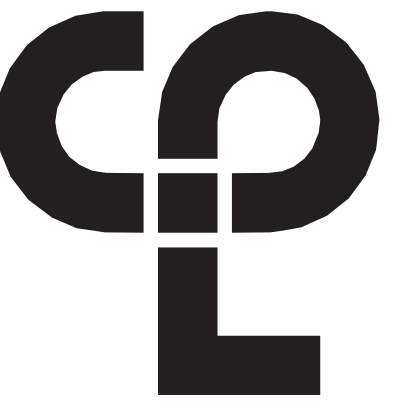
- 1 REMOVE TRANSFER GRILLE AND DUCT. COORDINATE INFILL WITH GC.
- 2 REMOVE TSTAT.
- 3 REMOVE AND DISPOSE OF EXISTING UNIT VENTILATOR, FINPIPE AND PIPE ENCLOSURE. REMOVE PIPING AS SHOWN. REMOVE AND DISPOSE OF LOUVER SLEEVE. EXISTING LOUVER TO REMAIN. COORDINATE INFILL WITH GC. REMOVE ALL BAS CONTROLS INSTRUMENTS AND CONTROL VALVE ACTUATORS. SET ASIDE FOR RE-INSTALLATION WITH NEW WORK.
- 4 REMOVE AND DISPOSE OF EXISTING SUSPENDED AHU. EXISTING LOUVER AND SLEEVE TO REMAIN.
- 5 REMOVE RELIEF VENT. SECURE OPENING AGAINST THE WEATHER UNTIL INFILLED BY GC. COORDINATE INFILL WITH GC.
- 6 COORDINATE WITH THE OWNER TO SAMPLE AND ANALYZE THE HYDRONIC SYSTEM FLUID. SUBMIT RESULTS TO THE ENGINEER.
- 7 COORDINATE WITH THE BUILDING AUTOMATION SYSTEM TO FORCE THE HVAC SYSTEM INTO FULL HEATING MODE. DOCUMENT PRELIMINARY HHWS/R SYSTEM TAB DATA AND SUBMIT TO THE ENGINEER.
- 8 PLACE THE GYMNASIUM AND LOCKER ROOM IN 'OCCUPIED MODE'. COORDINATE PRELIMINARY TAB MEASUREMENTS FOR THE EXISTING AHU'S, EF-4, INCLUDING ASSOCIATED OUTDOOR AIR AND TRANSFER AIR VOLUMES. SUBMIT RESULTS TO THE ENGINEER.



1 HVAC DEMOLITION PLAN - AREA 1

H101.1

1/8" = 1'-0"



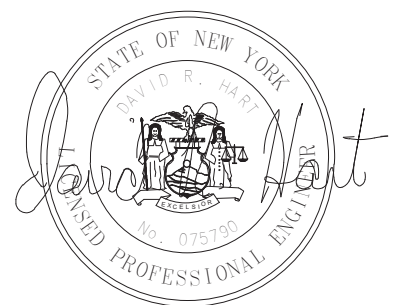
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NEWBURGH, NY 12550
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PROJECT INFORMATION

Project Number
13940.20
Client Name
NEWBURGH ENLARGED CITY
SCHOOL DISTRICT
Project Name
PHASE 5: 2019 CAPITAL
IMPROVEMENTS PROJECT
SED # 44-16-00-01-0-018-009
Project Address
400 Old Forge Hill Rd, New Windsor, NY
12553

REVISION SCHEDULE

Date Description

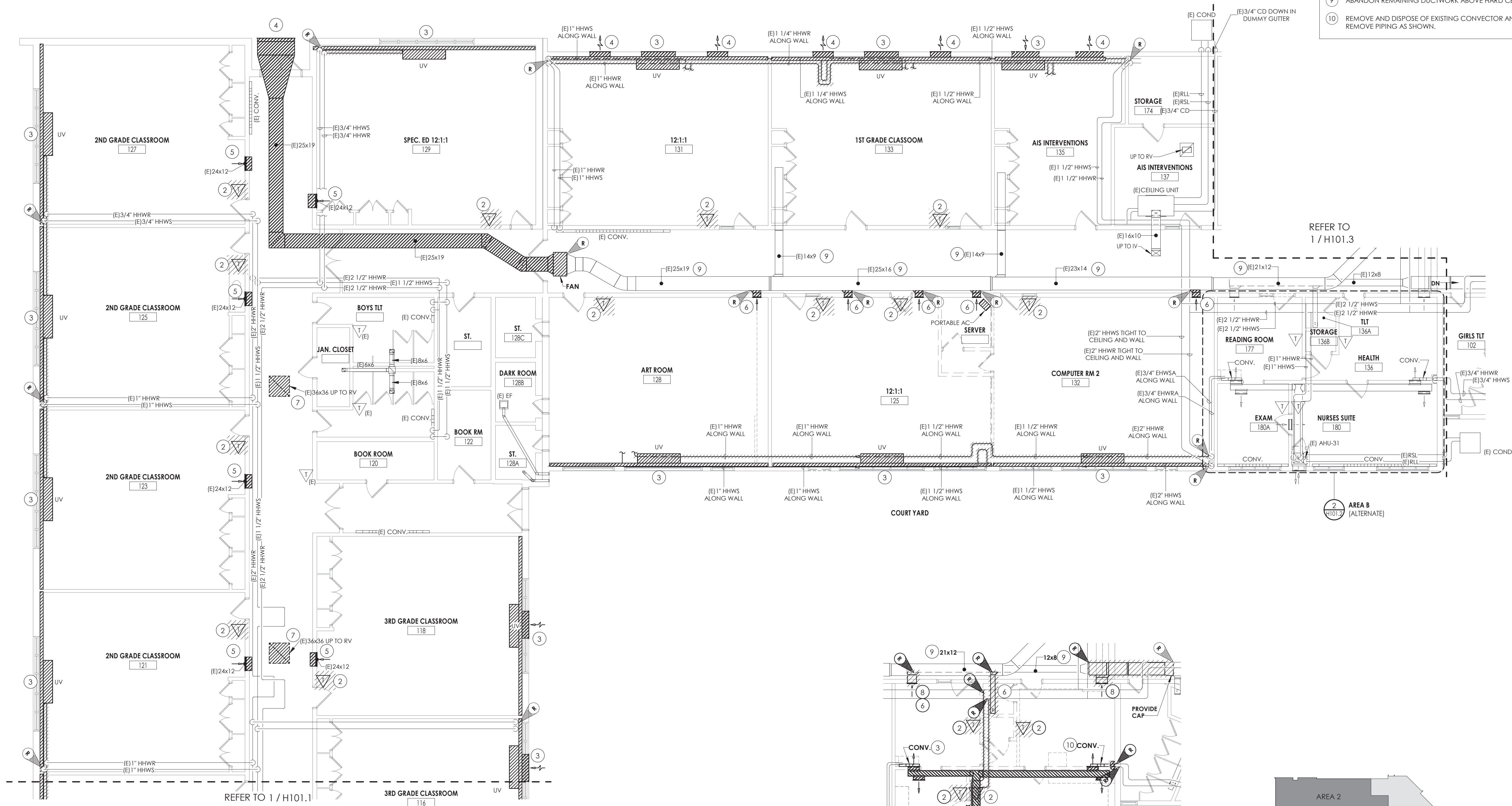


SHEET INFORMATION

Issued
03/05/21
BID SUBMISSION
Drawn By
ACS
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EM
Drawing Title
GROUND FLOOR PLAN AREA 1
DEMOLITION PLAN

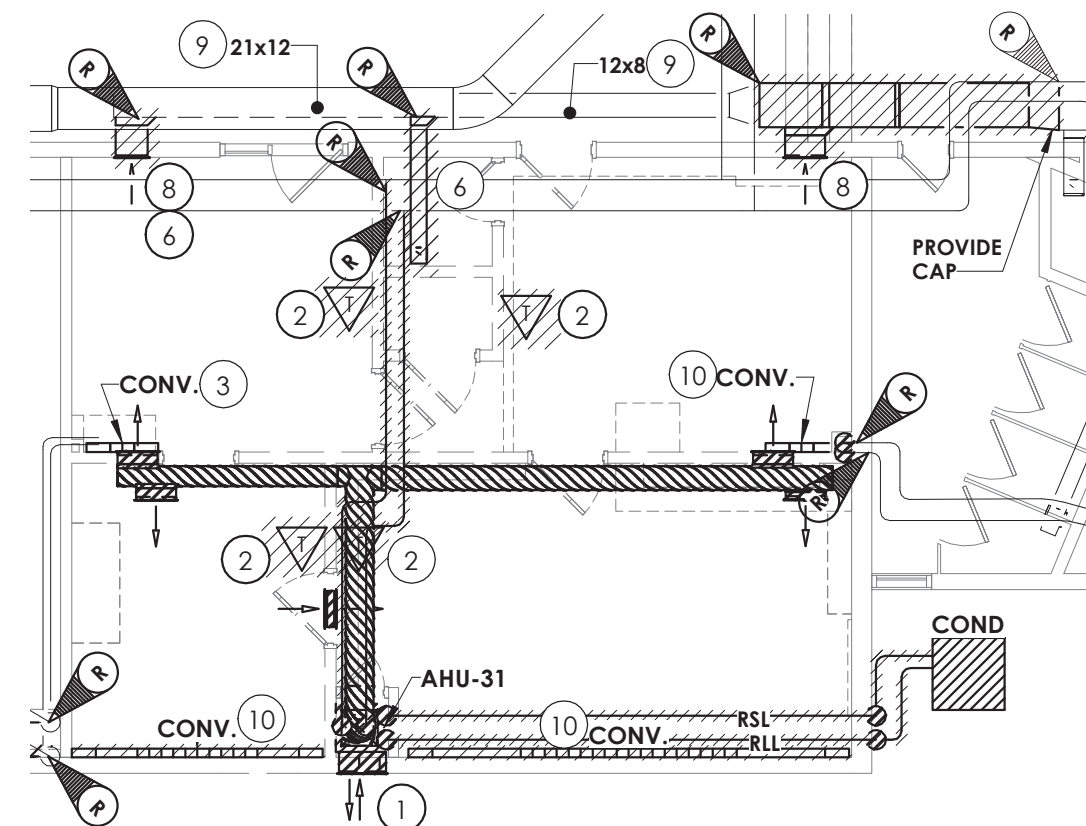
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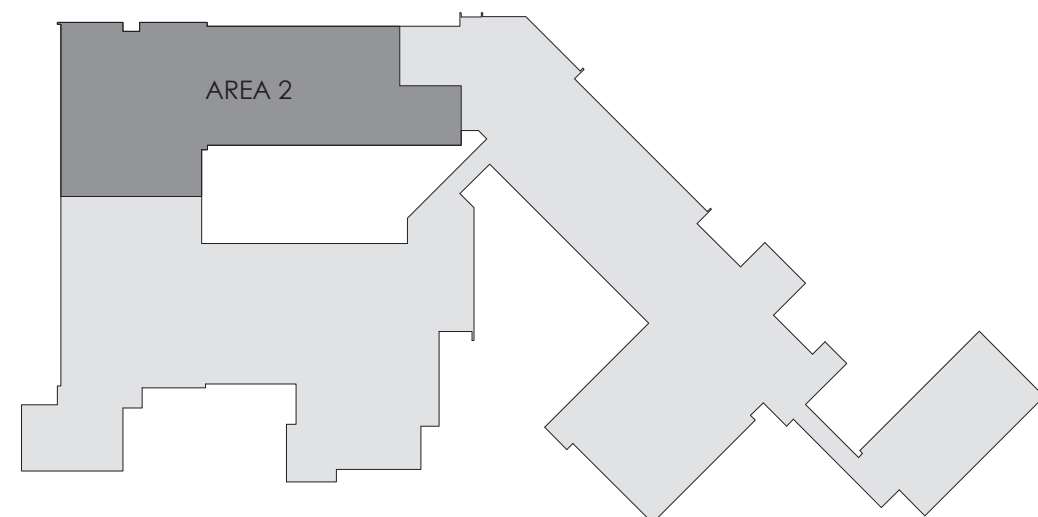
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H101.2
1/8" = 1'-0"

HVAC DEMOLITION PLAN - AREA 2



2
H101.2
1/8" = 1'-0"

HVAC DEMOLITION PLAN - AREA B ALTERNATE



KEYPLAN - AREA 2
1" = 100'-0"

GENERAL NOTES

1. REFER TO H000 FOR GENERAL NOTES.

KEYNOTES

- 1 REMOVE AND DISPOSE OF EXISTING AHU. REMOVE AND DISPOSE OF LOUVER SLEEVE. EXISTING LOUVER TO REMAIN.
- 2 REMOVE TSTAT.
- 3 REMOVE AND DISPOSE OF EXISTING UNIT VENTILATOR, FIN/TUBE AND PIPE ENCLOSURE. REMOVE PIPING AS SHOWN. REMOVE AND DISPOSE OF LOUVER SLEEVE. EXISTING LOUVER TO REMAIN. COORDINATE INFILL WITH GC. REMOVE ALL BAS CONTROLS INSTRUMENTS AND CONTROL VALVE ACTUATORS. SET ASIDE FOR RE-INSTALLATION WITH NEW WORK.
- 4 REMOVE AND DISPOSE OF EXISTING ACTUATOR AND DAMPER. REMOVE AND DISPOSE OF LOUVER SLEEVE. EXISTING LOUVER TO REMAIN. COORDINATE INFILL WITH GC.
- 5 REMOVE TRANSFER GRILLE AND DUCT. COORDINATE INFILL WITH GC.
- 6 REMOVE GRILLE. REMOVE DUCTWORK FOR WALL INFILL. ABANDON REMAINING DUCTWORK ABOVE HARD CEILING. COORDINATE INFILL WITH GC.
- 7 REMOVE RELIEF VENT. SECURE OPENING AGAINST THE WEATHER UNTIL INFILLED BY GC. COORDINATE INFILL WITH GC.
- 8 REMOVE TRANSFER GRILLE AND DUCT. COORDINATE INFILL WITH GC.
- 9 ABANDON REMAINING DUCTWORK ABOVE HARD CEILING.
- 10 REMOVE AND DISPOSE OF EXISTING CONVECTOR AND PIPE ENCLOSURE. REMOVE PIPING AS SHOWN.

PROJECT INFORMATION

Project Number
13940.20
Client Name
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
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PHASE 5: 2019 CAPITAL IMPROVEMENTS PROJECT
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400 Old Forge Hill Rd, New Windsor, NY 12553

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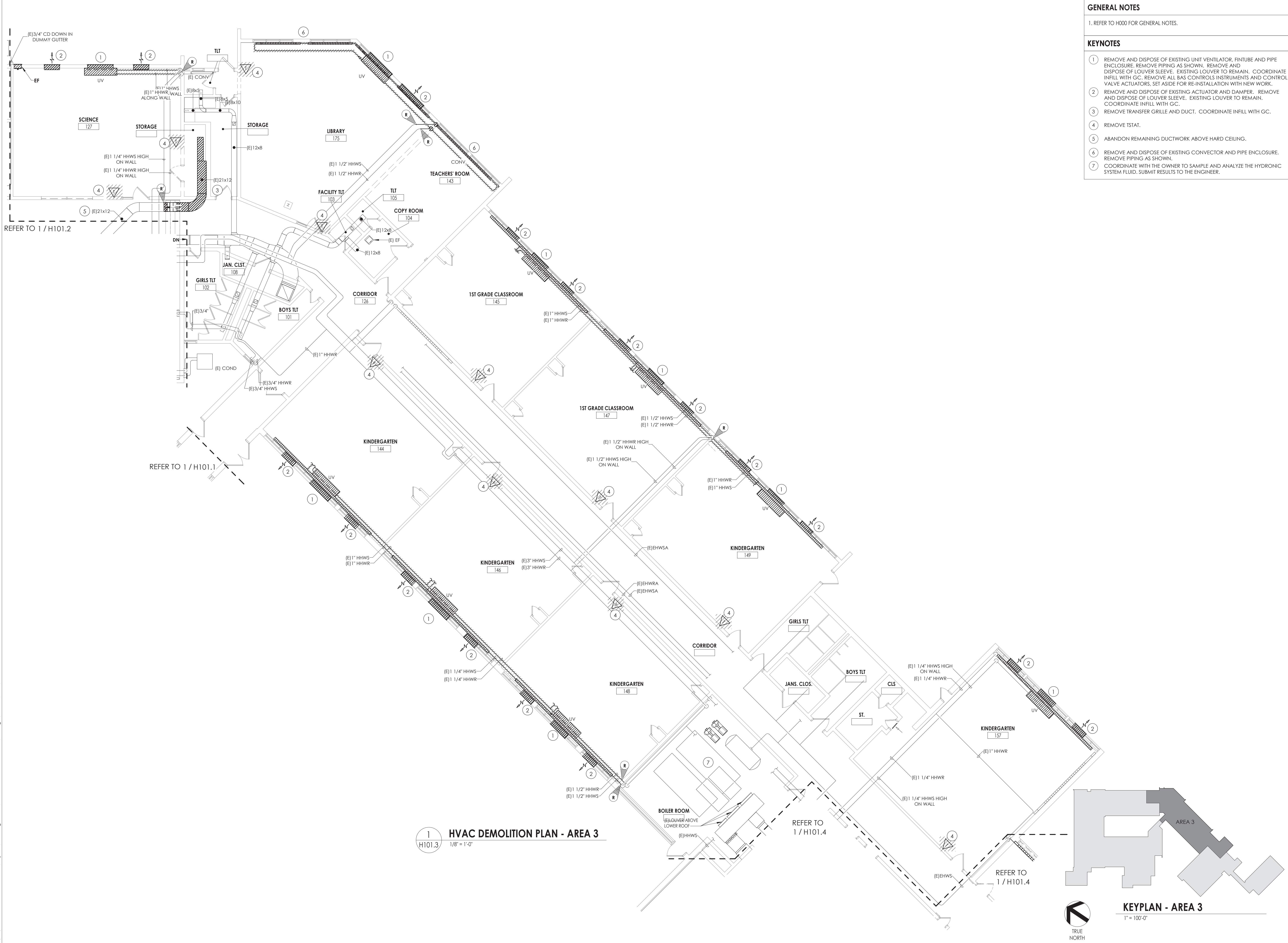
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BID SUBMISSION
Drawn By
ACS
Drawing Title
GROUND FLOOR PLAN AREA 2 DEMOLITION PLAN
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VG
H101.2

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GENERAL NOTES

1. REFER TO H000 FOR GENERAL NOTES.

KEYNOTES

- 1 REMOVE AND DISPOSE OF EXISTING UNIT VENTILATOR, RINTUBE AND PIPE ENCLOSURE. REMOVE PIPING AS SHOWN. REMOVE AND DISPOSE OF LOUVER SLEEVE. EXISTING LOUVER TO REMAIN. COORDINATE INFILL WITH GC. REMOVE ALL BAS CONTROLS INSTRUMENTS AND CONTROL VALVE ACTUATORS. SET ASIDE FOR RE-INSTALLATION WITH NEW WORK.
- 2 REMOVE AND DISPOSE OF EXISTING ACTUATOR AND DAMPER. REMOVE AND DISPOSE OF LOUVER SLEEVE. EXISTING LOUVER TO REMAIN. COORDINATE INFILL WITH GC.
- 3 REMOVE TRANSFER GRILLE AND DUCT. COORDINATE INFILL WITH GC.
- 4 REMOVE TSTAT.
- 5 ABANDON REMAINING DUCTWORK ABOVE HARD CEILING.
- 6 REMOVE AND DISPOSE OF EXISTING CONVECTOR AND PIPE ENCLOSURE. REMOVE PIPING AS SHOWN.
- 7 COORDINATE WITH THE OWNER TO SAMPLE AND ANALYZE THE HYDRONIC SYSTEM FLUID. SUBMIT RESULTS TO THE ENGINEER.

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GROUND FLOOR PLAN AREA 3 DEMOLITION PLAN



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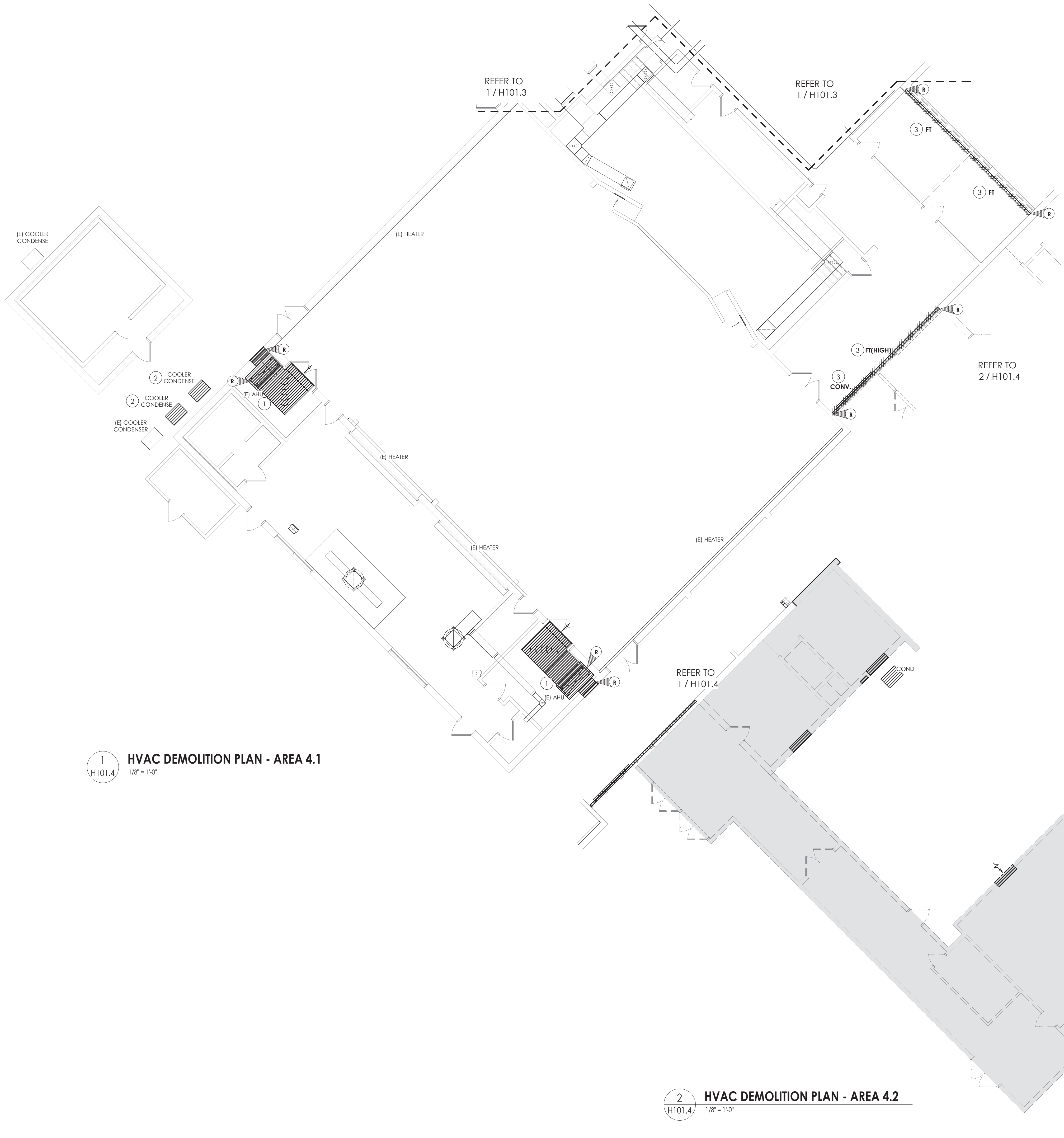
KEYPLAN - AREA 3

1" = 100'-0"

VG
H101.3

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1 HVAC DEMOLITION PLAN - AREA 4.1
H101.4 1/8" = 1'-0"

2 HVAC DEMOLITION PLAN - AREA 4.2
H101.4 1/8" = 1'-0"

GENERAL NOTES

1. REFER TO H000 FOR GENERAL NOTES.

KEYNOTES

1

REMOVE AND DISPOSE OF EXISTING AHU. EXISTING LOUVER AND SLEEVE TO REMAIN.

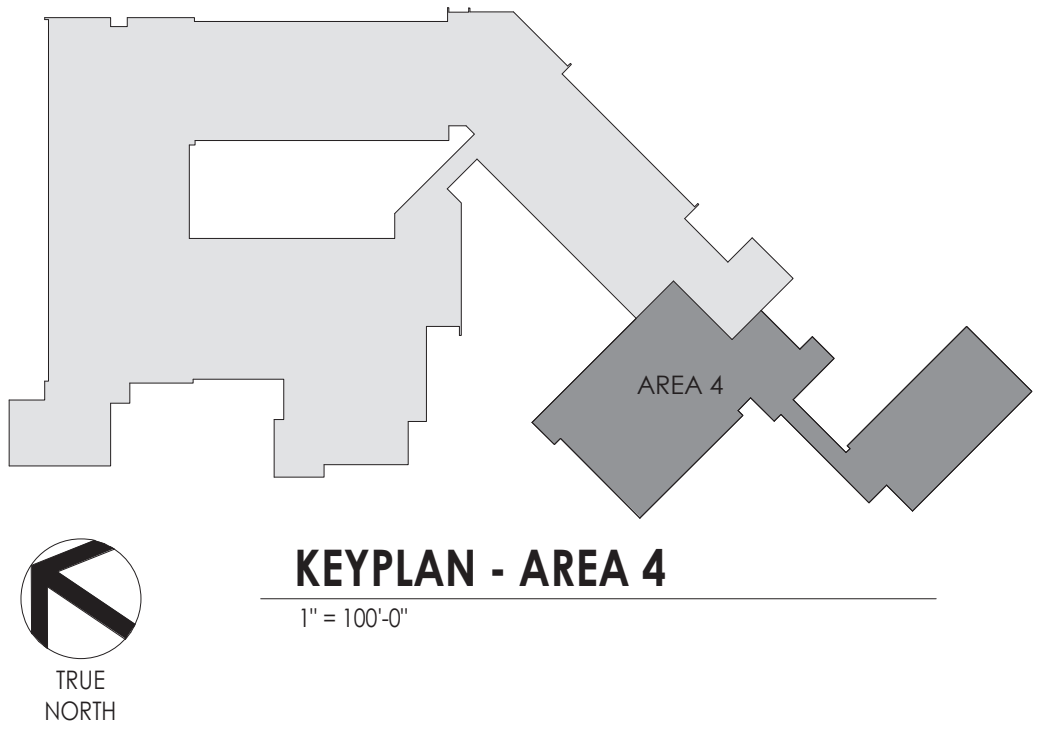
2

EVACUATE ALL REFRIGERANT LINES PER LOCAL CODES. REMOVE COMPRESSOR, EVAPORATOR, PIPING ETC.

3

REMOVE AND DISPOSE OF EXISTING CONVECTOR AND PIPE ENCLOSURE. REMOVE PIPING AS SHOWN.

AREA OF MASS DEMOLITION

GC TO COMPLETELY REMOVE AND DISPOSE OF ENTIRE AREA INDICATED BY HATCH INCLUDING BUT NOT LIMITED TO: WALLS (EXTERIOR & INTERIOR), FOUNDATIONS, FLOORS, CEILINGS, ROOFS, RESTROOM FIXTURES, DOORS, AND EXTERIOR CONCRETE STAIRS. (BASE BID)



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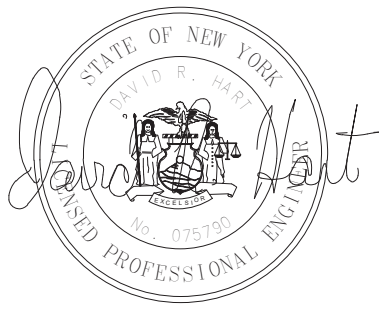
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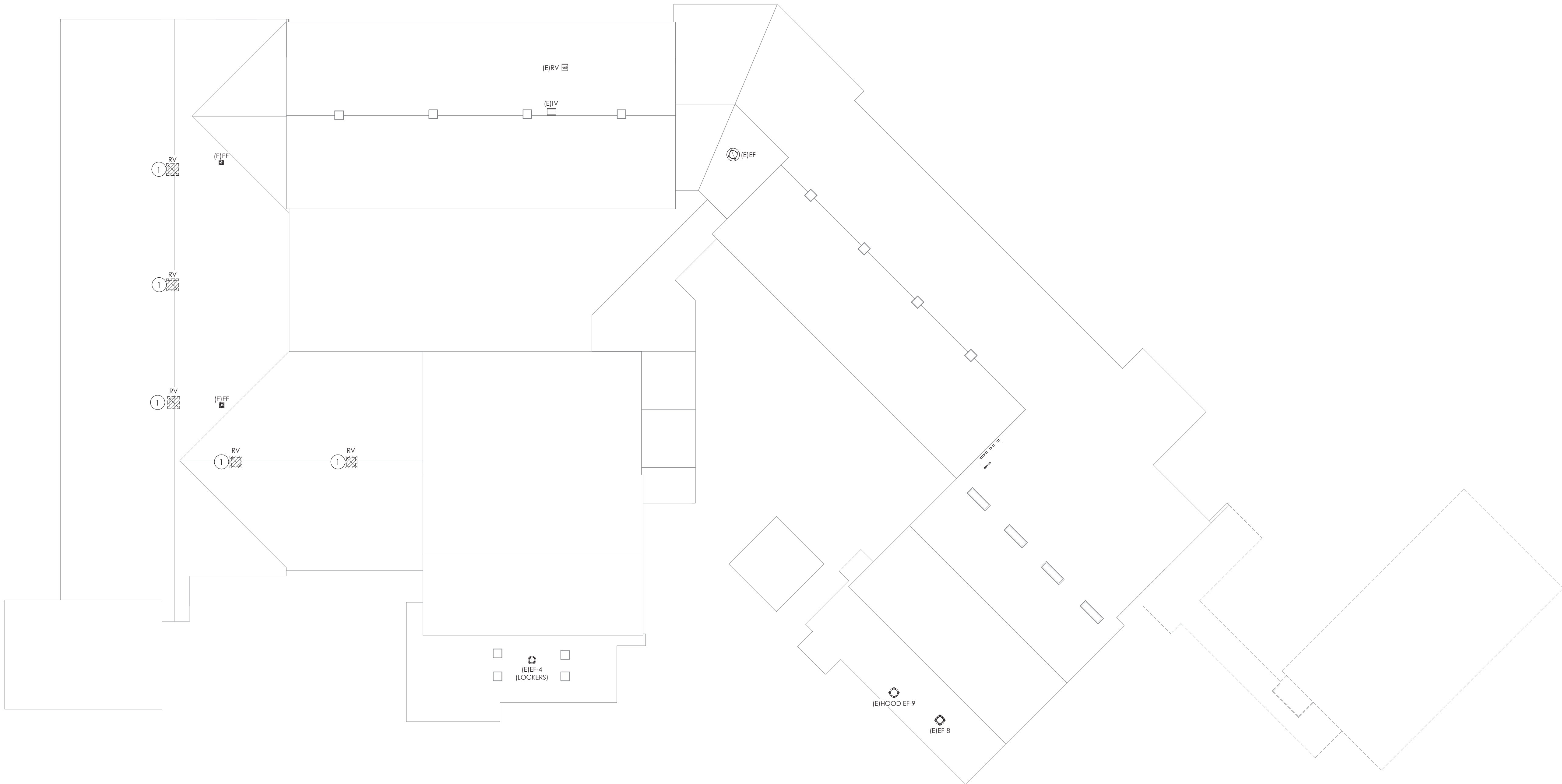
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Drawing Title
GROUND FLOOR PLAN AREA 4
DEMOLITION PLAN

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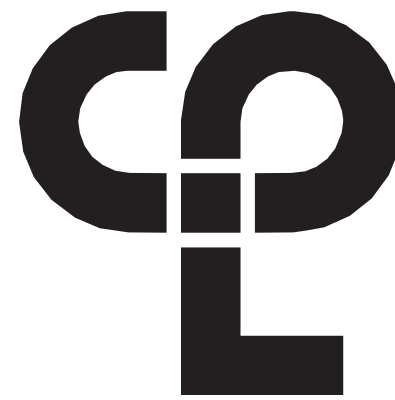
1
H102

ROOF MECHANICAL DEMOLITION PLAN

1" = 20'-0"

KEYNOTES

- ① REMOVE RELIEF VENT, SECURE OPENING AGAINST THE WEATHER UNTIL INFILLED BY GC. COORDINATE INFILL WITH GC.



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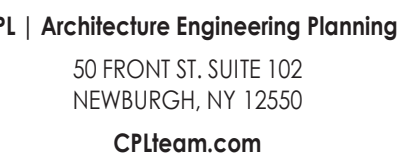
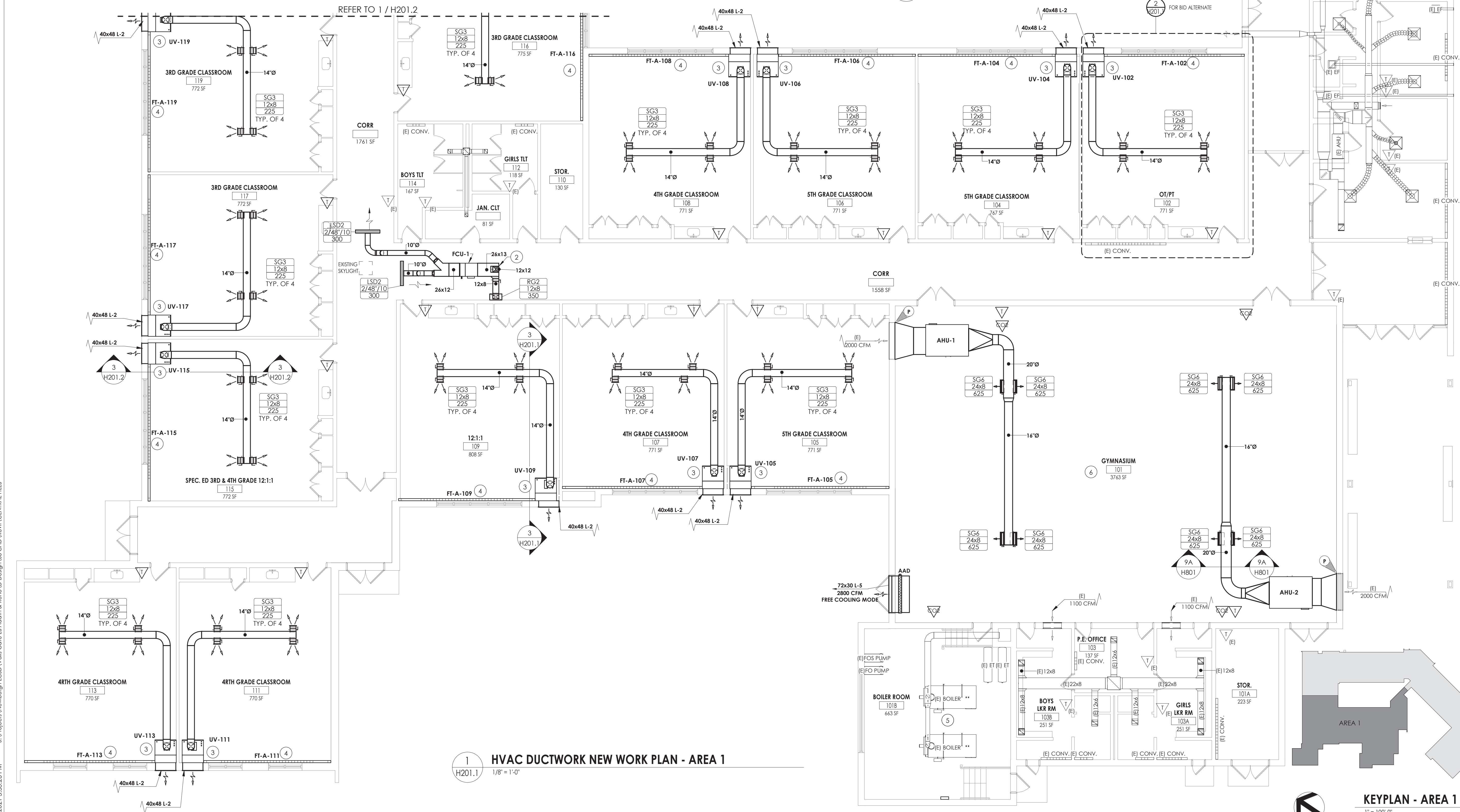
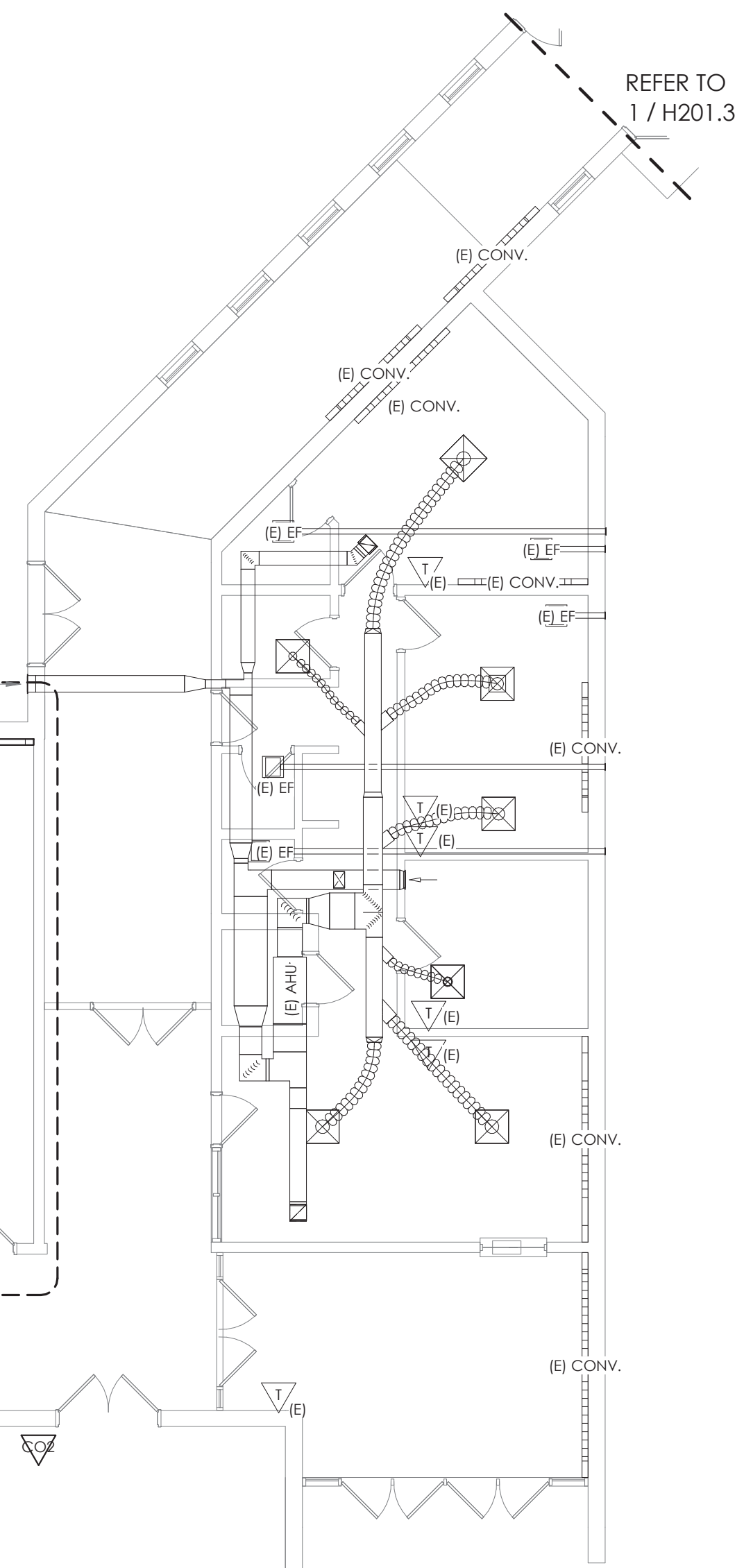
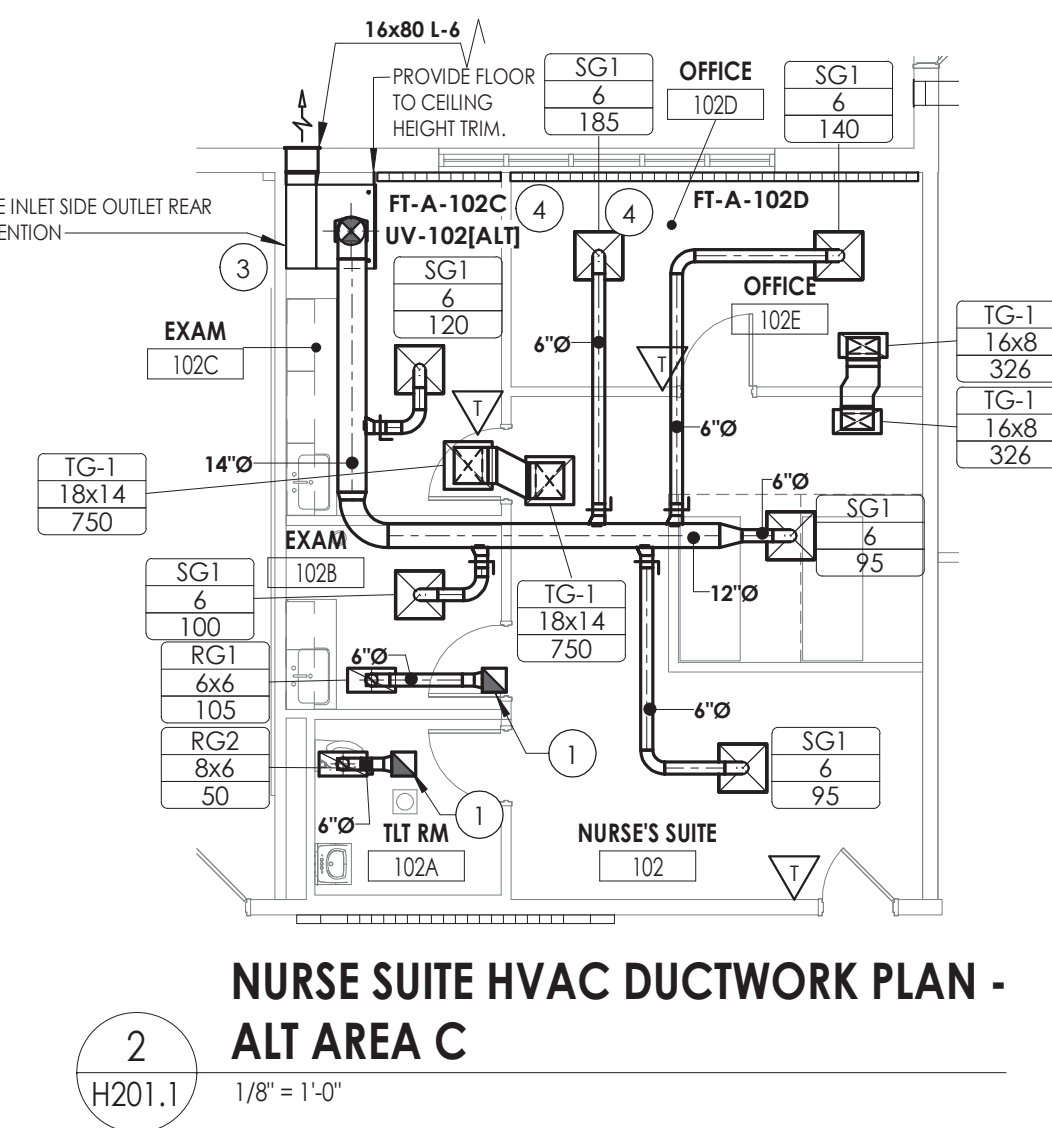
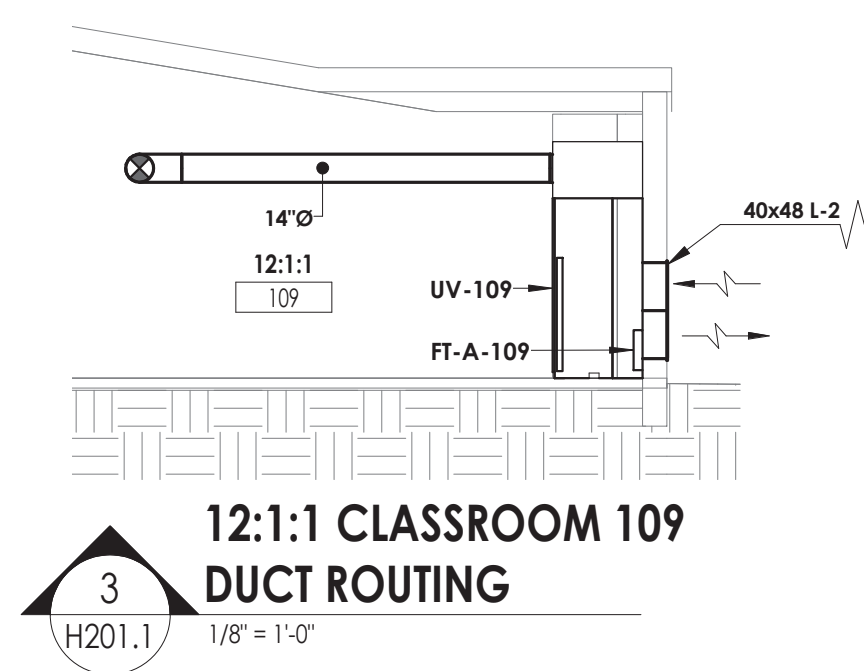


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ROOF DEMOLITION PLAN

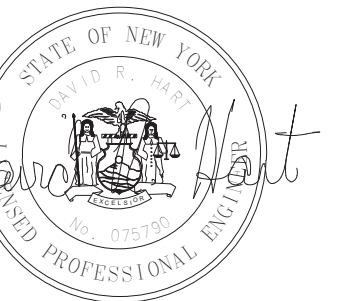
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H102

- 1 12x12 DUCT UP TO OE (ON ROOF). PROVIDE AUTOMATIC DAMPER AND COORDINATE CONTROLS.
- 2 12x12 DUCT UP TO IV (ON ROOF). PROVIDE AUTOMATIC DAMPER AND COORDINATE CONTROLS.
- 3 PROVIDE UNIT VENTILATOR, LOUVER, WALL SLEEVE WITH SPLITTER PLATE, AND DUCTED AIR DISTRIBUTION SYSTEM. COORDINATE WALL OPENING SIZE WITH GC. COORDINATE AND REINSTATE BAS CONTROLS INSTRUMENTS AND CONTROL VALVE ACTUATORS. TEST ADJUST AND BALANCE.
- 4 PROVIDE FINTUBE ENCLOSURE ASSEMBLIES, ACCESSORIES AND MAINTENANCE ACCESS DOOR.
- 5 PROVIDE CHEMICAL TREATMENT AND REFILL THE HYDRONIC SYSTEM FLUID, COORDINATE WITH THE BUILDING AUTOMATION SYSTEM TO FORCE THE HVAC SYSTEM INTO FULL HEATING MODE. TEST, ADJUST, AND BALANCE THE HYDRONIC HWHS/ R SYSTEM.
- 6 TEST, ADJUST, AND BALANCE THE HVAC AND EXHAUST SYSTEM SERVING THE GYMNASIUM AND LOCKER ROOM.



ct Number
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ct Name
**BURBURN ENLARGED CITY
SCHOOL DISTRICT**
ct Name
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44-16-00-01-0-018-009
ct Address
Old Forge Hill Rd, New Windsor, NY
53

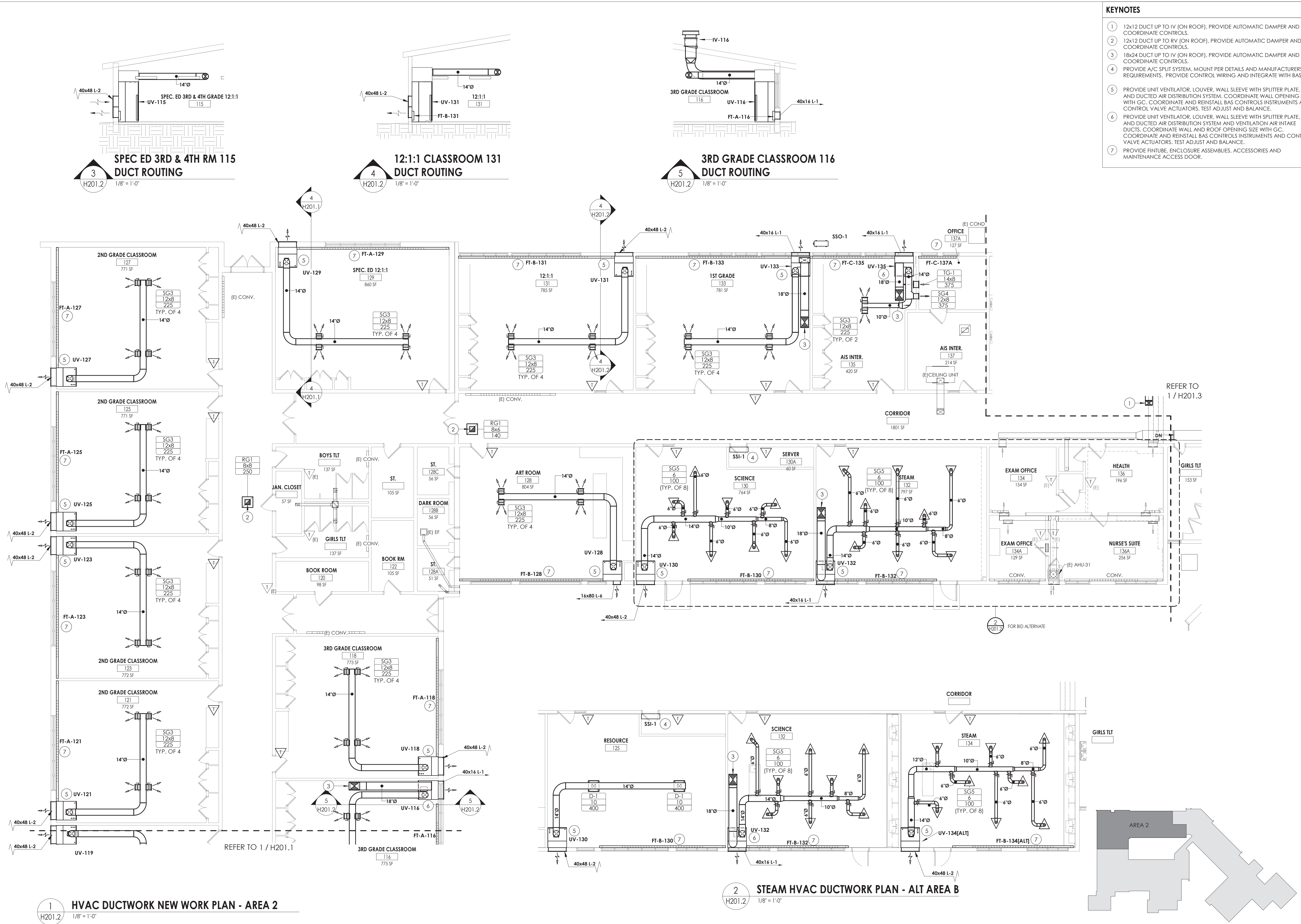
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ROUND FLOOR PLAN AREA 1
NETWORK PLAN

VG
H201.1

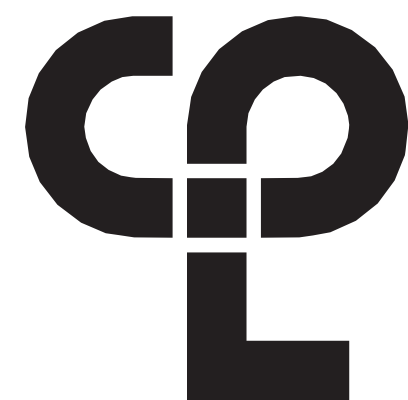
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GROUND FLOOR PLAN AREA 3	
DUCTWORK PLAN	

VG
H201.3



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PROJECT INFORMATION

Project Number
13940.20
Client Name
**NEWBURGH ENLARGED CITY
SCHOOL DISTRICT**
Project Name
**PHASE 5: 2019 CAPITAL
IMPROVEMENTS PROJECT**
SED # 44-16-00-01-0-018-009
Project Address
400 Old Forge Hill Rd, New Windsor, NY
12553

REVISION SCHEDULE

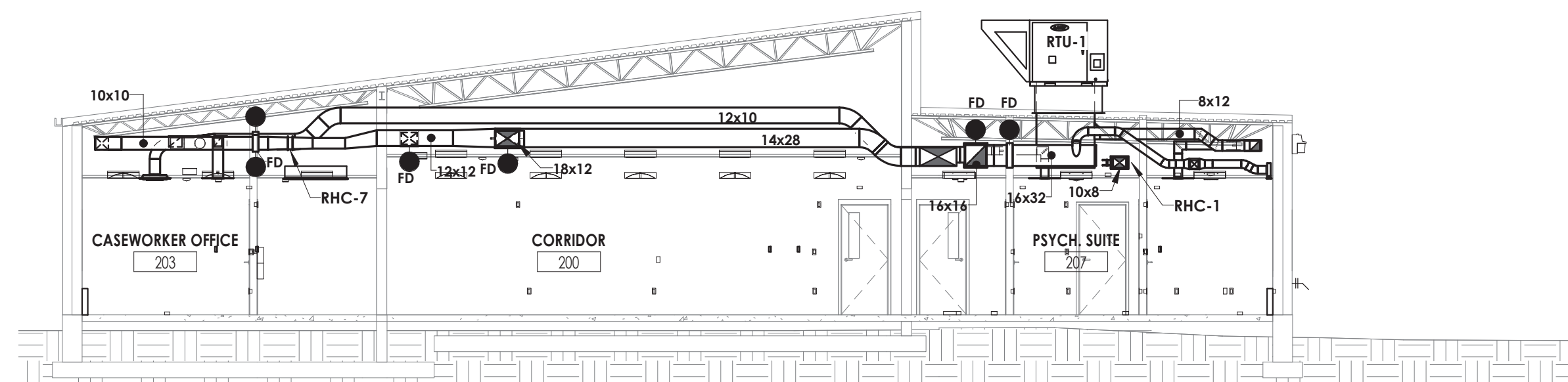
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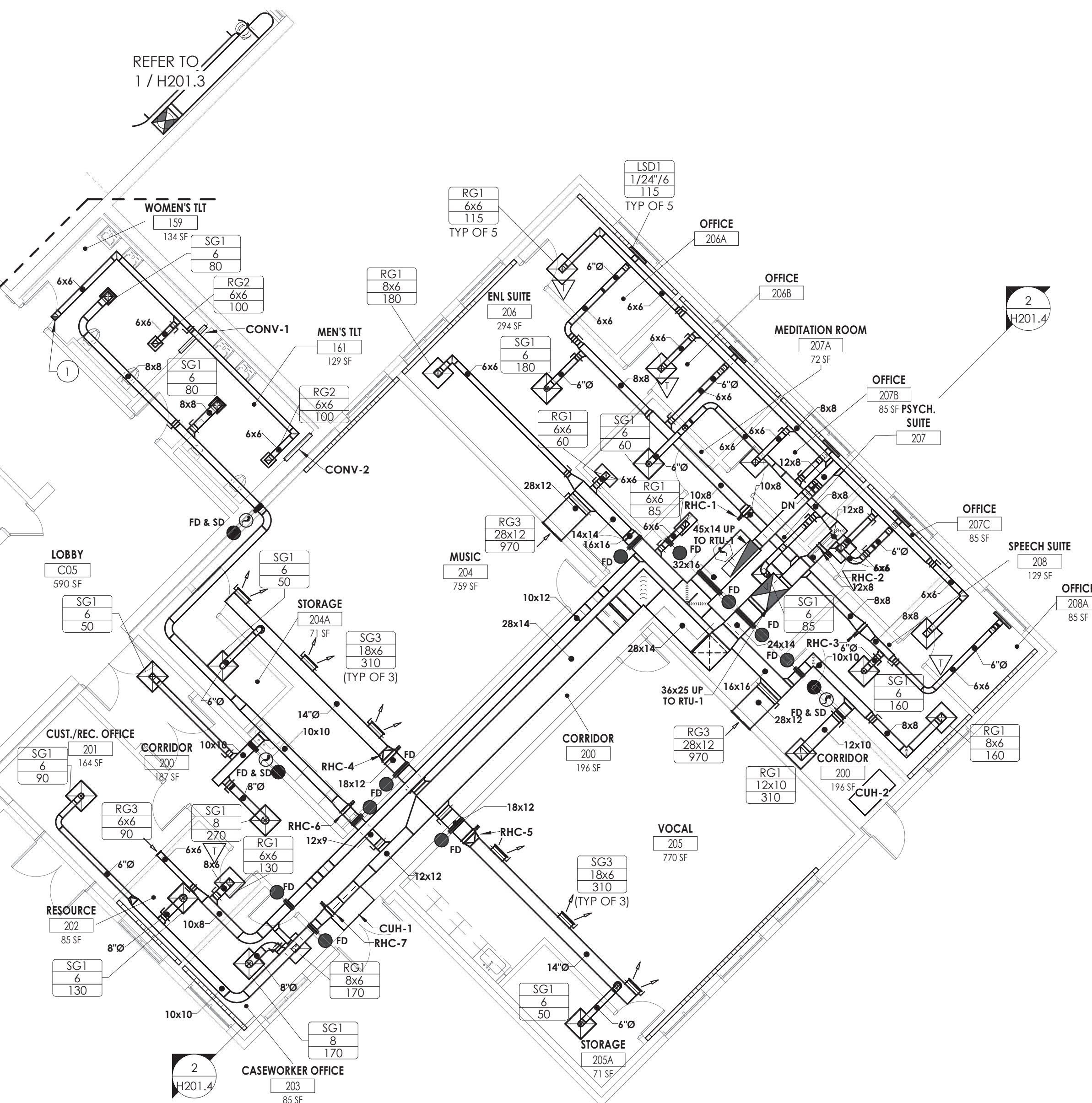
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ACS
Checked By
EM
Drawing Title
**GROUND FLOOR PLAN AREA 4
DUCTWORK PLAN**

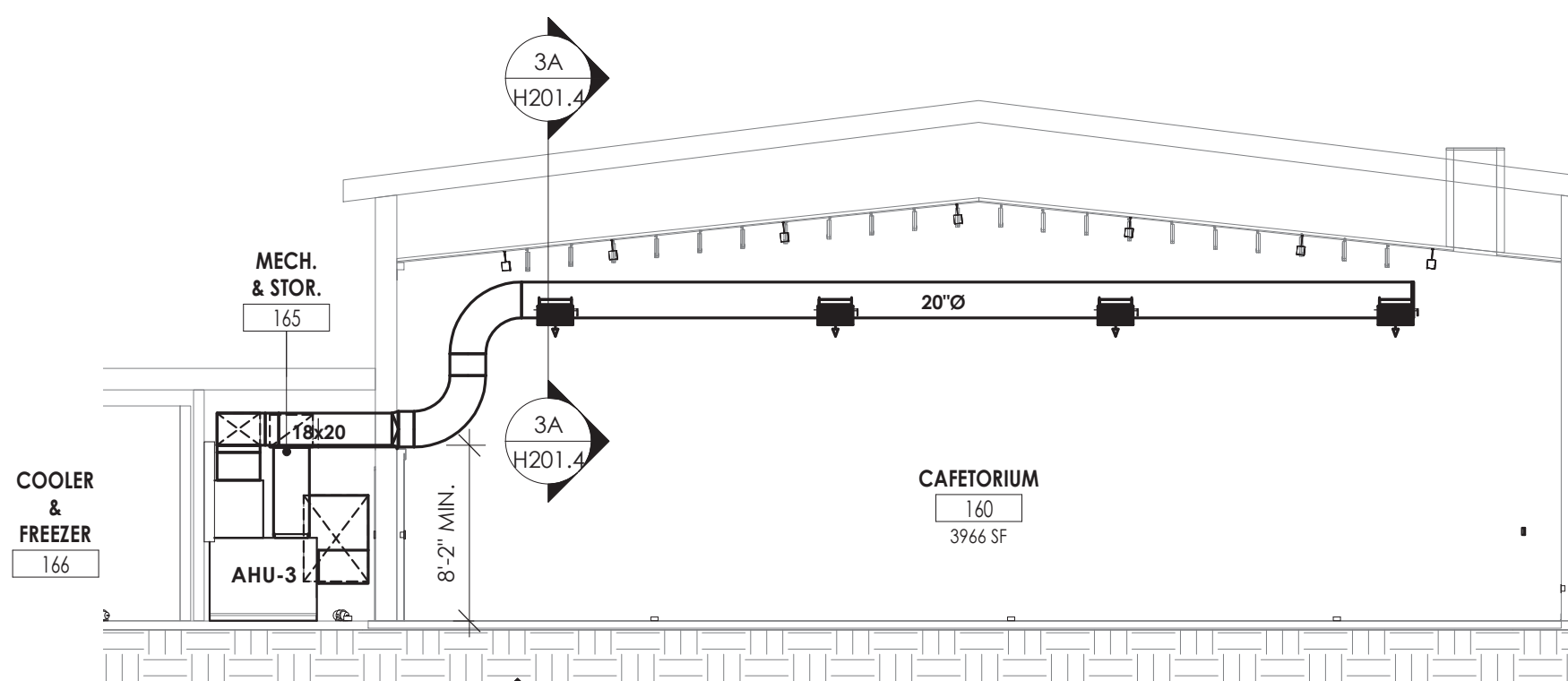
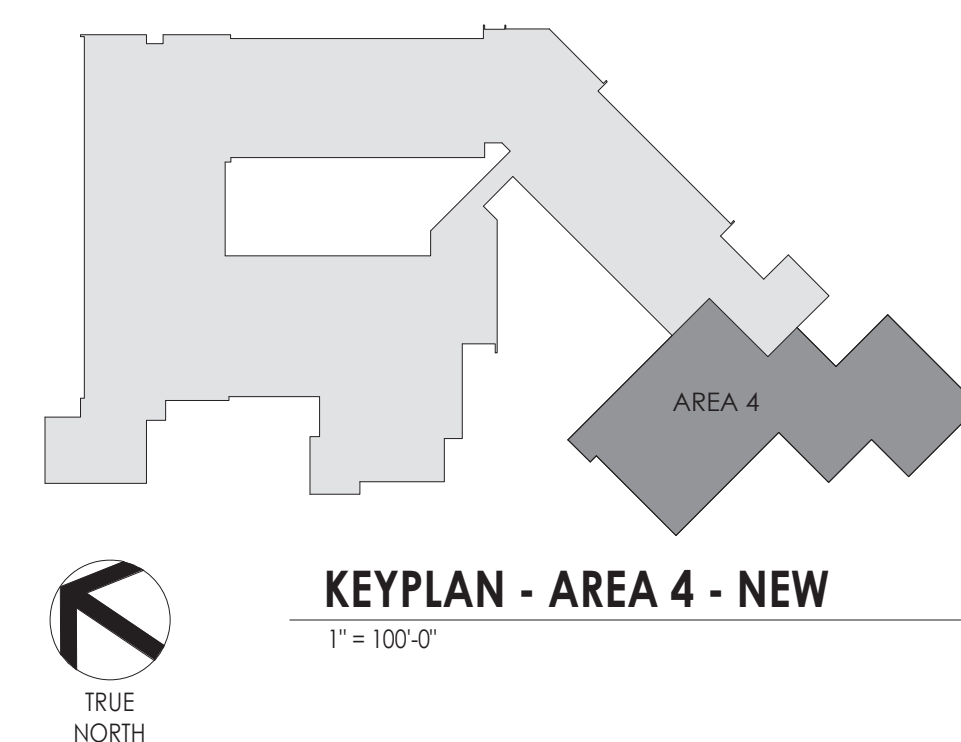
VG
H201.4



2 MUSIC CORRIDOR DUCT ROUTING
H201.4 1/8" = 1'-0"

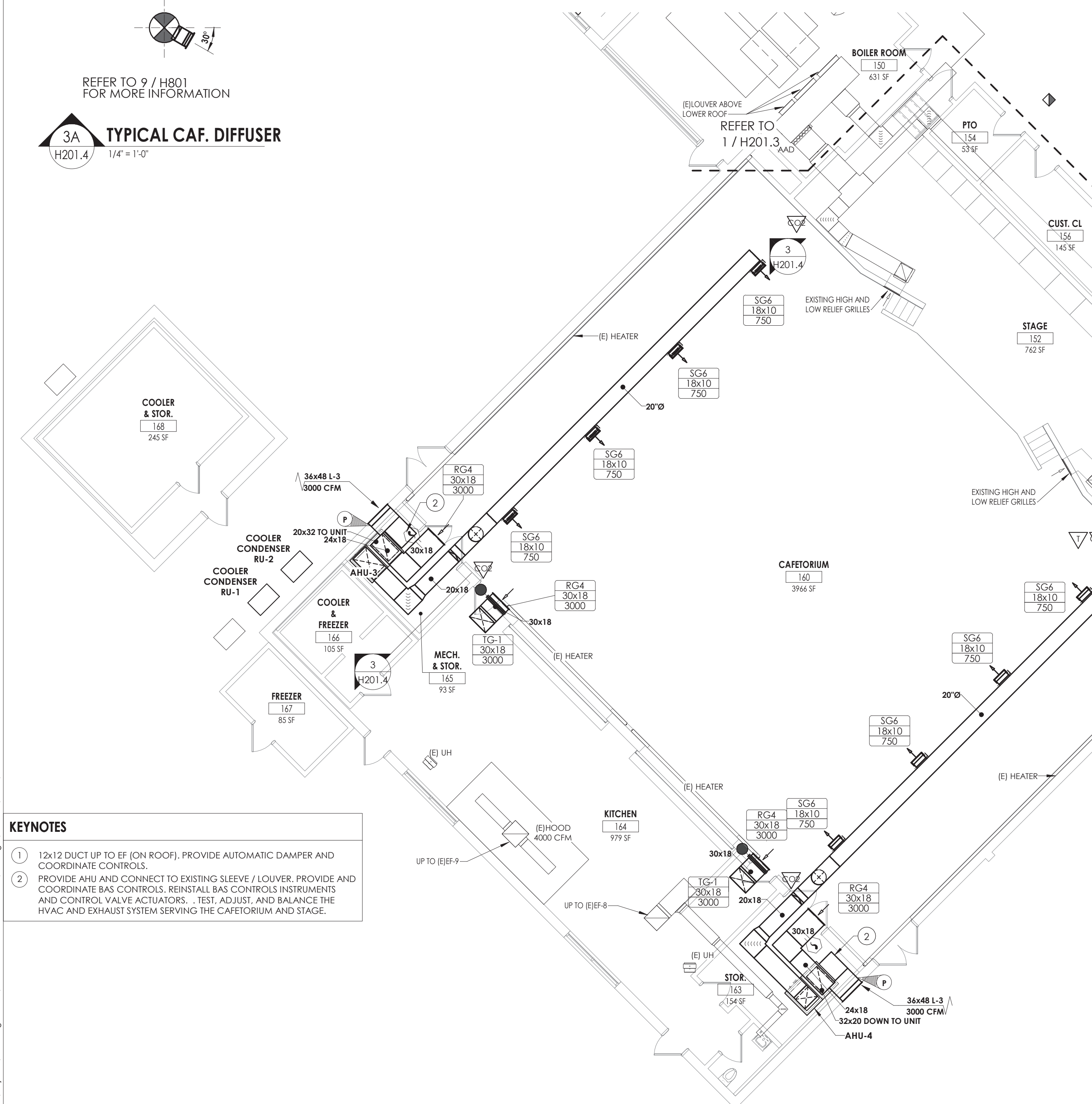


1 HVAC DUCTWORK NEW WORK PLAN - AREA 4
H201.4 1/8" = 1'-0"



3 CAFATORIUM SECTION
H201.4 1/8" = 1'-0"

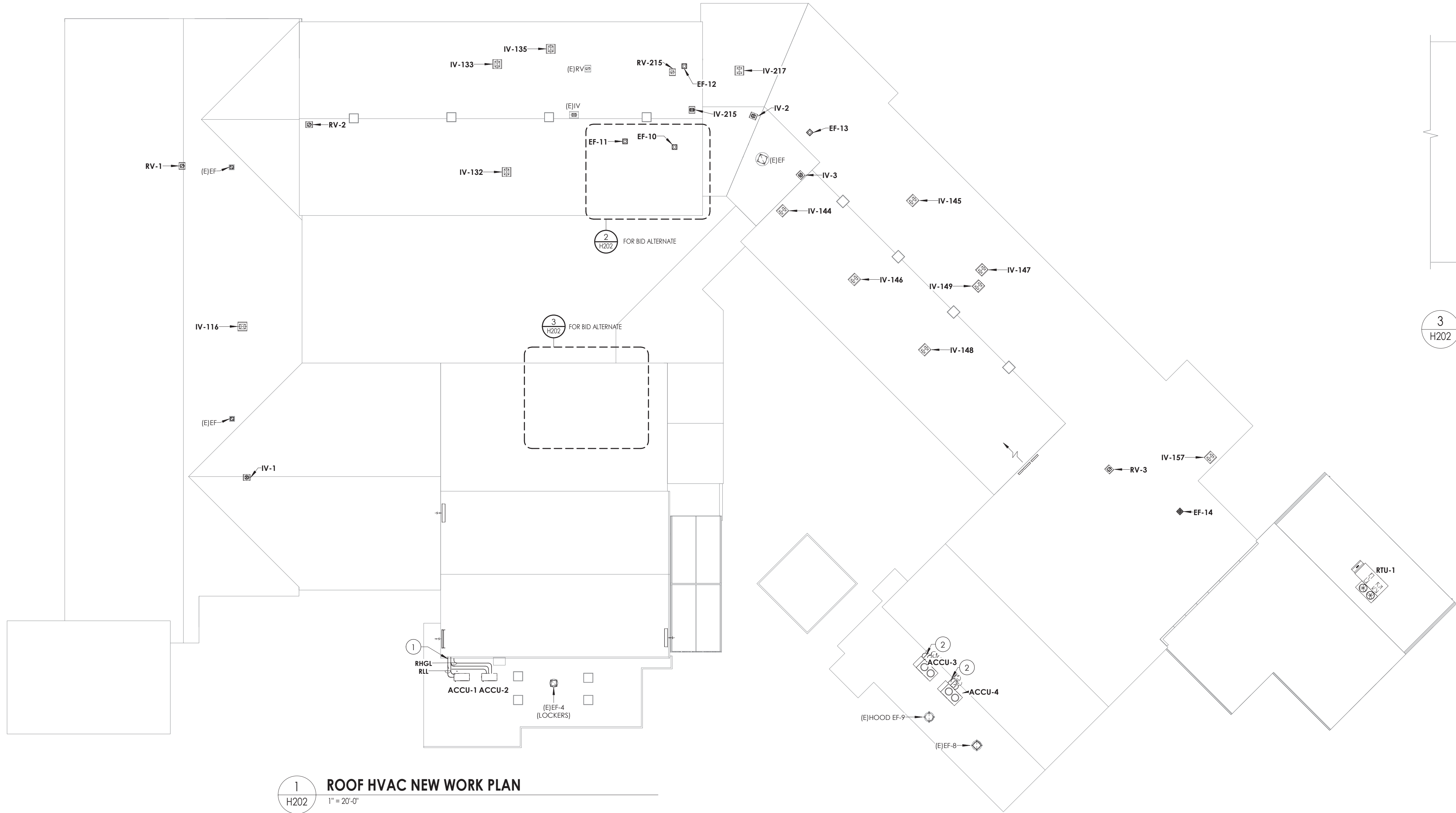
3A TYPICAL CAF. DIFFUSER
H201.4 1/4" = 1'-0"



- KEYNOTES**
- 12x12 DUCT UP TO EF (ON ROOF). PROVIDE AUTOMATIC DAMPER AND COORDINATE CONTROLS.
 - PROVIDE AHU AND CONNECT TO EXISTING SLEEVE / LOUVER. PROVIDE AND COORDINATE BAS CONTROLS. REINSTALL BAS CONTROLS INSTRUMENTS AND CONTROL VALVE ACTUATORS. TEST, ADJUST, AND BALANCE THE HVAC AND EXHAUST SYSTEM SERVING THE CAFETERIUM AND STAGE.

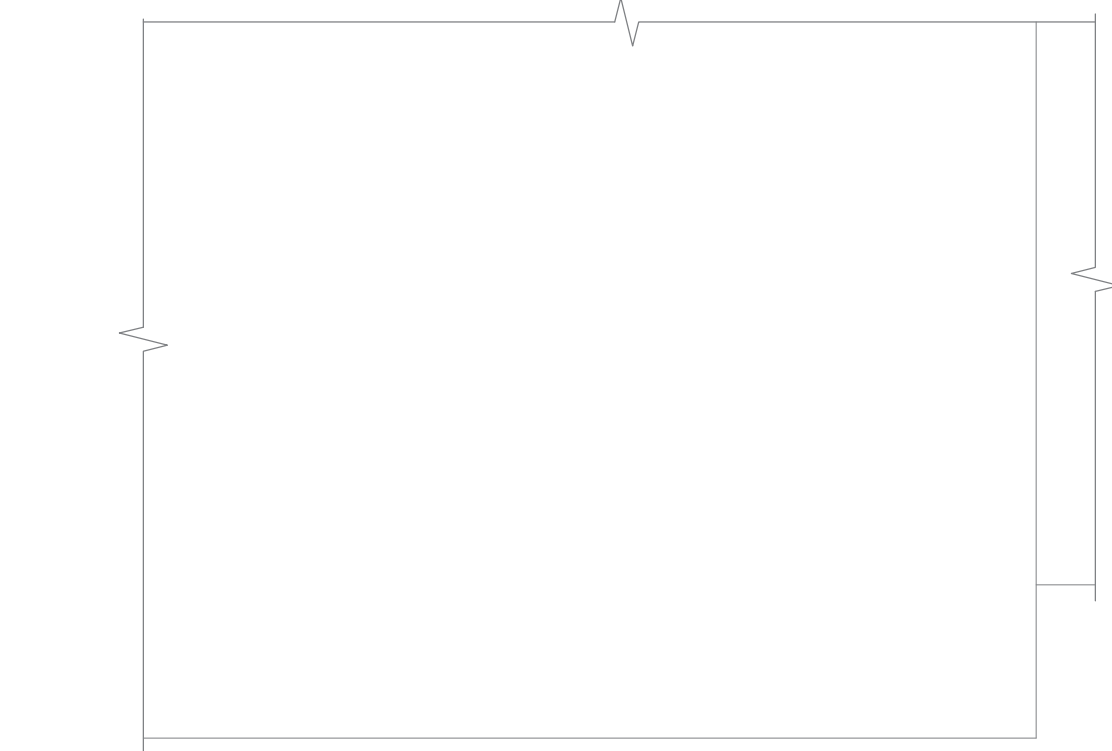
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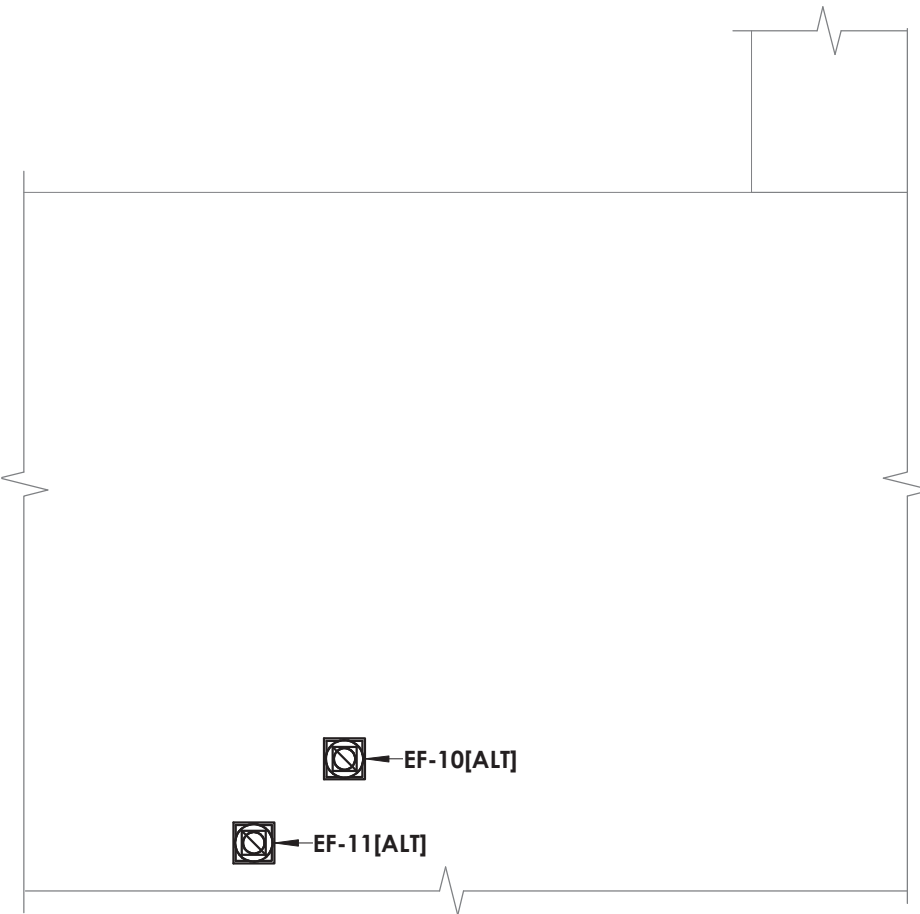
1
H202 1" = 20'-0"

ROOF HVAC NEW WORK PLAN



2
H202 1/8" = 1'-0"

STEAM ROOF HVAC NEW WORK ALTERNATE PLAN - AREA B



3
H202 1/8" = 1'-0"

NURSE SUITE ROOF HVAC NEW WORK ALTERNATE PLAN - AREA C

KEYNOTES

- 1 PROVIDE REFRIGERANT PIPING AND ACCESSORIES PER THE MANUFACTURER'S RECOMMENDATIONS.
- 2 PROVIDE PIPING ROOF PORTAL. SIZE REFRIGERANT PIPING AND PROVIDE ACCESSORIES PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE WITH OTHER TRADES.



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PROJECT INFORMATION

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NEWBURGH ENLARGED CITY
SCHOOL DISTRICT
Project Name
PHASE 5: 2019 CAPITAL
IMPROVEMENTS PROJECT
SED # 44-16-00-01-0-018-009
Project Address
400 Old Forge Hill Rd, New Windsor, NY
12553

REVISION SCHEDULE

Date Description

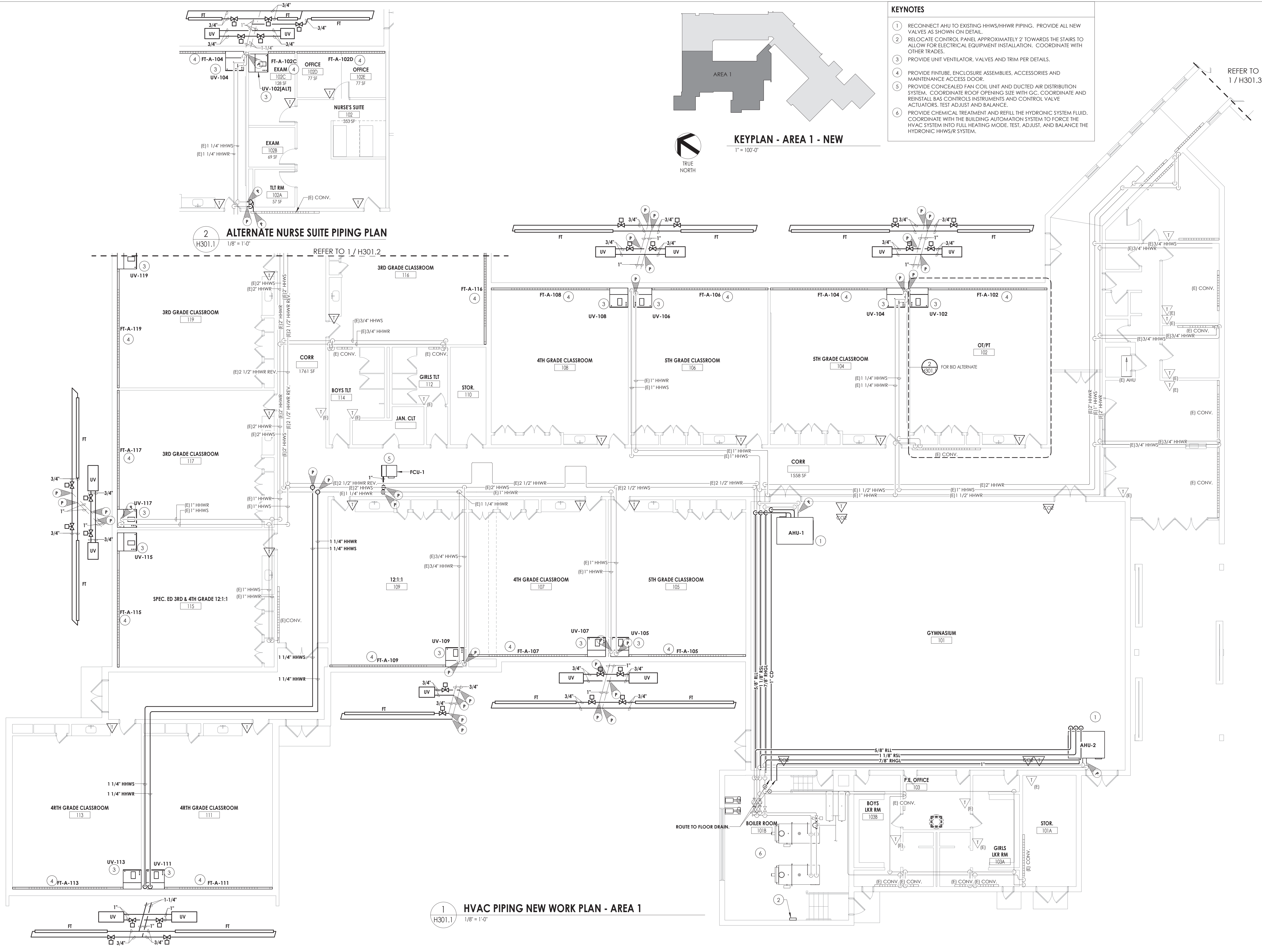


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ROOF HVAC DUCTWORK AND
PIPING PLAN

VG
H202

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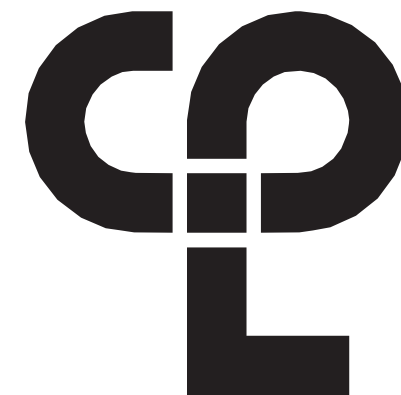
KEYNOTES

- 1 RECONNECT AHU TO EXISTING HHWS/HHWR PIPING. PROVIDE ALL NEW VALVES AS SHOWN ON DETAIL.
- 2 RELOCATE CONTROL PANEL APPROXIMATELY 2' TOWARDS THE STAIRS TO ALLOW FOR ELECTRICAL EQUIPMENT INSTALLATION. COORDINATE WITH OTHER TRADES.
- 3 PROVIDE UNIT VENTILATOR, VALVES AND TRIM PER DETAILS.
- 4 PROVIDE FINITUBE, ENCLOSURE ASSEMBLIES, ACCESSORIES AND MAINTENANCE ACCESS DOOR.
- 5 PROVIDE CONCEALED FAN COIL UNIT AND DUCTED AIR DISTRIBUTION SYSTEM. COORDINATE ROOF OPENING SIZE WITH GC. COORDINATE AND REINSTALL BAS CONTROLS INSTRUMENTS AND CONTROL VALVE ACTUATORS. TEST ADJUST AND BALANCE.
- 6 PROVIDE CHEMICAL TREATMENT AND REFILL THE HYDRONIC SYSTEM FLUID. COORDINATE WITH THE BUILDING AUTOMATION SYSTEM TO FORCE THE HVAC SYSTEM INTO FULL HEATING MODE. TEST, ADJUST, AND BALANCE THE HYDRONIC HHWS/R SYSTEM.



KEYPLAN - AREA 1 - NEW

1" = 100'-0"



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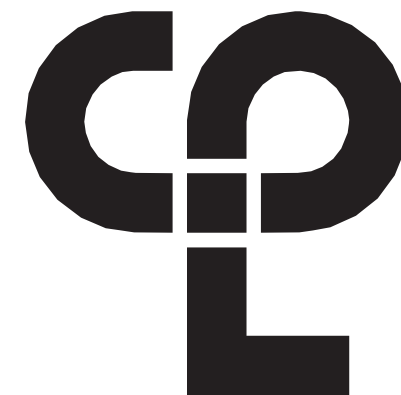
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GROUND FLOOR PLAN AREA 1
PIPING PLAN

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H301.1

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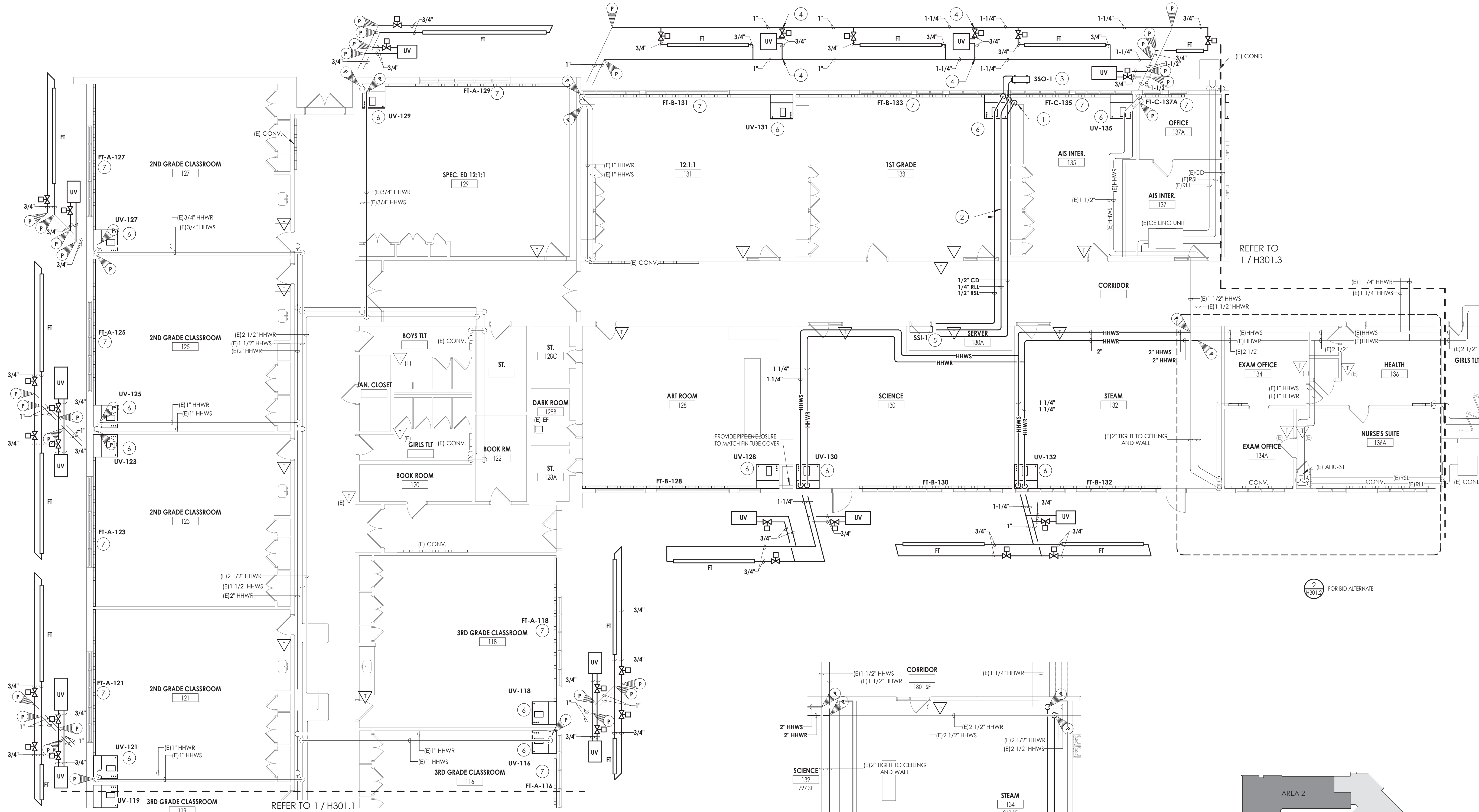
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GROUND FLOOR PLAN AREA 2
PIPING PLAN

VG
H301.2

KEYNOTES

- 1 TERMINATE CONDENSATE PIPE 1'-0" ABOVE GRADE WITH INSECT SCREEN.
- 2 PROVIDE REFRIGERANT PIPING AND ACCESSORIES PER THE MANUFACTURER'S RECOMMENDATIONS.
- 3 SIZE REFRIGERANT PIPING AND PROVIDE ACCESSORIES PER THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE REINFORCED CONCRETE HOUSEKEEPING PAD FOR UNIT.
- 4 ROUTE UP TO UNIT VENTILATOR PIPE CONNECTION THROUGH REAR EXTENSION.
- 5 PROVIDE A/C SPLIT SYSTEM. MOUNT PER DETAILS AND MANUFACTURERS REQUIREMENTS. PROVIDE CONTROL WIRING AND INTEGRATE WITH BAS.
- 6 PROVIDE UNIT VENTILATOR, VALVES AND TRIM PER DETAILS.
- 7 PROVIDE FIN/TUBE, ENCLOSURE ASSEMBLIES, ACCESSORIES AND MAINTENANCE ACCESS DOOR.



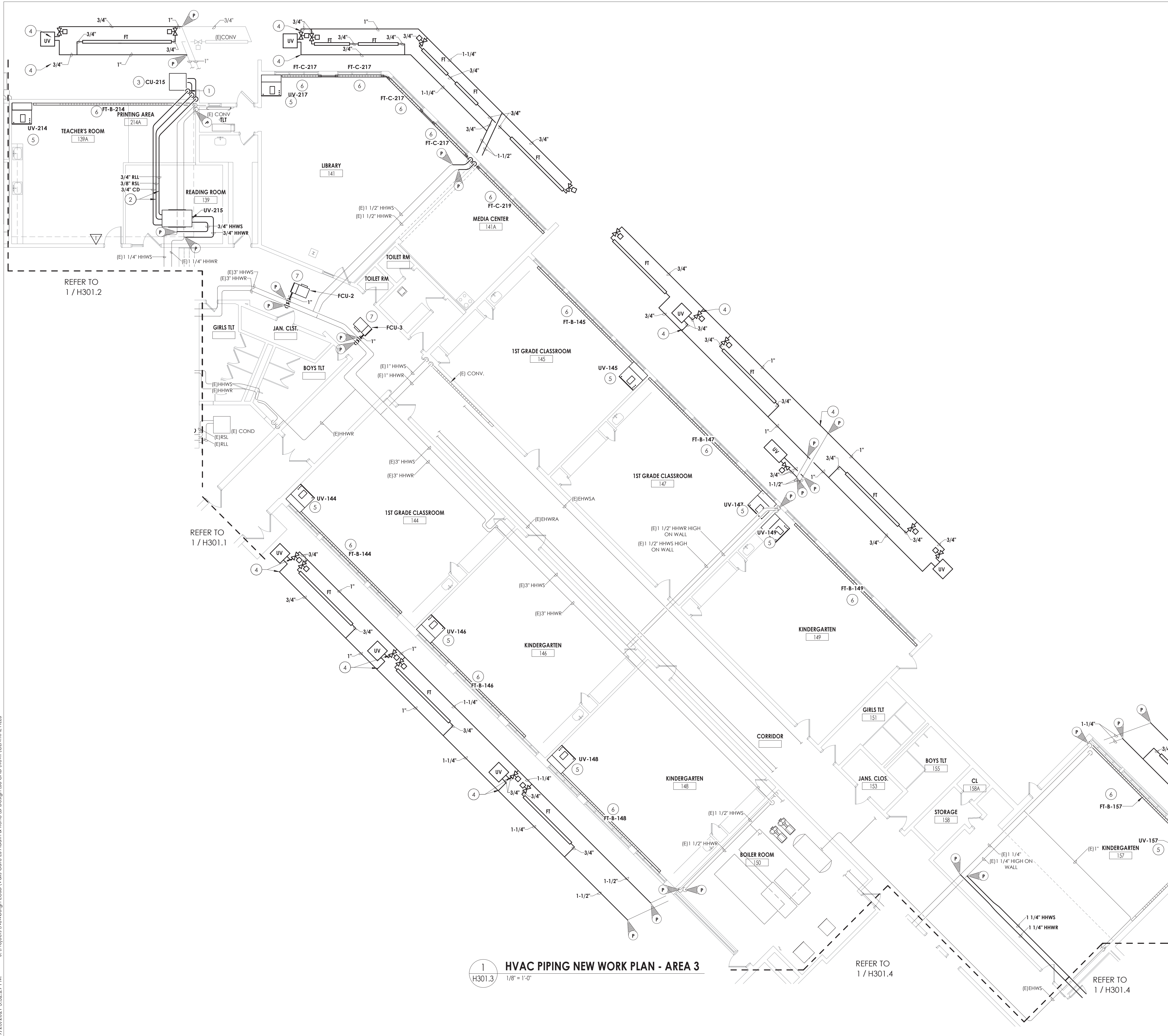
1 HVAC PIPING NEW WORK PLAN - AREA 2
H301.2 1/8" = 1'-0"

2 STEAM CLASSROOM PIPING PLAN - ALTERANTE
H301.2 1/8" = 1'-0"



KEYPLAN - AREA 2 - NEW
1" = 100'-0"

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KEYNOTES

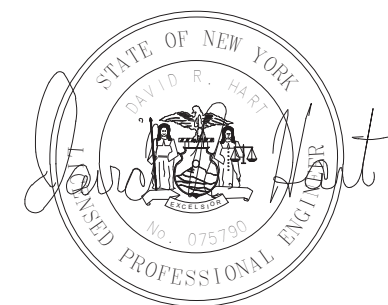
- 1 TERMINATE CONDENSATE PIPE 1'-0" ABOVE GRADE WITH INSECT SCREEN.
- 2 PROVIDE REFRIGERANT PIPING AND ACCESSORIES PER THE MANUFACTURER'S RECOMMENDATIONS.
- 3 SIZE REFRIGERANT PIPING AND PROVIDE ACCESSORIES PER THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE REINFORCED CONCRETE HOUSEKEEPING PAD FOR UNIT.
- 4 ROUTE UP TO UNIT VENTILATOR PIPE CONNECTION THROUGH REAR EXTENSION.
- 5 PROVIDE UNIT VENTILATOR, VALVES AND TRIM PER DETAILS.
- 6 PROVIDE FINITUBE, ENCLOSURE ASSEMBLIES, ACCESSORIES AND MAINTENANCE ACCESS DOOR.
- 7 PROVIDE CONCEALED FAN COIL UNIT AND DUCTED AIR DISTRIBUTION SYSTEM. COORDINATE ROOF OPENING SIZE WITH GC. COORDINATE AND REINSTALL BAS CONTROLS INSTRUMENTS AND CONTROL VALVE ACTUATORS, TEST ADJUST AND BALANCE.

PROJECT INFORMATION

Project Number
13940.20
Client Name
NEWBURGH ENLARGED CITY SCHOOL DISTRICT
Project Name
PHASE 5: 2019 CAPITAL IMPROVEMENTS PROJECT
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Project Address
400 Old Forge Hill Rd, New Windsor, NY 12553

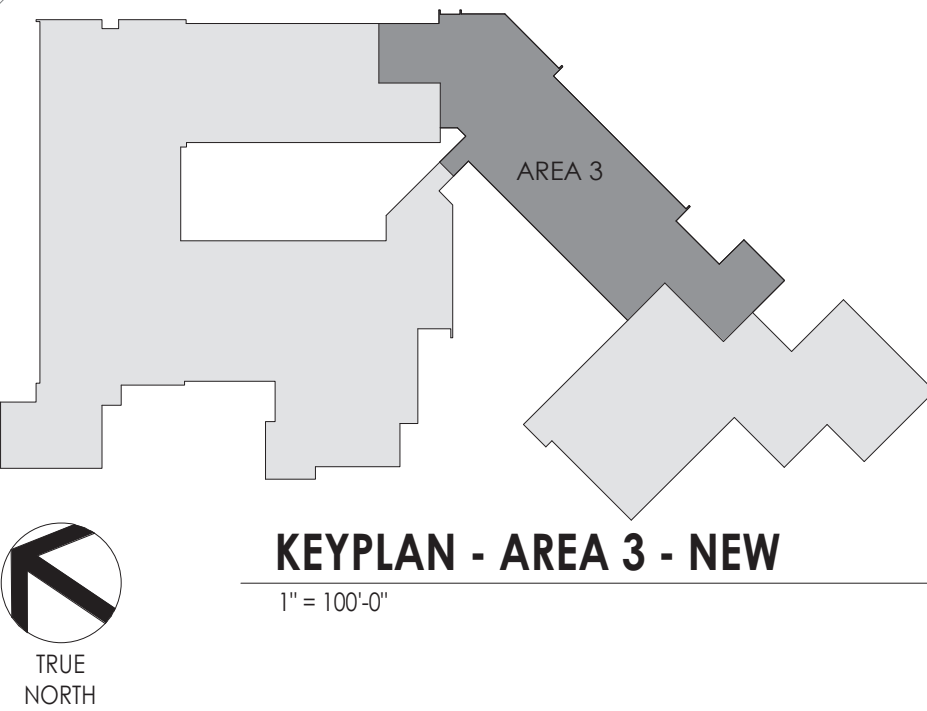
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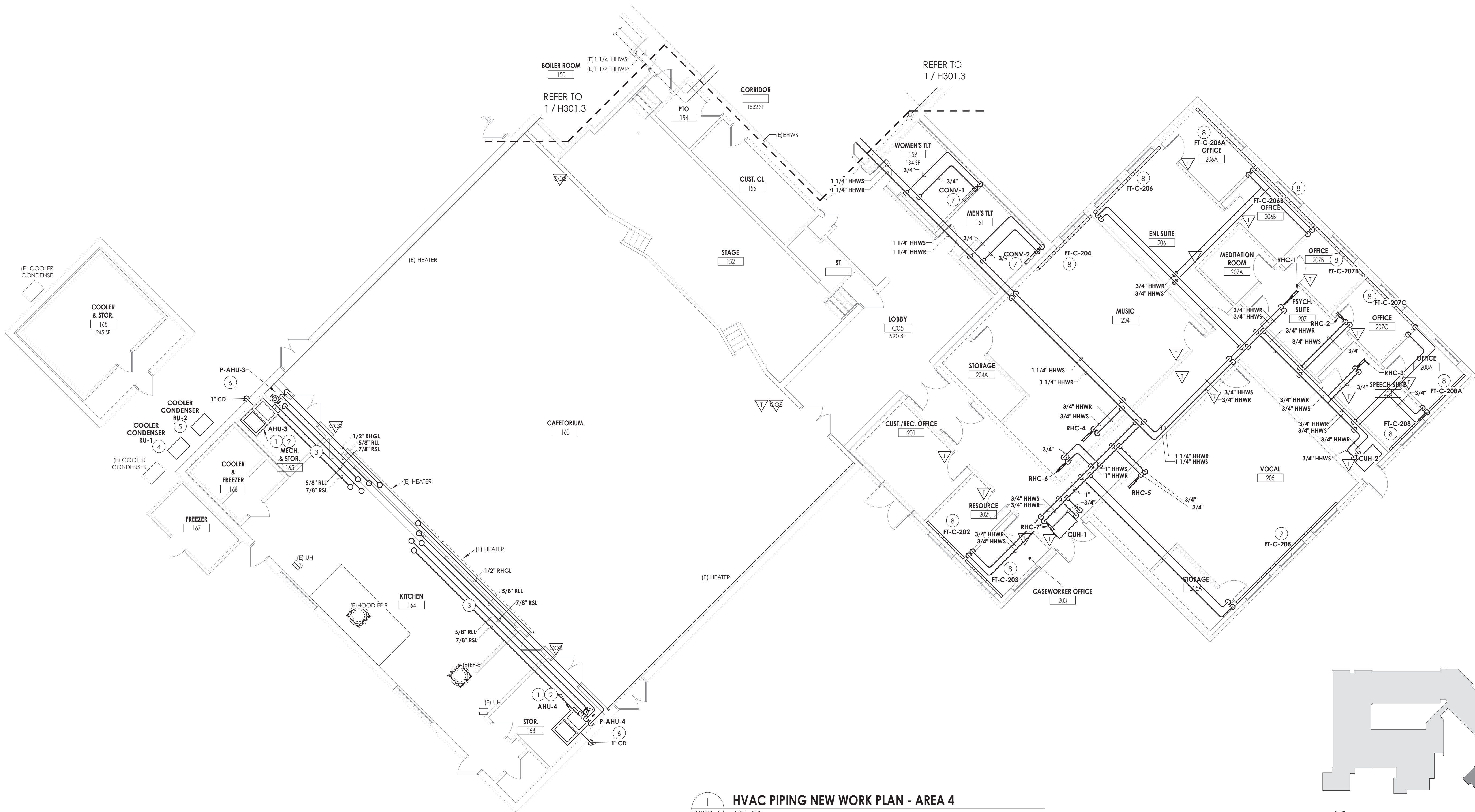
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GROUND FLOOR PLAN AREA 3 PIPING PLAN



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H301.3

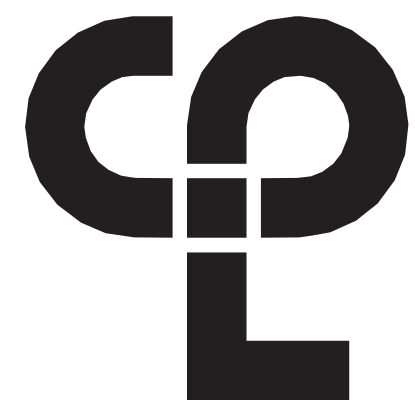
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1
H301.4
HVAC PIPING NEW WORK PLAN - AREA 4
1/8" = 1'-0"

KEYNOTES

- 1 RECONNECT AHU TO EXISTING HHWS/HHWR PIPING. PROVIDE ALL NEW VALVES AS SHOWN ON DETAIL.
- 2 TERMINATE CONDENSATE PIPE 1'-0" ABOVE GRADE WITH INSECT SCREEN.
- 3 PROVIDE REFRIGERANT PIPING AND ACCESSORIES PER THE MANUFACTURER'S RECOMMENDATIONS.
- 4 PROVIDE BALLY E2-LINE SCROLL, CONDENSING UNITS-AIR (MODEL BEA007H8-HS2D, 8.5MCA, 208-230V/1PH/60HZ,) AND BALLY LOW PROFILE EVAPORATOR (208-230V/1PH/60HZ, 0.8MCA, MODEL BLP107MA-S2D) OR APPROVED EQUIVALENT WITH A CAPACITY REQUIRED OF 6108BTUH.
- 5 PROVIDE BALLY CONDENSING UNIT E2-LINE SCROLL, CONDENSING UNITS-AIR (208-230V/1PH/60HZ, 18.4MCA, MODEL BEA020L8-HS2D) AND LOW PROFILE, EVAPORATOR (208-230V/1PH/60HZ, 1.4MCA, MODEL BLP207LE-S2D) OR APPROVED EQUIVALENT WITH A CAPACITY REQUIRED OF 6669BTUH.
- 6 PROVIDE WITH 1-1/2" PIPING AND ALL TRIM AS SHOWN ON DETAIL 11/H801.
- 7
- 8 PROVIDE FINITUBE, ENCLOSURE ASSEMBLIES, ACCESSORIES AND MAINTENANCE ACCESS DOOR.
- 9



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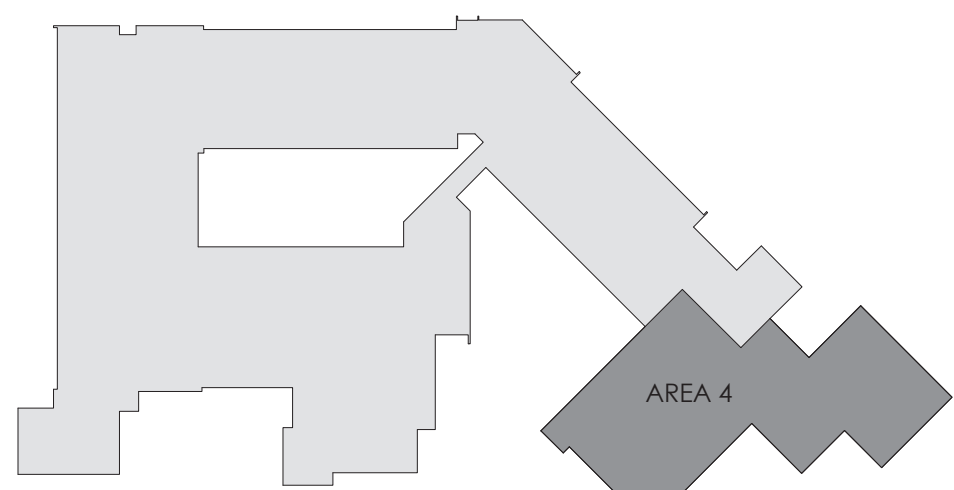
PROJECT INFORMATION

Project Number
13940.20
Client Name
NEWBURGH ENLARGED CITY
SCHOOL DISTRICT
Project Name
PHASE 5: 2019 CAPITAL
IMPROVEMENTS PROJECT
SED # 44-16-00-01-0-018-009
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KEYPLAN - AREA 4 - NEW
1" = 100'-0"

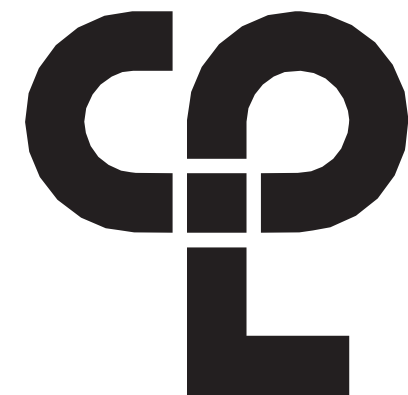


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GROUND FLOOR PLAN AREA 4
PIPING PLAN

VG
H301.4



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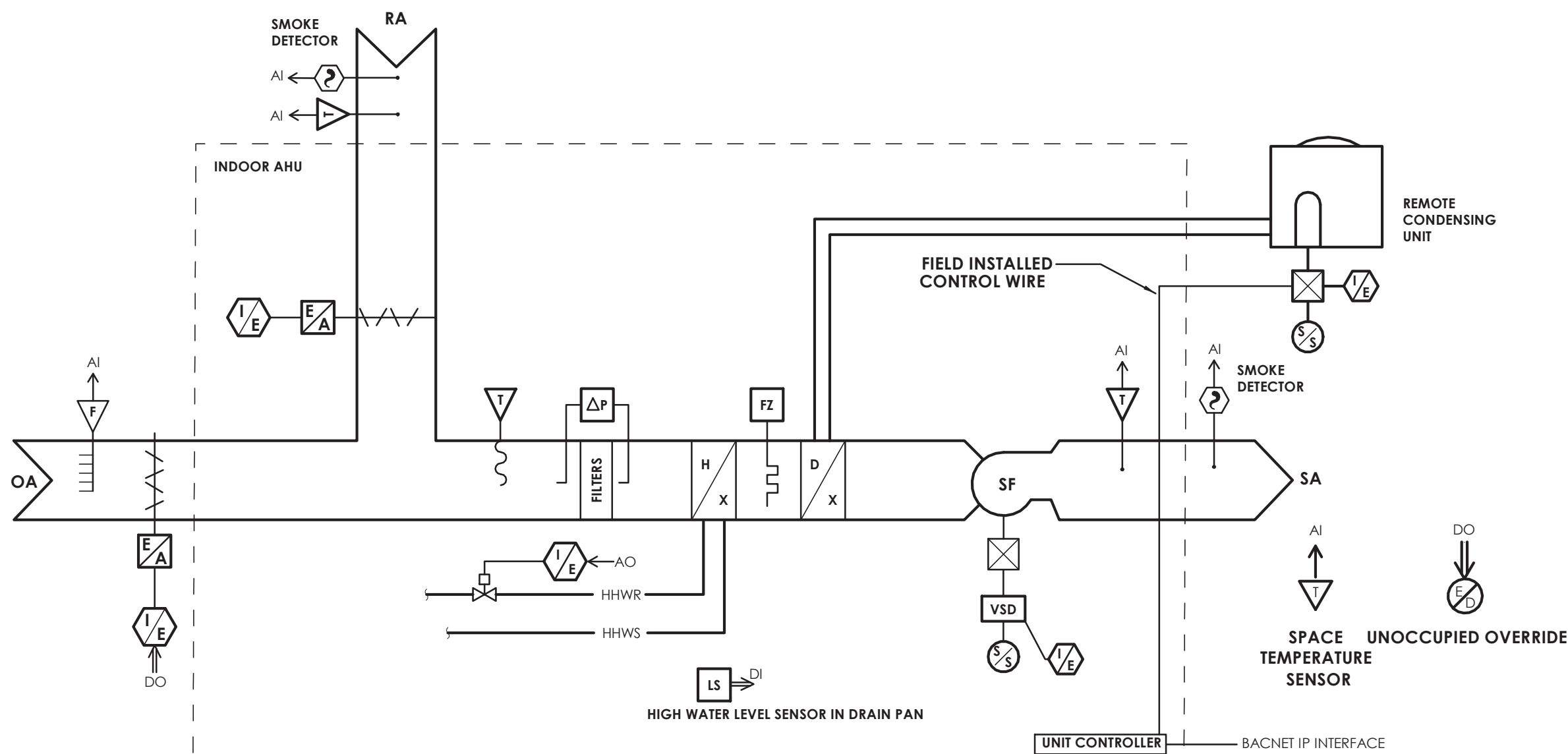
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HVAC CONTROLS

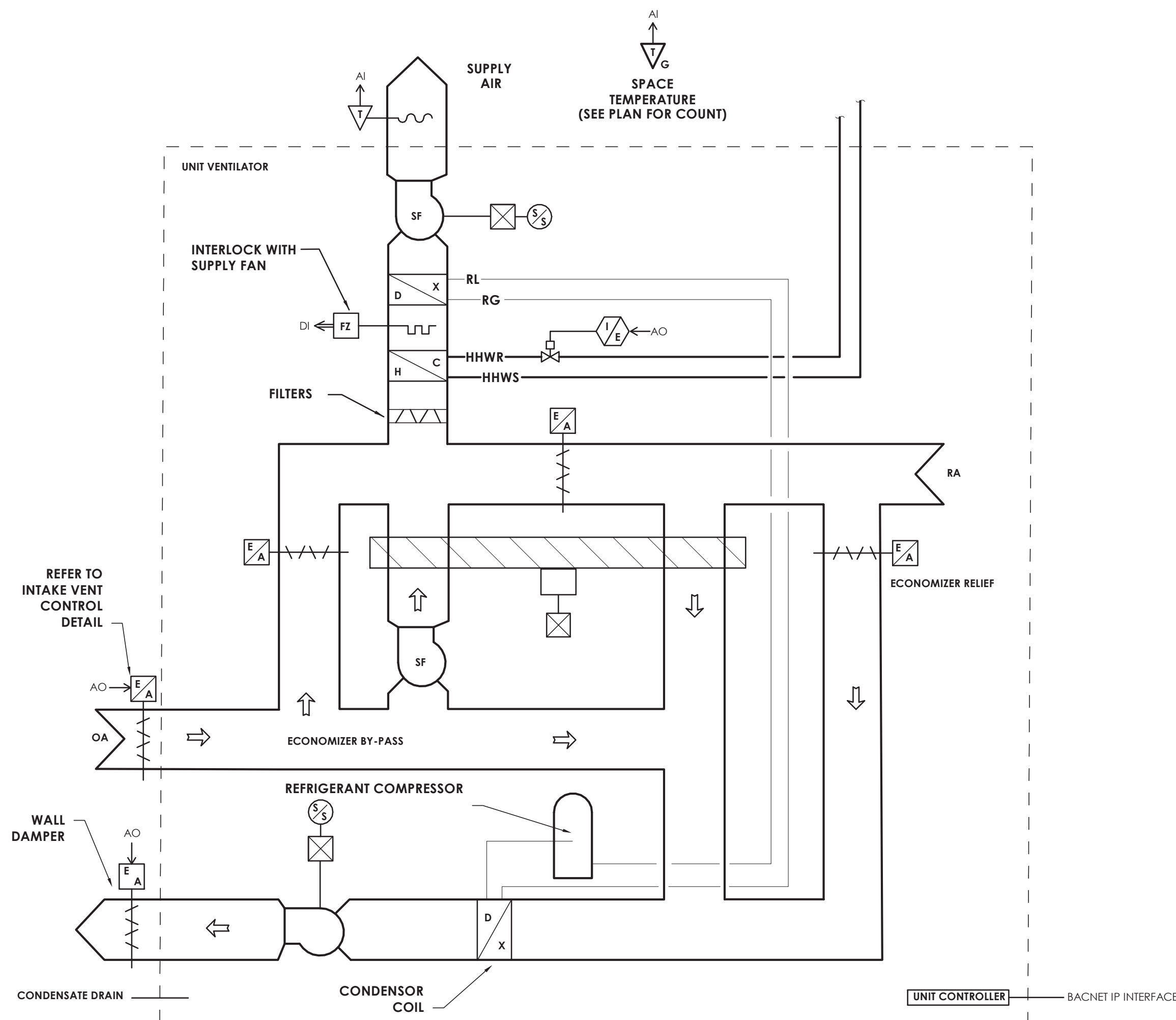
VG
H500



NOTES:
1. MODULATING PRESSURE INDEPENDENT CONTROL VALVE. RE-INSTALL VALVE ACTUATORS REMOVED DURING DEMOLITION.

1 INDOOR AIR HANDLING UNITS AHU-1 & AHU-2

NOT TO SCALE.

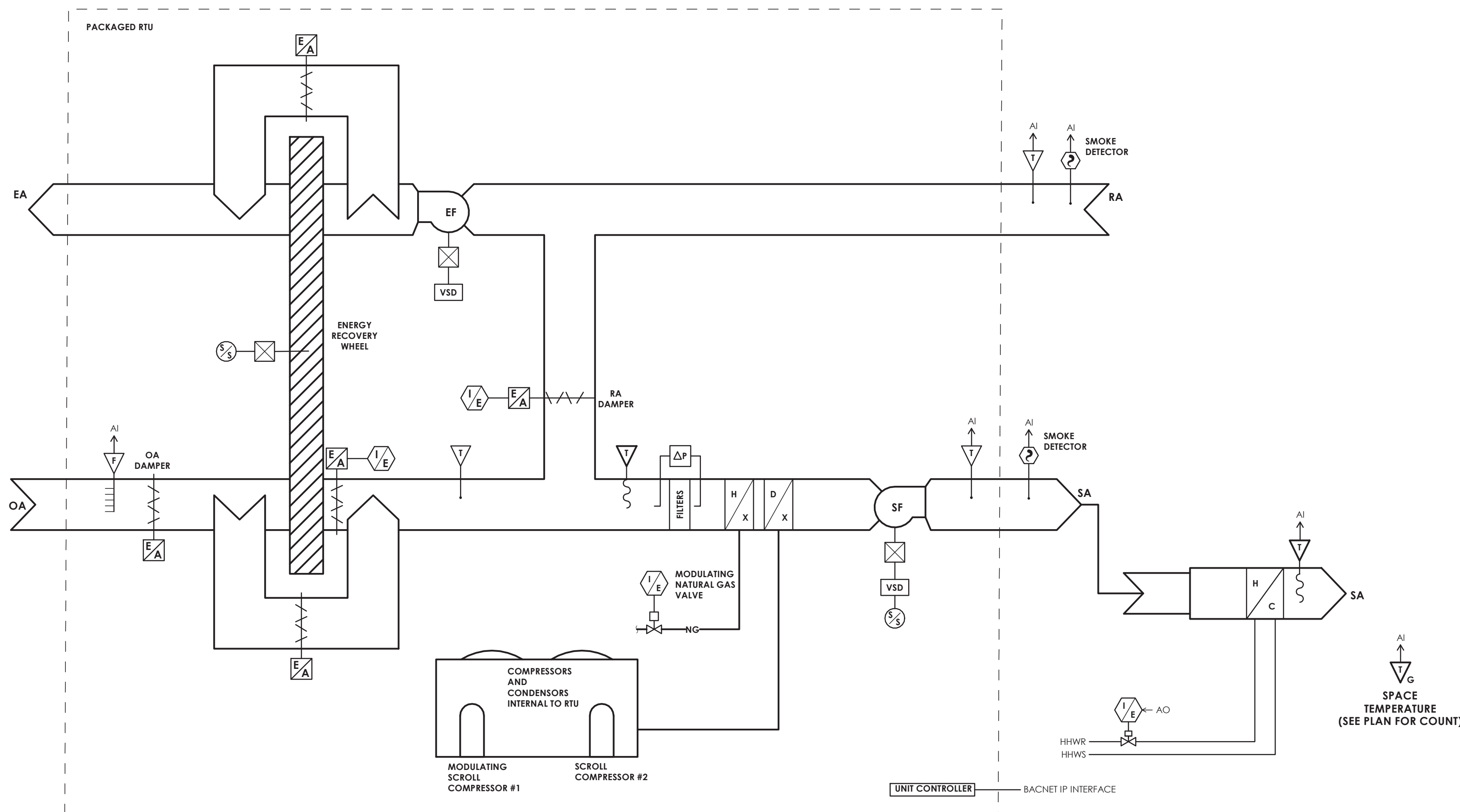
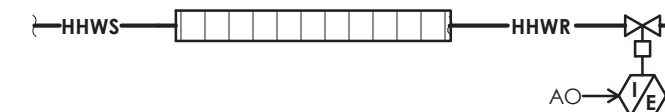


NOTES:
1. MODULATING PRESSURE INDEPENDENT CONTROL VALVE. RE-INSTALL VALVE ACTUATORS REMOVED DURING DEMOLITION.

2 VERTICAL UNIT VENTILATOR SCHEMATIC

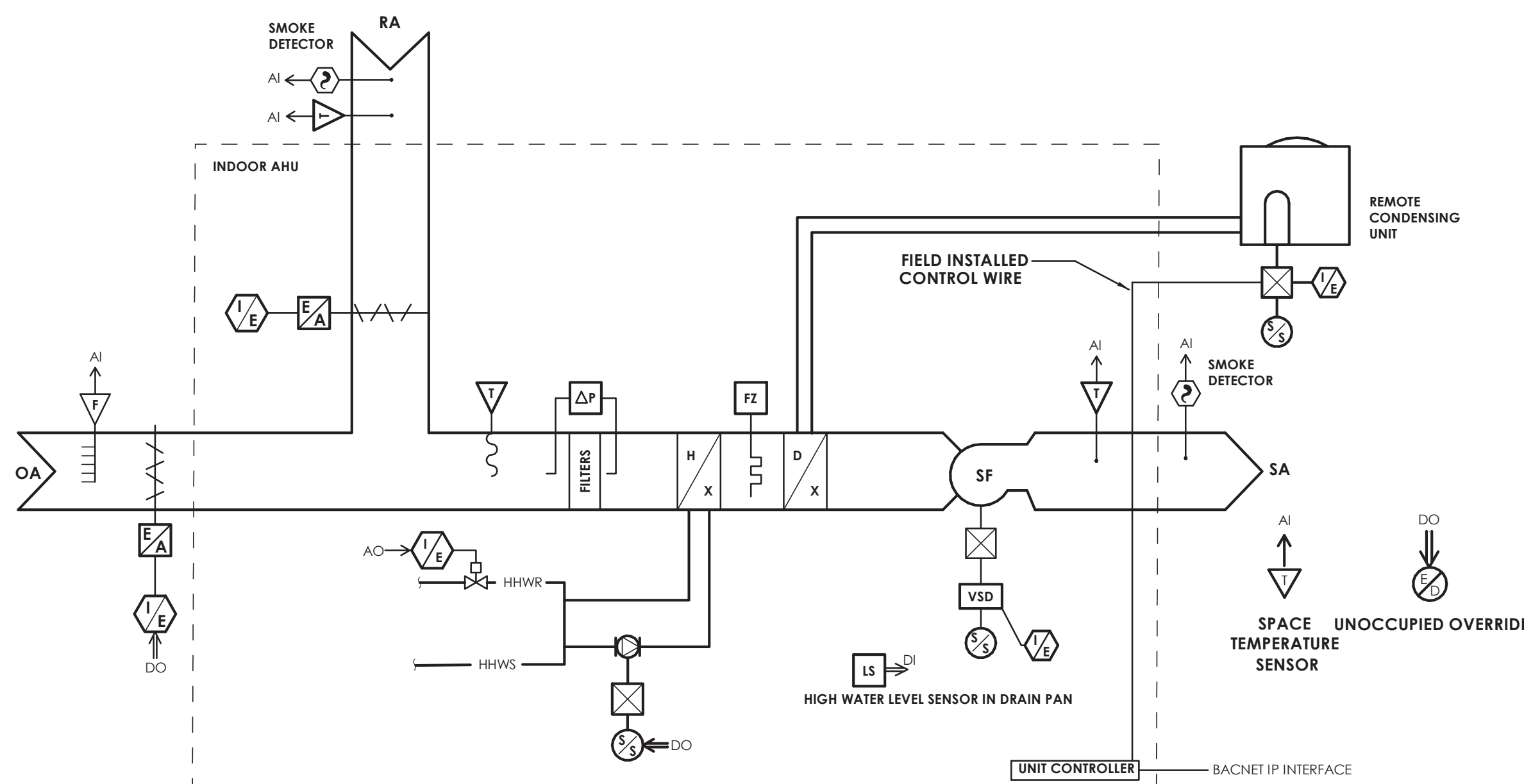
NOT TO SCALE.

FIN-TUBE (FT) / CONVECTOR (CV) RADIATION
(SEE PLAN FOR COUNT)



3 PACKAGED ROOFTOP AIR HANDLING UNIT WITH DUCT MOUNTED REHEAT COILS

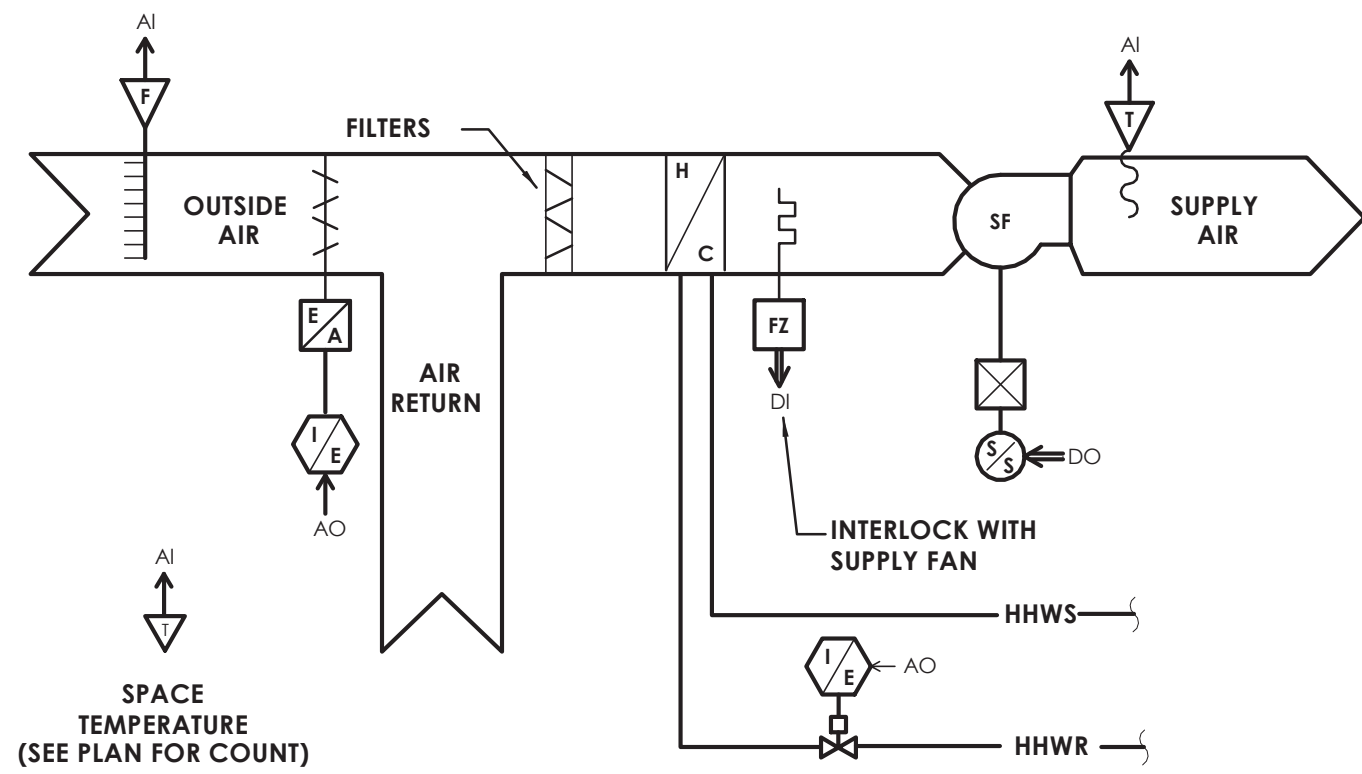
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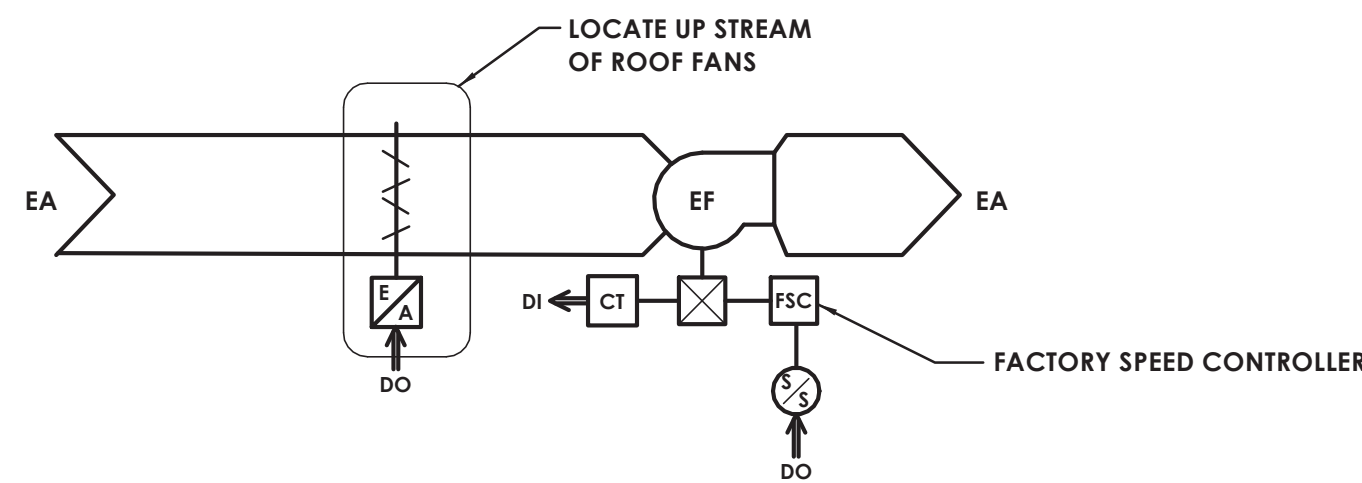
NOTES:
1. MODULATING PRESSURE INDEPENDENT CONTROL VALVE. RE-INSTALL VALVE ACTUATORS REMOVED DURING DEMOLITION.

4 INDOOR AIR HANDLING UNITS AHU-3 & AHU-4

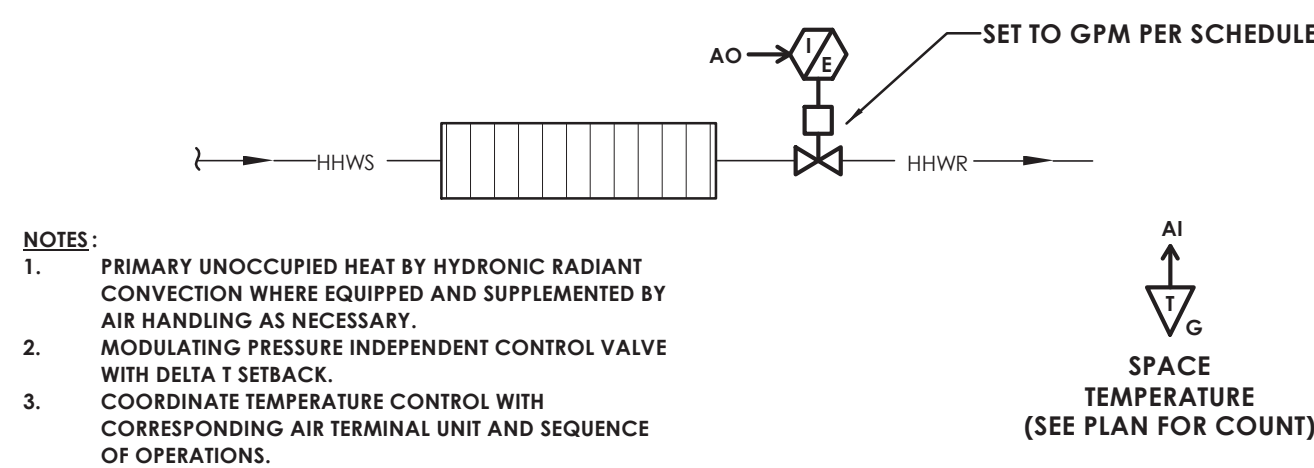
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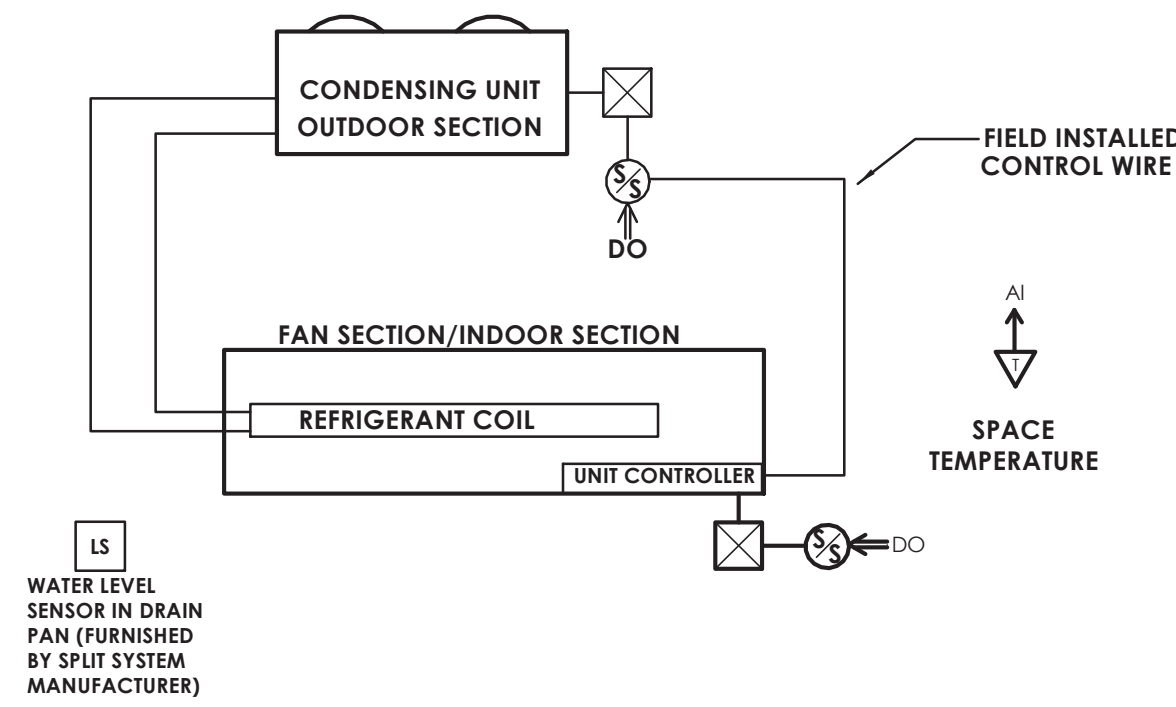
1 CORRIDOR FAN-COIL UNITS
H501 NOT TO SCALE



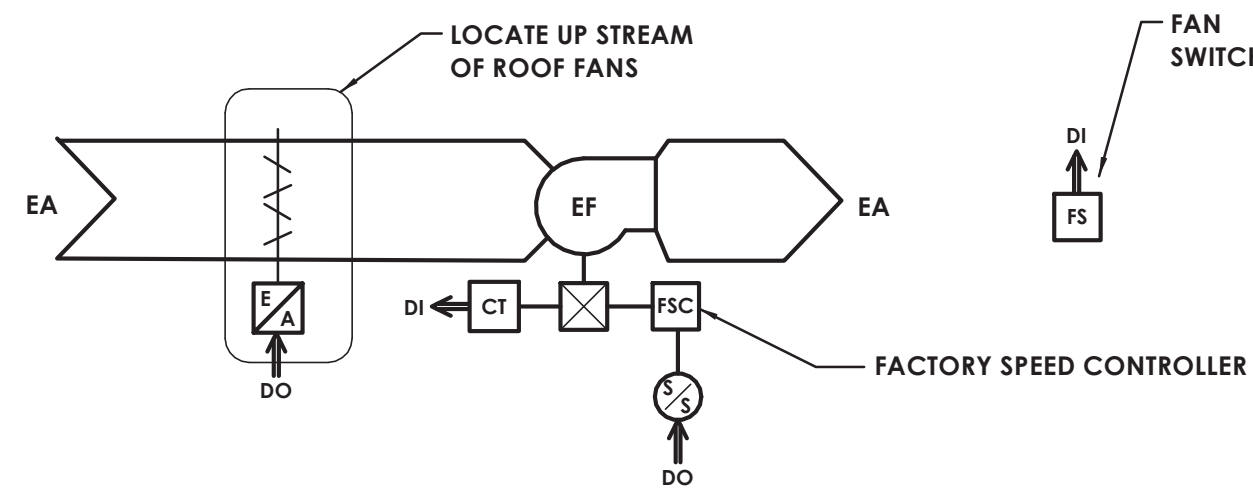
4 TOILET ROOM EXHAUST FAN
H501 NOT TO SCALE



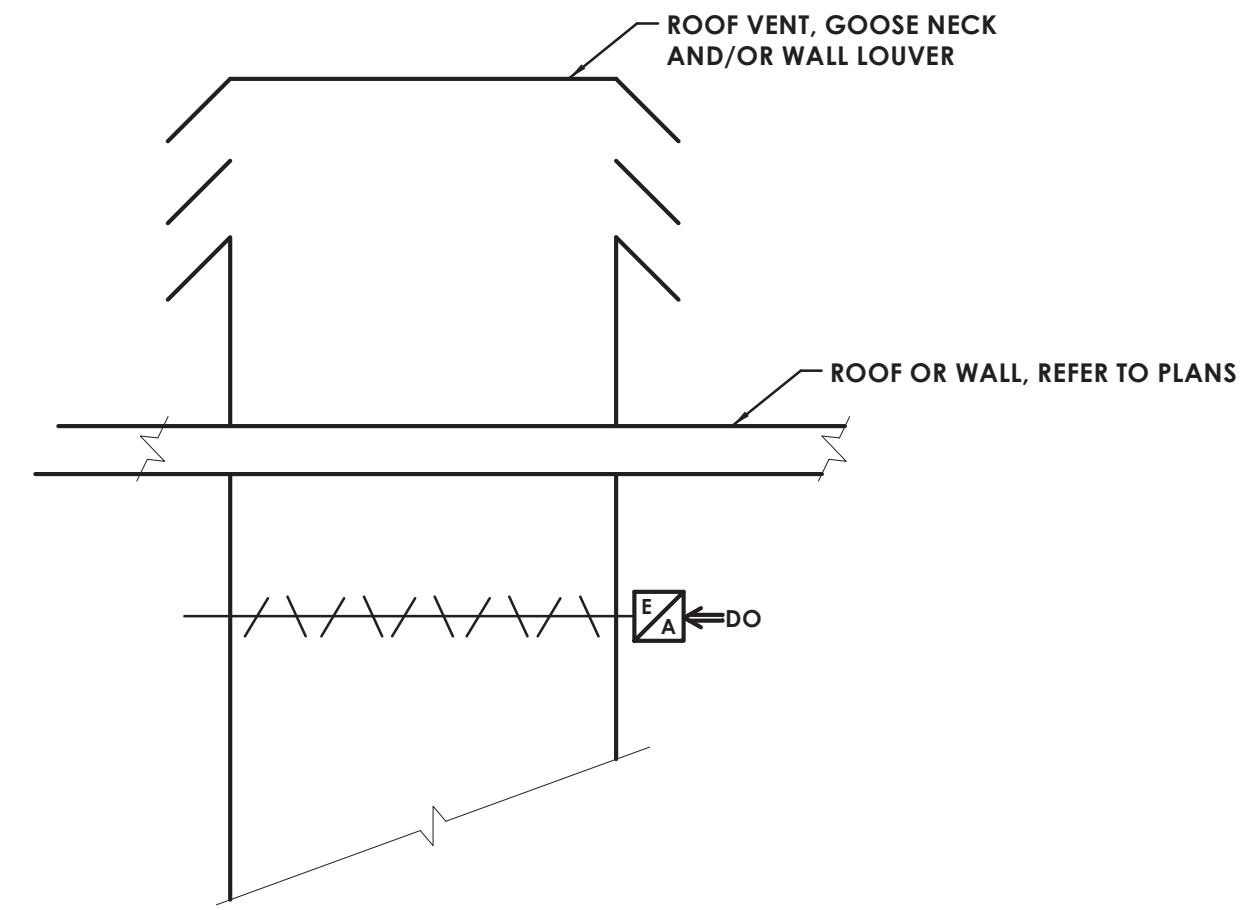
7 HOT WATER FIN TUBE RADIATION CONTROL SCHEMATIC
H501 NOT TO SCALE



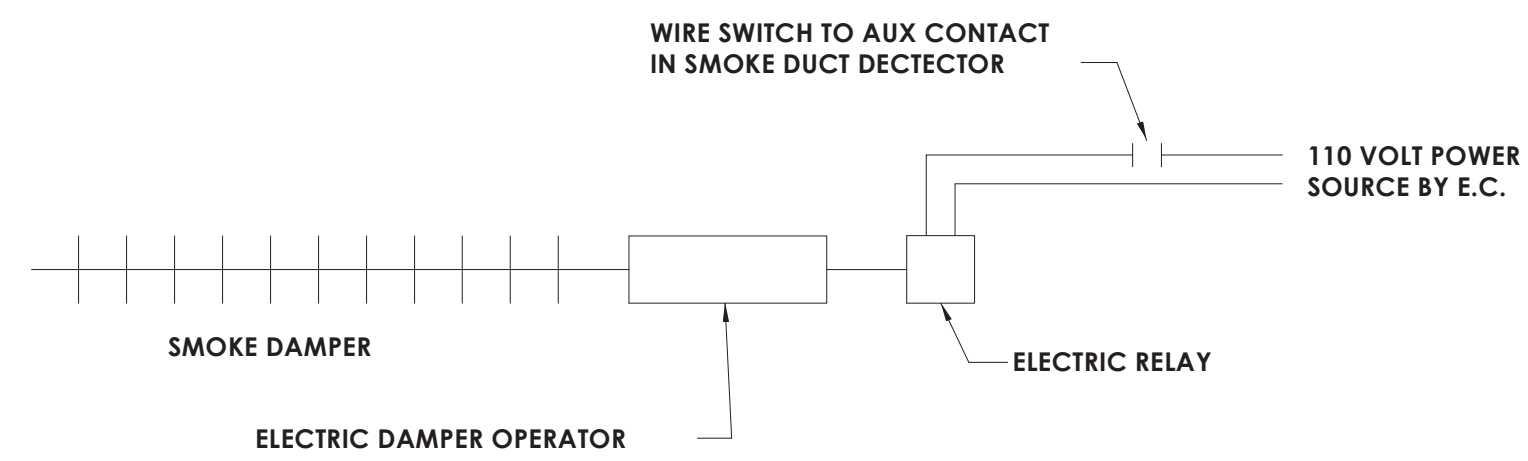
2 DUCTLESS SPLIT SYSTEM - TYP. SSI AND SSO UNITS
H501 NOT TO SCALE



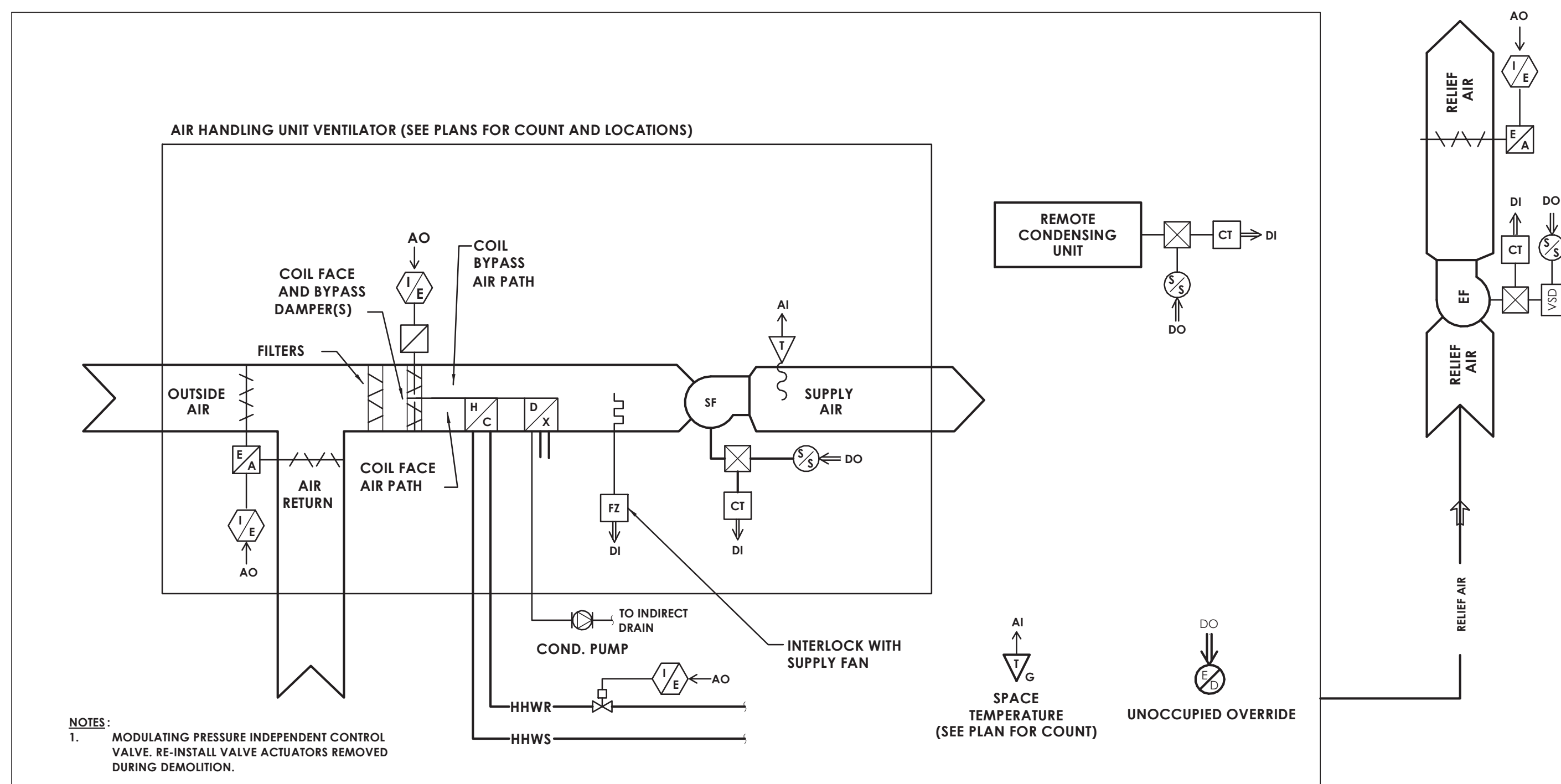
5 NURSES SUITE EXHAUST FAN
H501 NOT TO SCALE



3 TYPICAL GRAVITY RELIEF AND INTAKE VENTS
H501 NOT TO SCALE



6 SMOKE DAMPER CONTROL DETAIL
H501 NOT TO SCALE



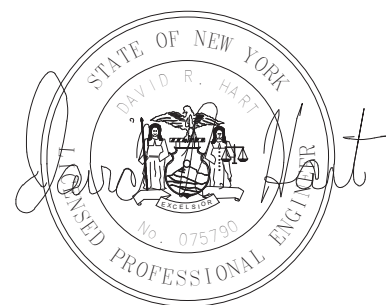
8 HORIZONTAL UNIT VENTILATOR WITH HYDRONIC HEAT
H501 NOT TO SCALE



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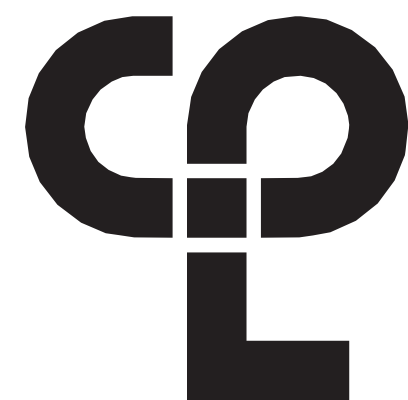
PROJECT INFORMATION
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13940.20
Client Name
NEWBURGH ENLARGED CITY
SCHOOL DISTRICT
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PHASE 5: 2019 CAPITAL
IMPROVEMENTS PROJECT
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HVAC CONTROLS

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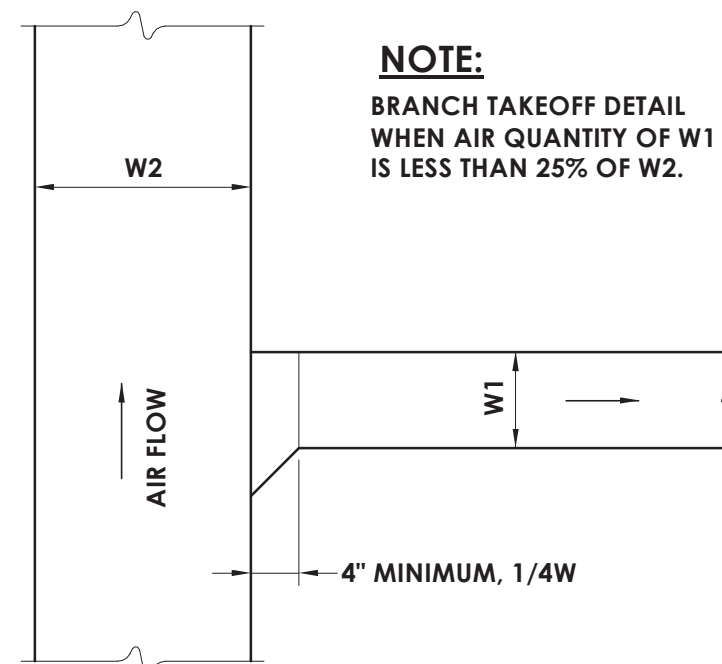
ACS

Drawing Title

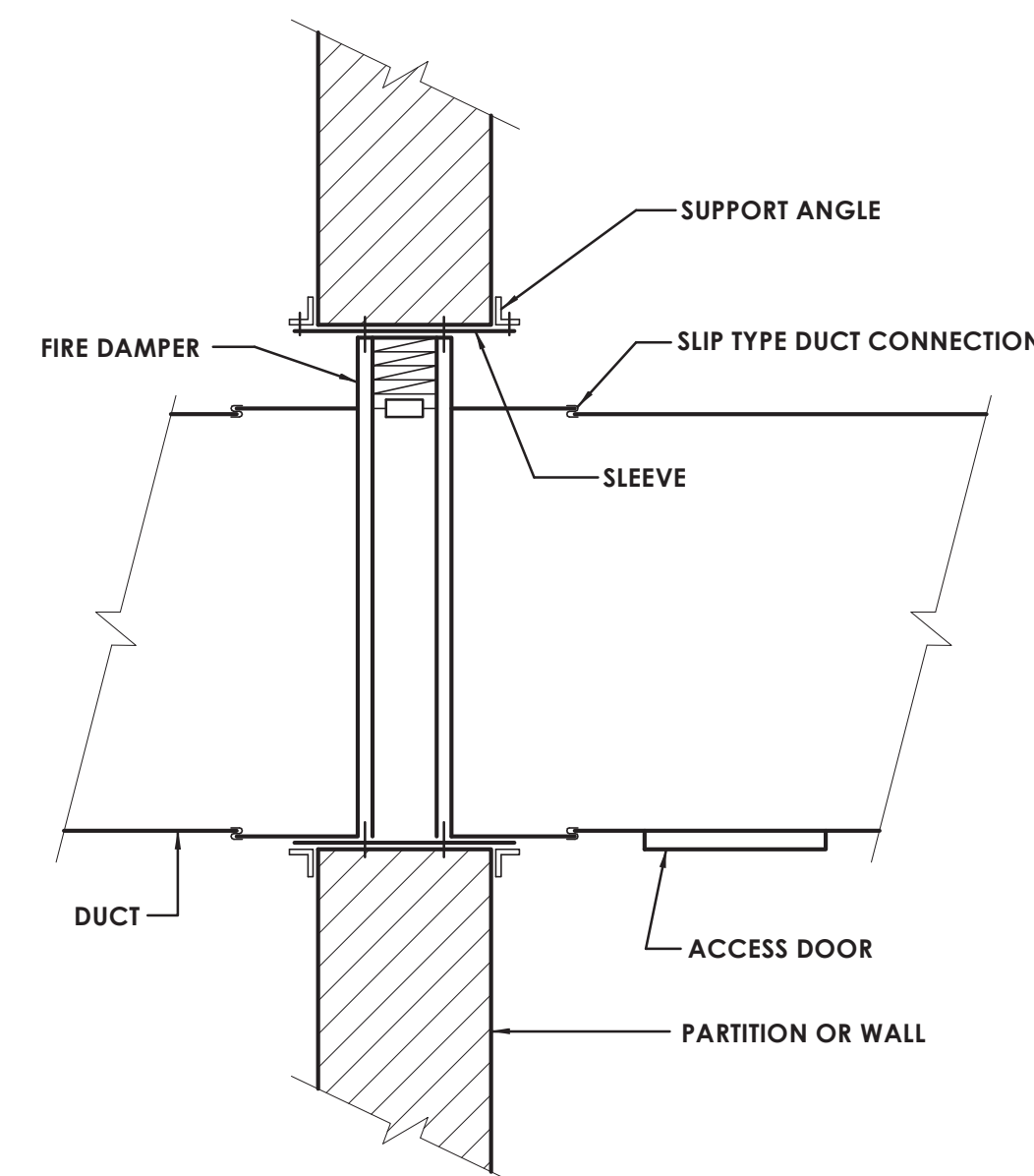
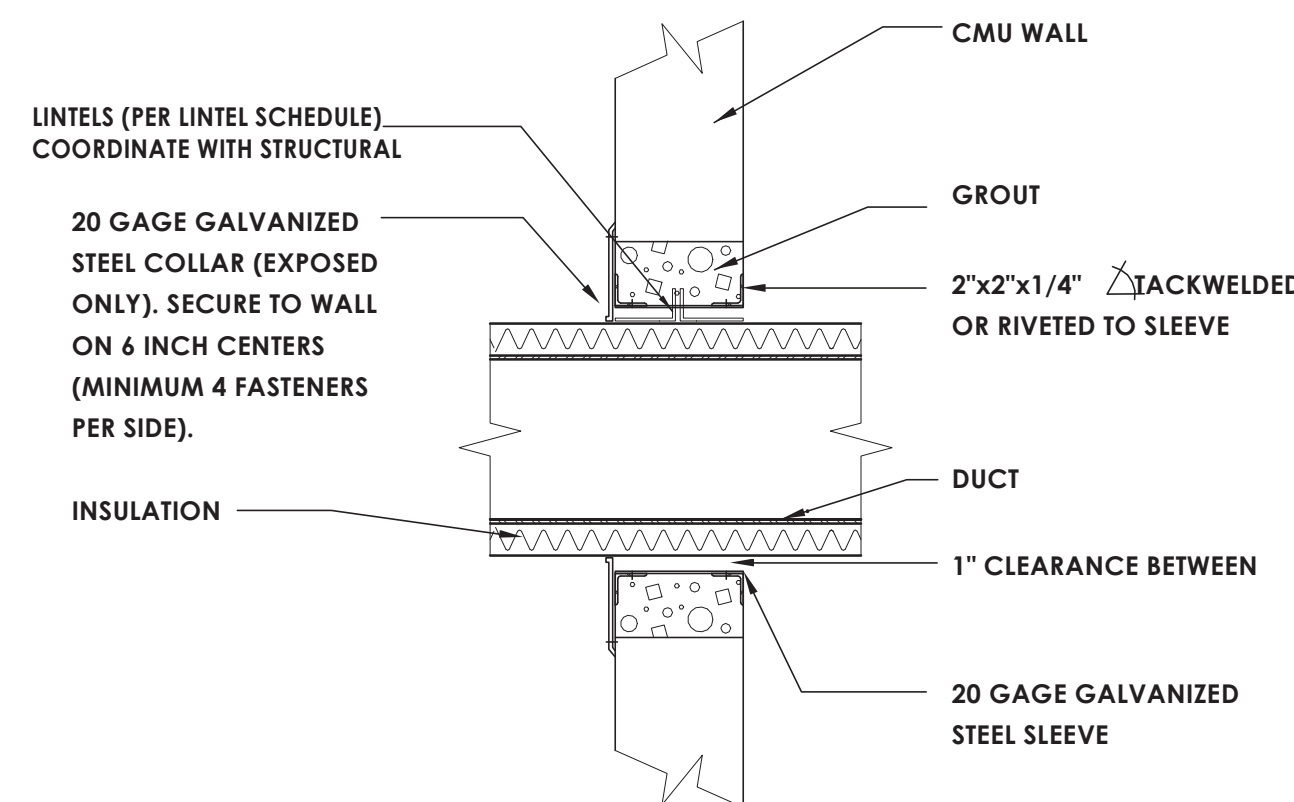
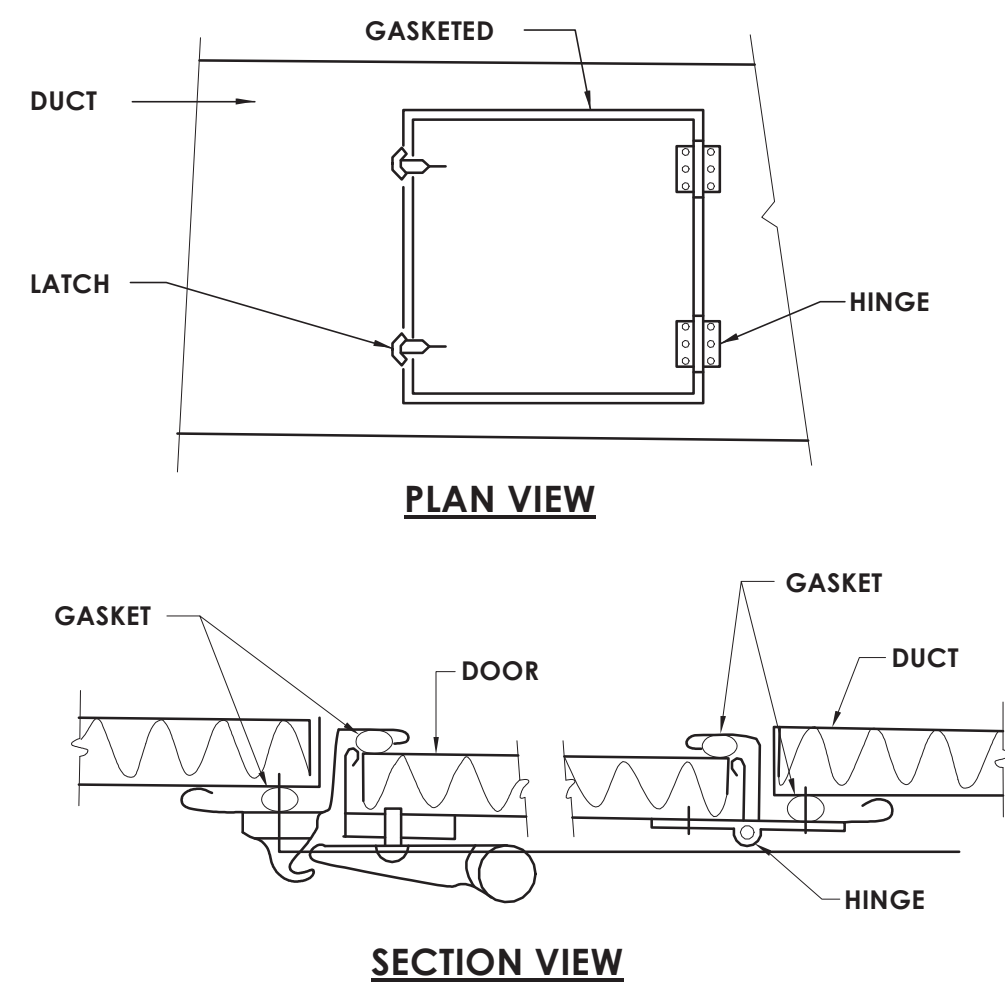
HVAC DETAILS

VG

H800



NOTE:
BRANCH TAKEOFF DETAIL
WHEN AIR QUANTITY OF W1
IS LESS THAN 25% OF W2.

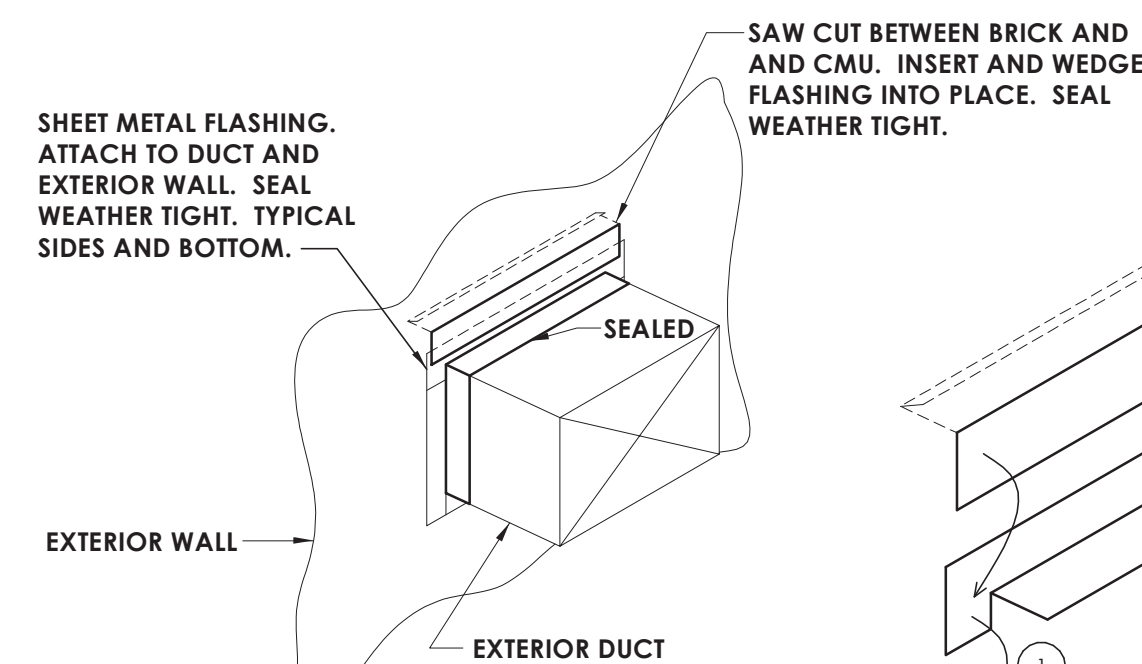
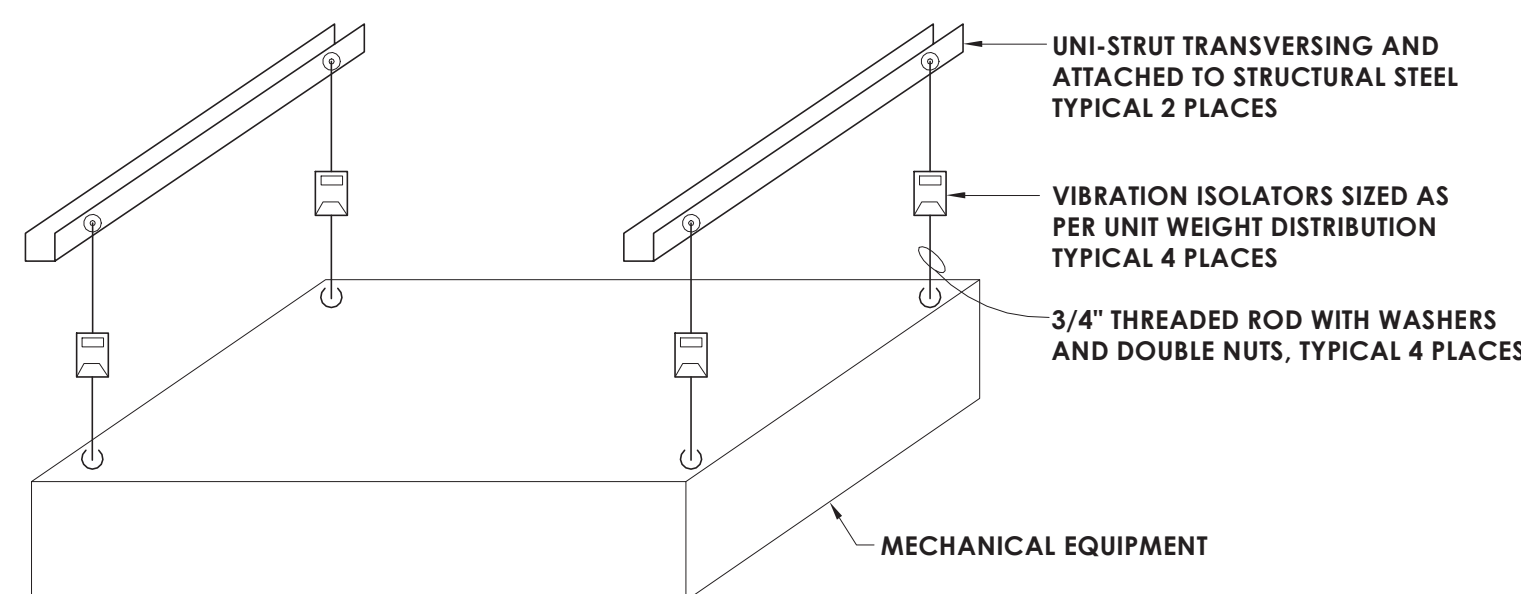
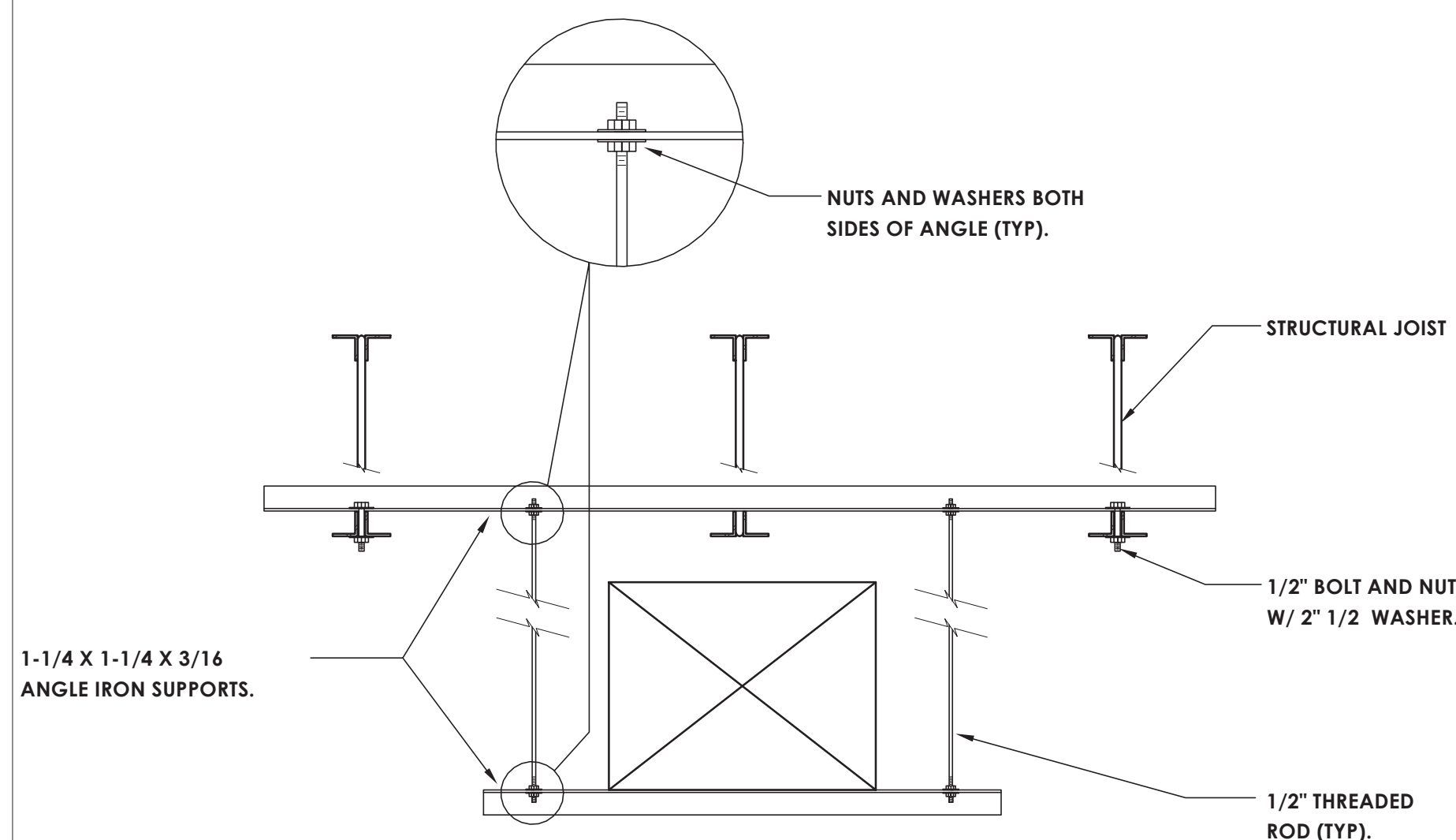


1
H800
NTS
BRANCH TAKE-OFF DETAIL

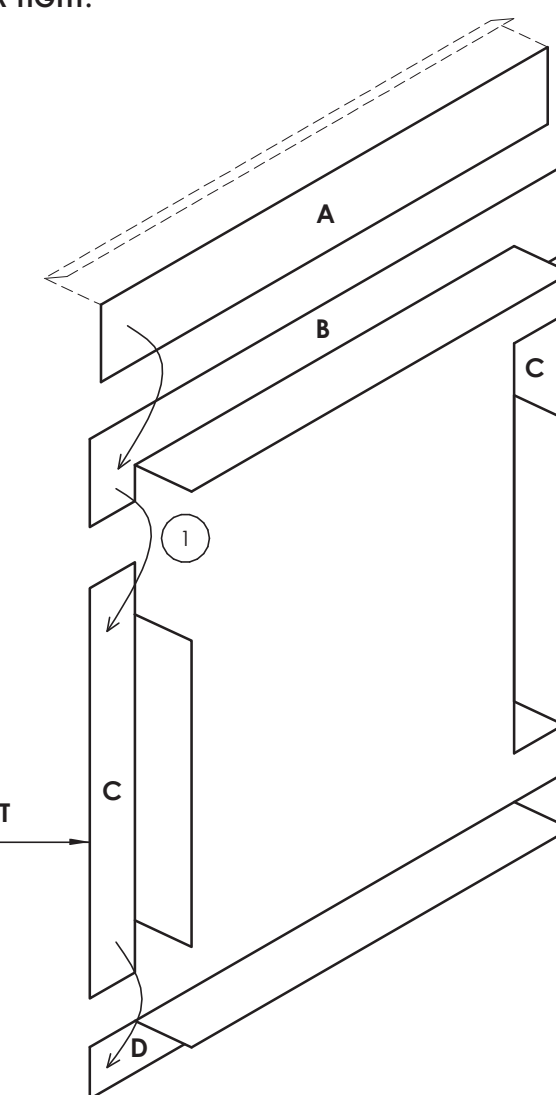
2
H800
NTS
ACCESS DOOR

3
H800
NTS
DUCT PENETRATION THROUGH WALL (NON FIRE RATED)

4
H800
NTS
VERTICAL FIRE DAMPER DETAIL

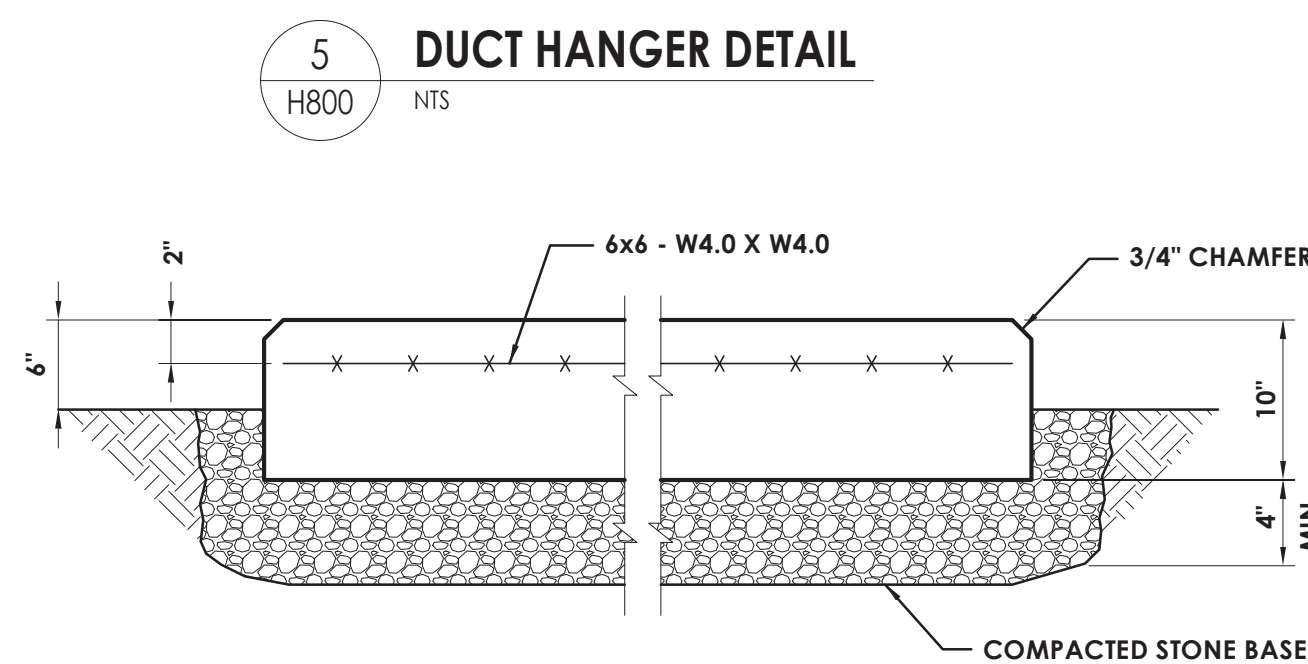


EXPLODED VIEW OF DUCT
SHEET METAL FLASHING.

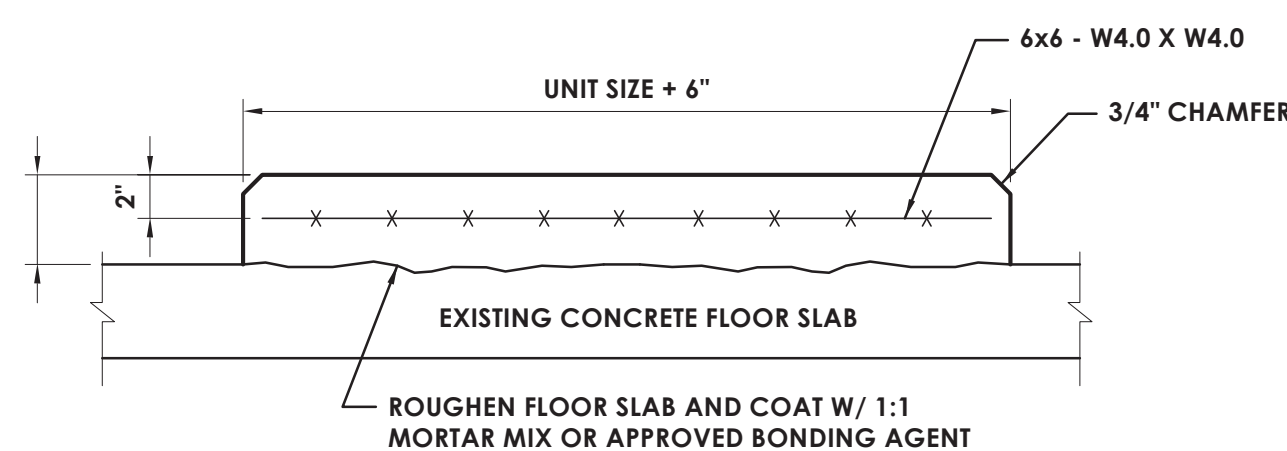


KEY NOTE:
1 TO ALLOW FOR PROPER WATER DRAINAGE,
A SHALL OVERLAP B, B SHALL OVERLAP C
AND C SHALL OVERLAP D.

FLASHING AND SEALING OF HORIZONTAL EXTERIOR DUCT PENETRATION THROUGH EXTERIOR WALL

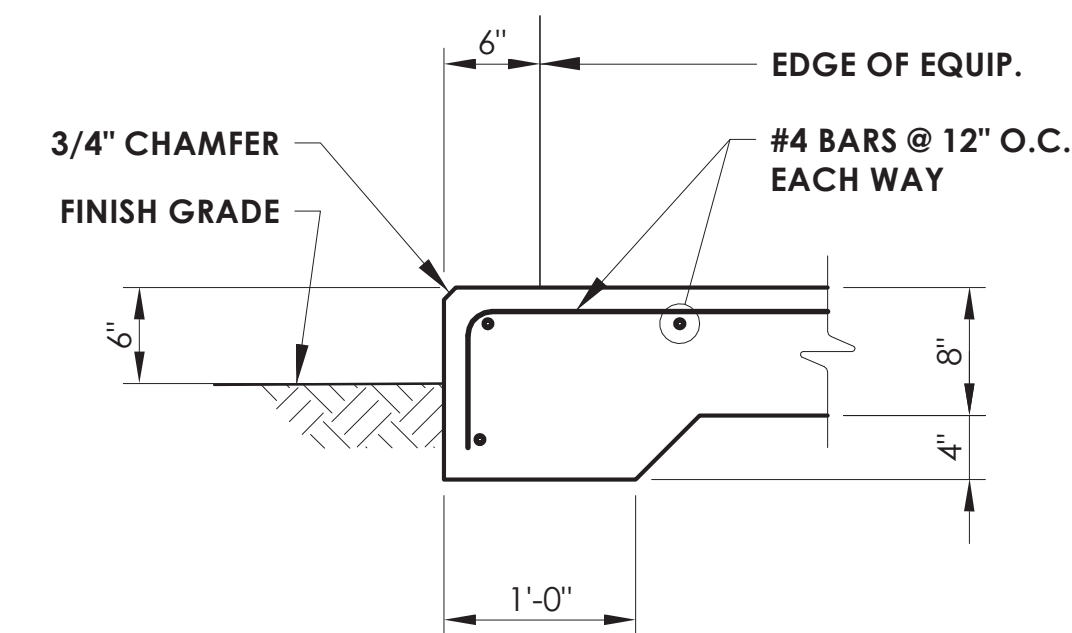


INTERIOR PAD DETAIL FOR LOCATION ON GROUND



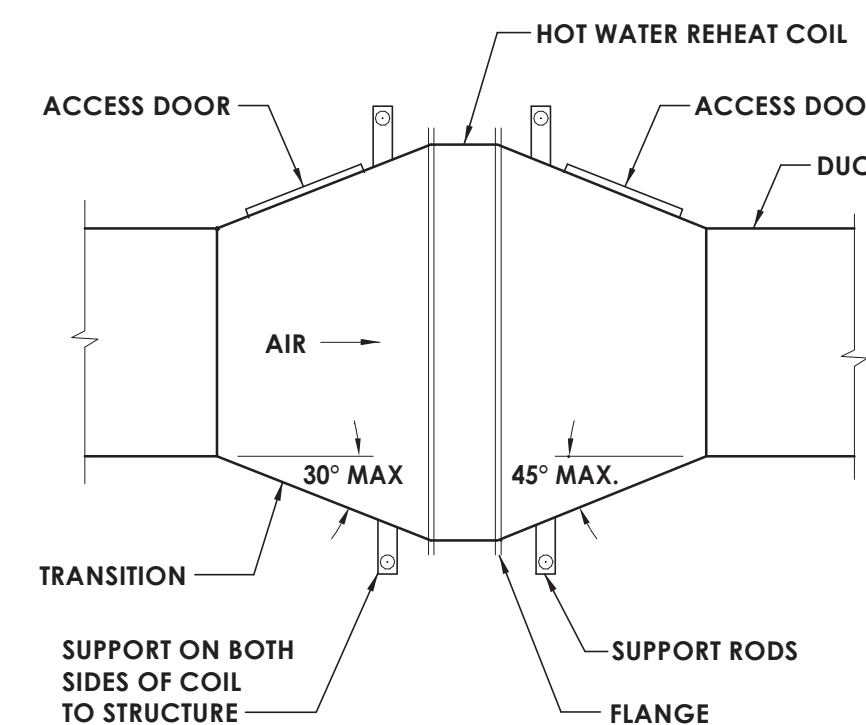
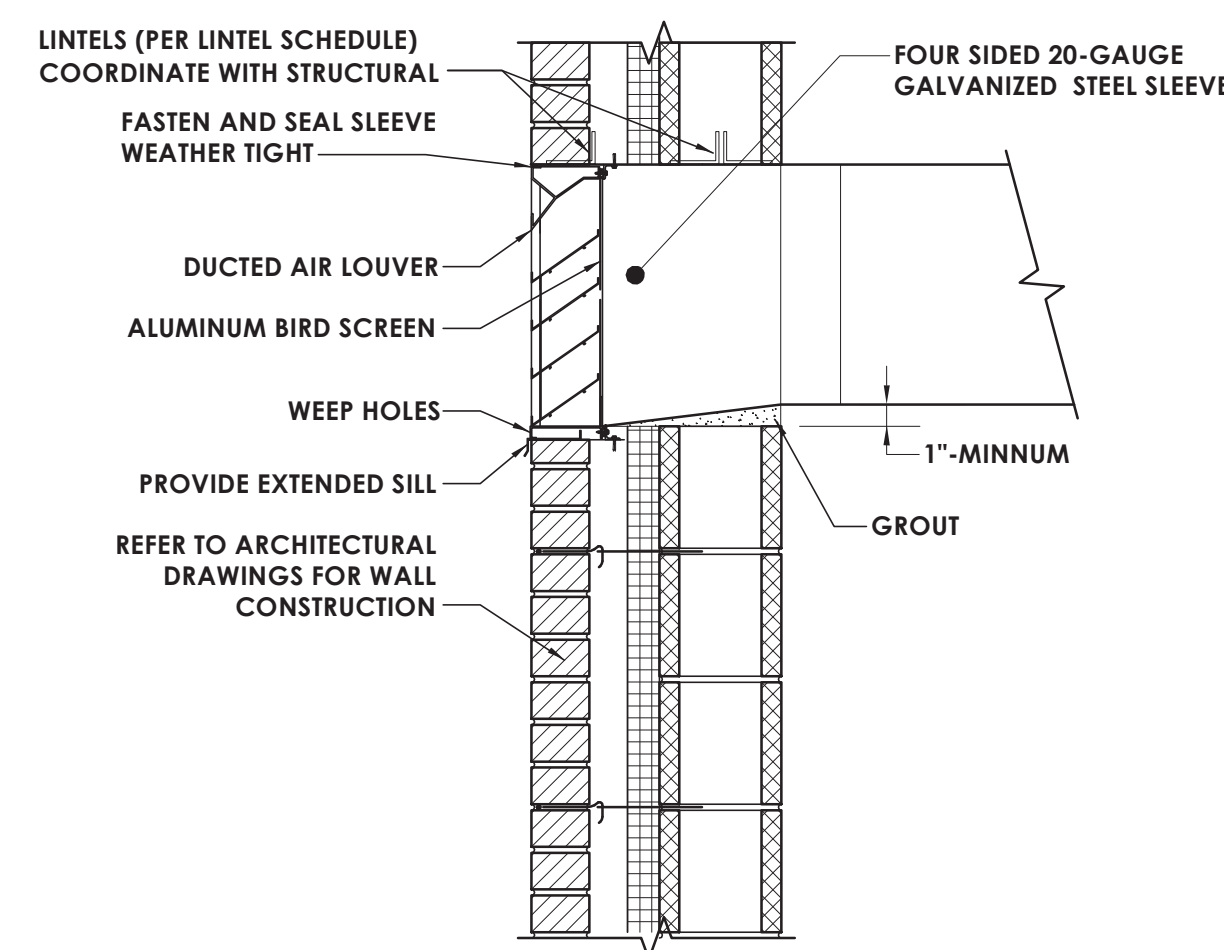
INTERIOR PAD DETAIL FOR LOCATION ON EXISTING CONCRETE FLOOR

NOTE: COORDINATE UNIT SIZE WITH EQUIPMENT SELECTED.



MOVEMENT ALLOWED EQUIPMENT

DETAIL NOTES:
1. COORDINATE EQUIPMENT PAD SIZE AND LOCATION WITH MECHANICAL,
ELECTRICAL AND EQUIPMENT MANUFACTURER'S DRAWINGS.
2. VERIFY PAD THICKNESS WITH EQUIPMENT MANUFACTURER FOR ANCHORAGE.
3. PROVIDE CONTROL JOINTS IN SLAB AT SPACINGS NOT TO EXCEED 12'-0" O.C.
IN EITHER DIRECTION. JOINTED AREAS SHALL BE SQUARE.



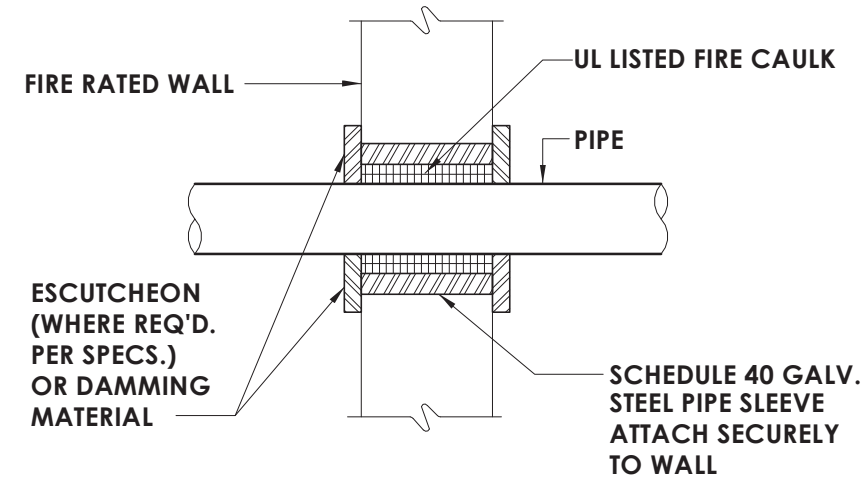
NOTE:
SUPPORT DUCTWORK INDEPENDENTLY OF THE COIL.

11
H800
NTS
REHEAT COIL DETAIL

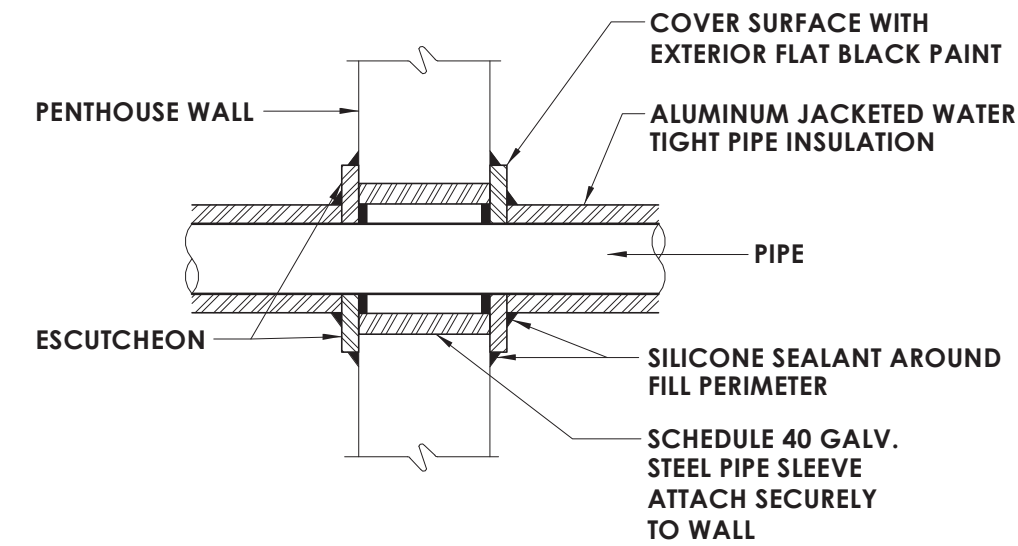
10
H800
NTS
DUCTED LOUVER THOUGH WALL SECTION

9
H800
NTS
EXTERIOR EQUIPMENT PAD DETAIL

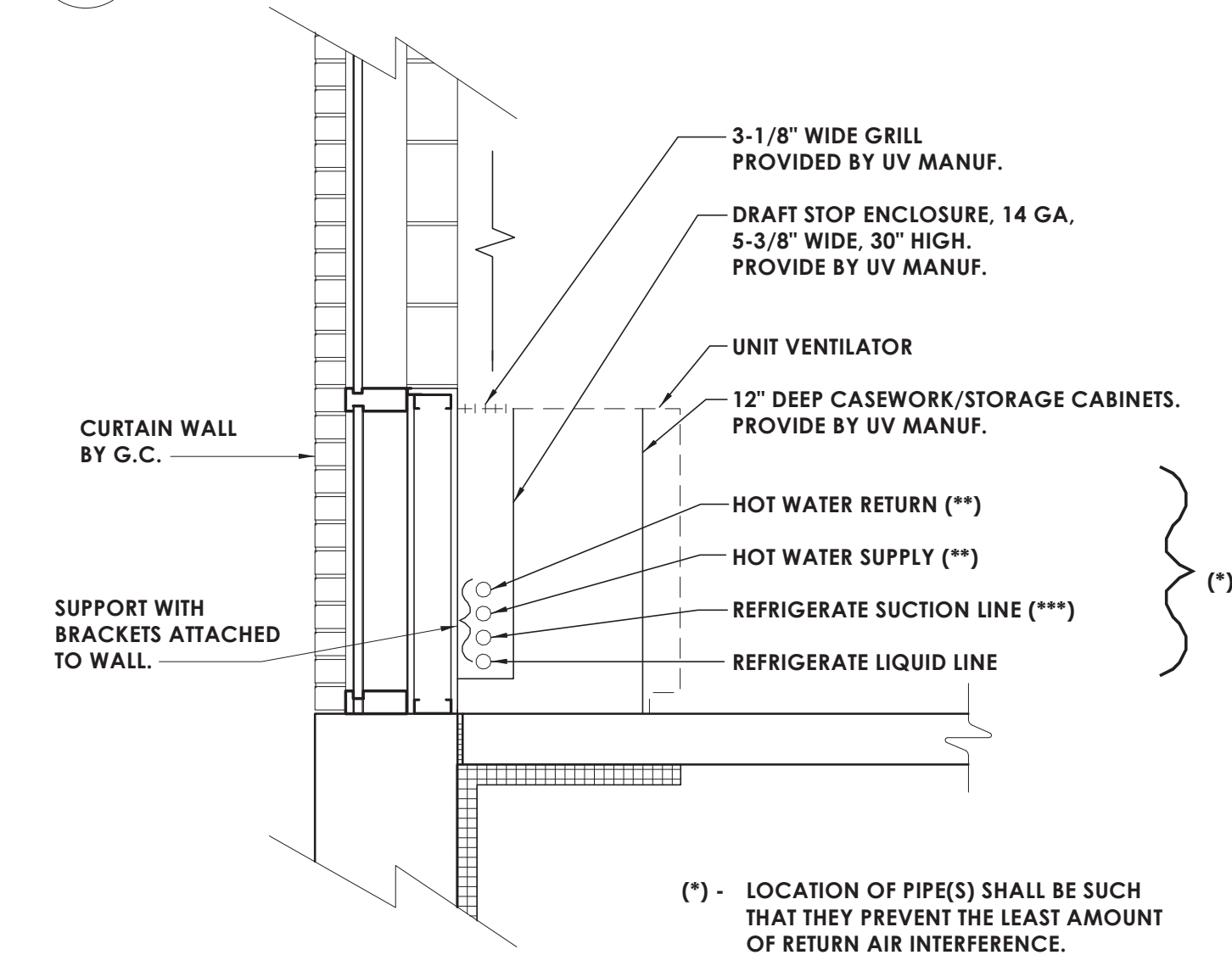
8
H800
NTS
EQUIPMENT HOUSEKEEPING PAD DETAIL



1
H801 NTS
PIPE THROUGH RATED WALL



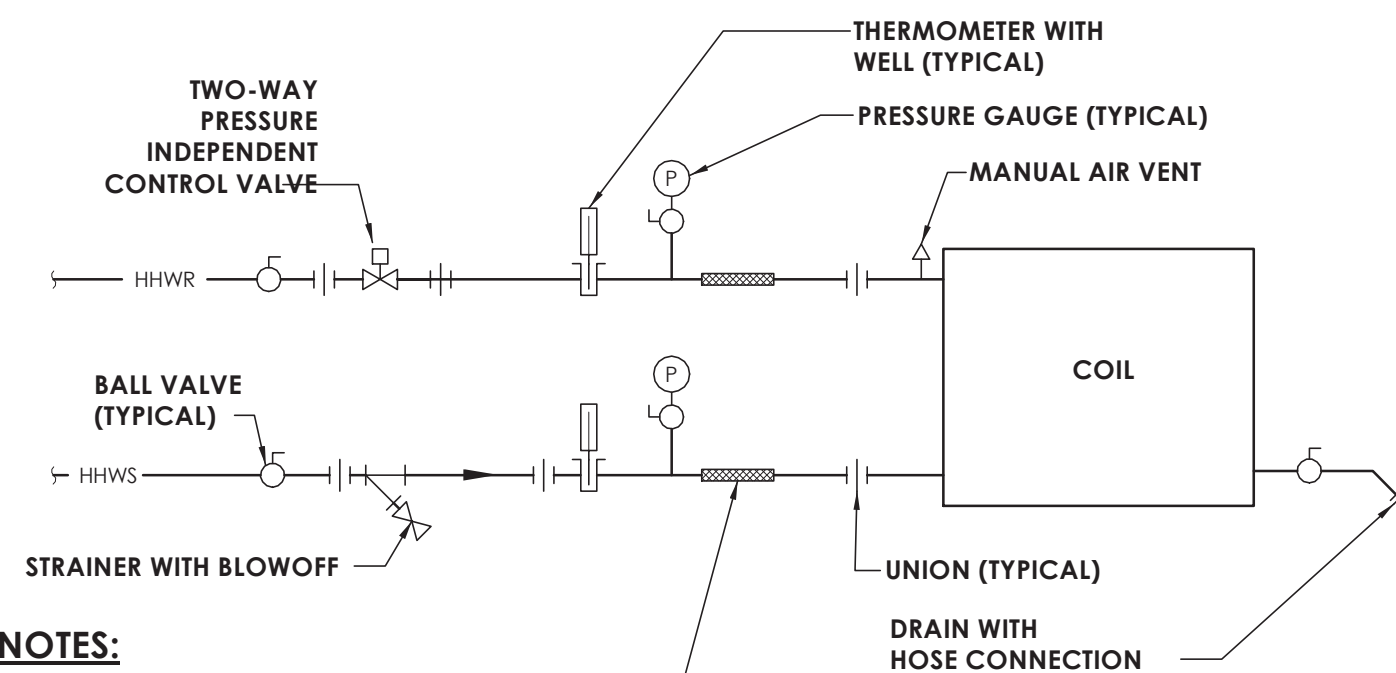
2
H801 NTS
PIPE THROUGH NON-RATED WALL



NOTE:
DRAFT STOP ENCLOSURE AND CABINETRY SHALL RUN FULL LENGTH OF EXTERIOR WALL UNLESS OTHERWISE NOTED.

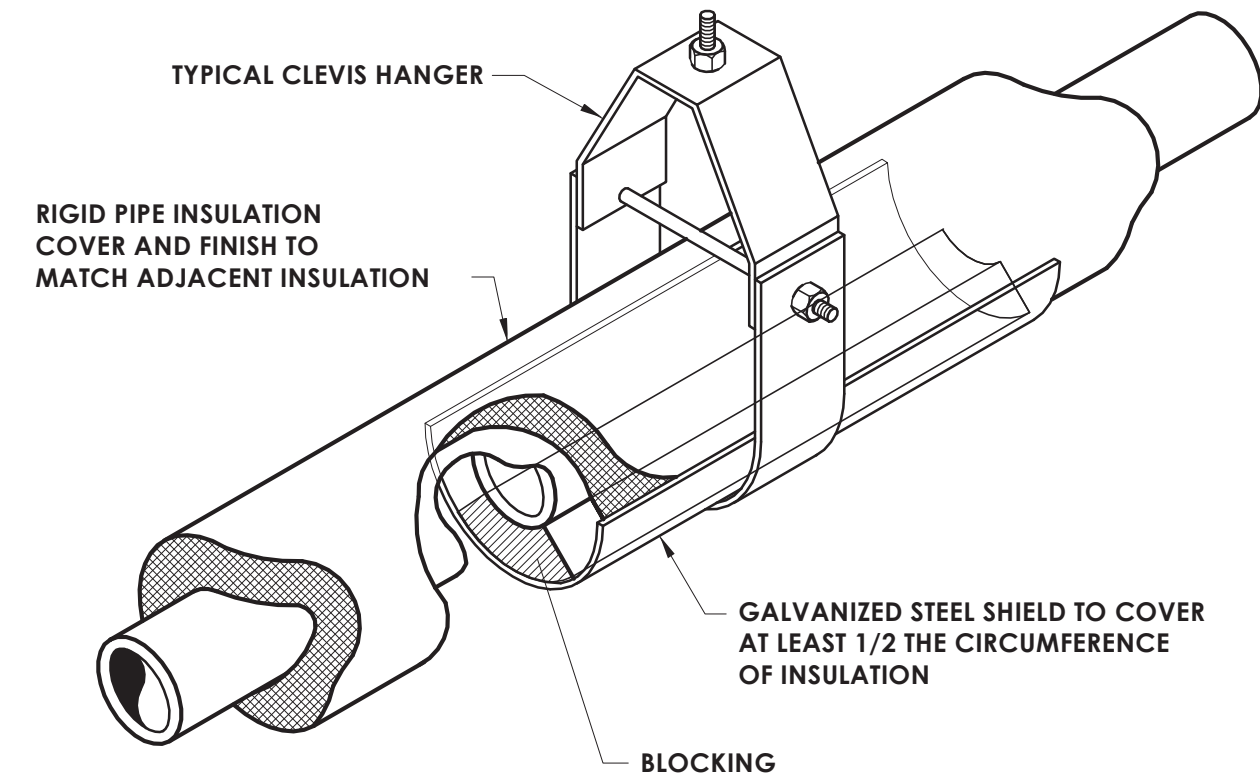
- (*) - LOCATION OF PIPE(S) SHALL BE SUCH THAT THEY PREVENT THE LEAST AMOUNT OF RETURN AIR INTERFERENCE.
- (**) - DO NOT INSULATE WITHIN DRAFT STOP ENCLOSURE
- (***) - 1" THK. INSULATION WITHIN DRAFT STOP ENCLOSURE. CLOSED-CELL PHENOLIC FOAM INSULATION.

5
H801 NTS
TYPICAL SECTION/ELEVATION OF UNIT VENTILATOR AT DRAFT STOP

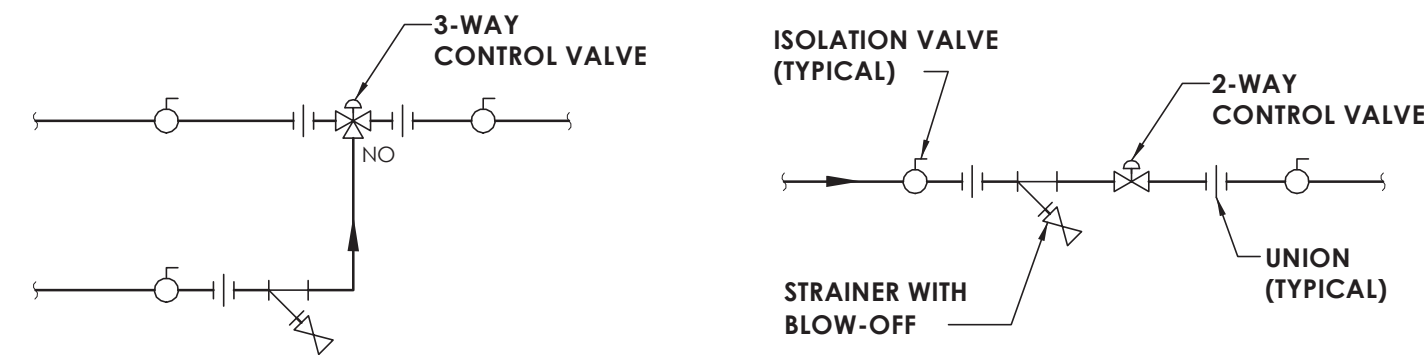


NOTES:
PIPE COIL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PIPING ARRANGEMENT SHALL ALLOW FOR REMOVAL OF COIL WITH REMOVAL OF PIPING BEYOND UNIONS.

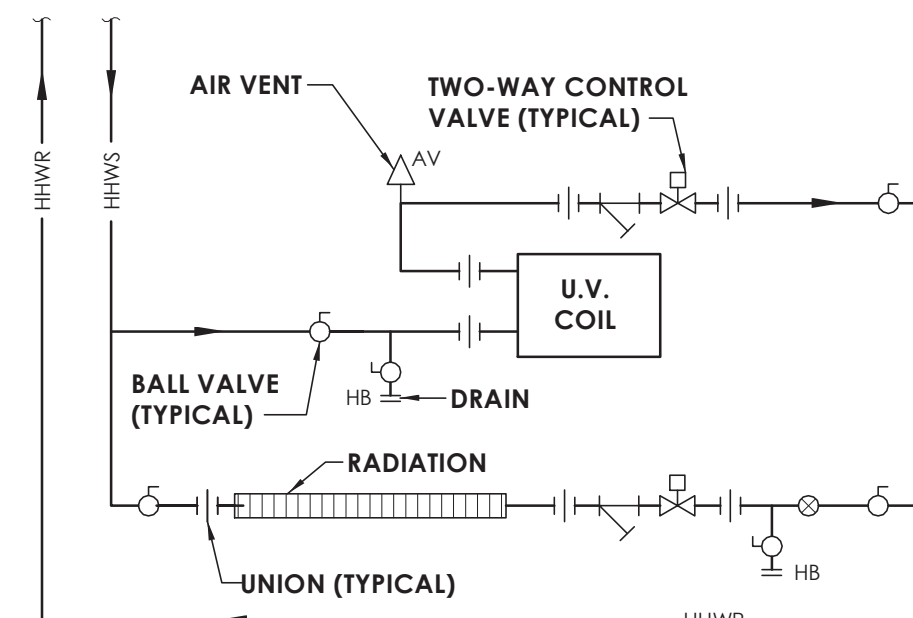
10
H801 12" = 1'-0"
AHU-1 & AHU-2 HOT WATER COIL PIPING DETAIL



3
H801 NTS
INSULATED PIPE HANGER DETAIL

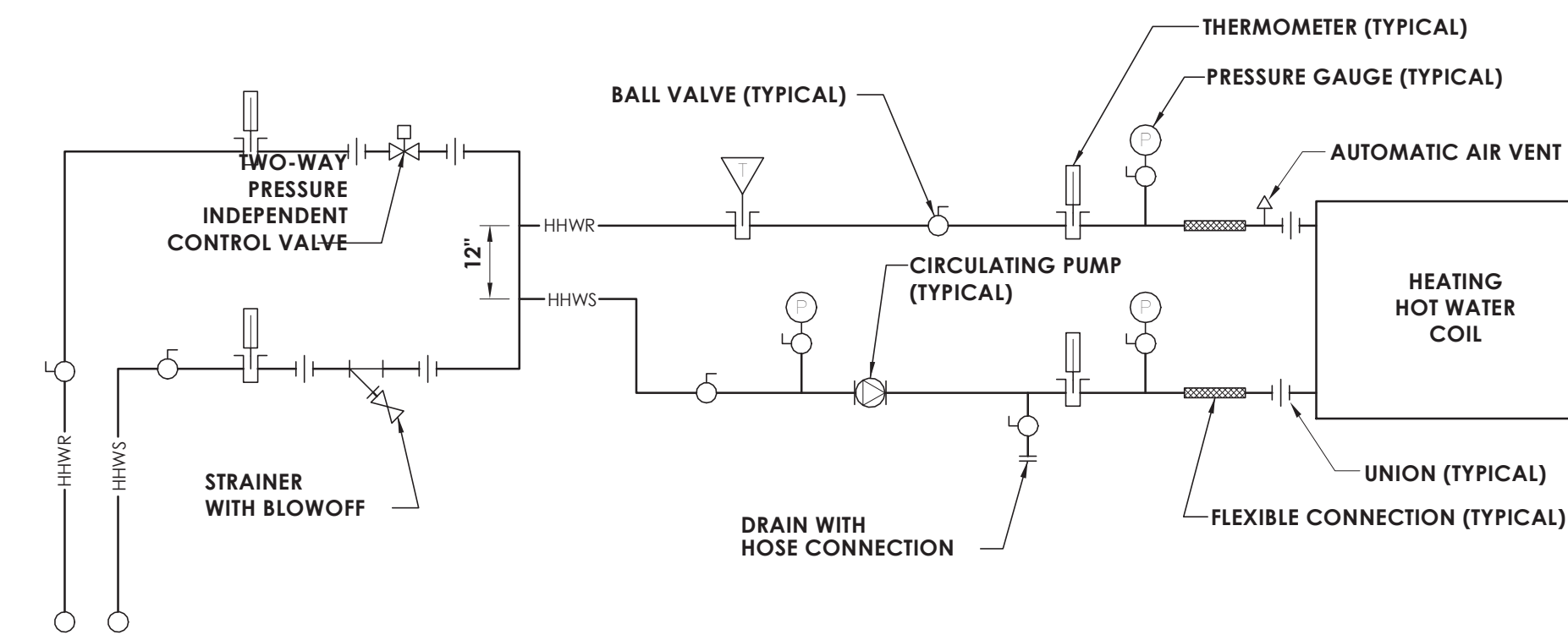


8
H801 NTS
CONTROL VALVE SCHEMATICS

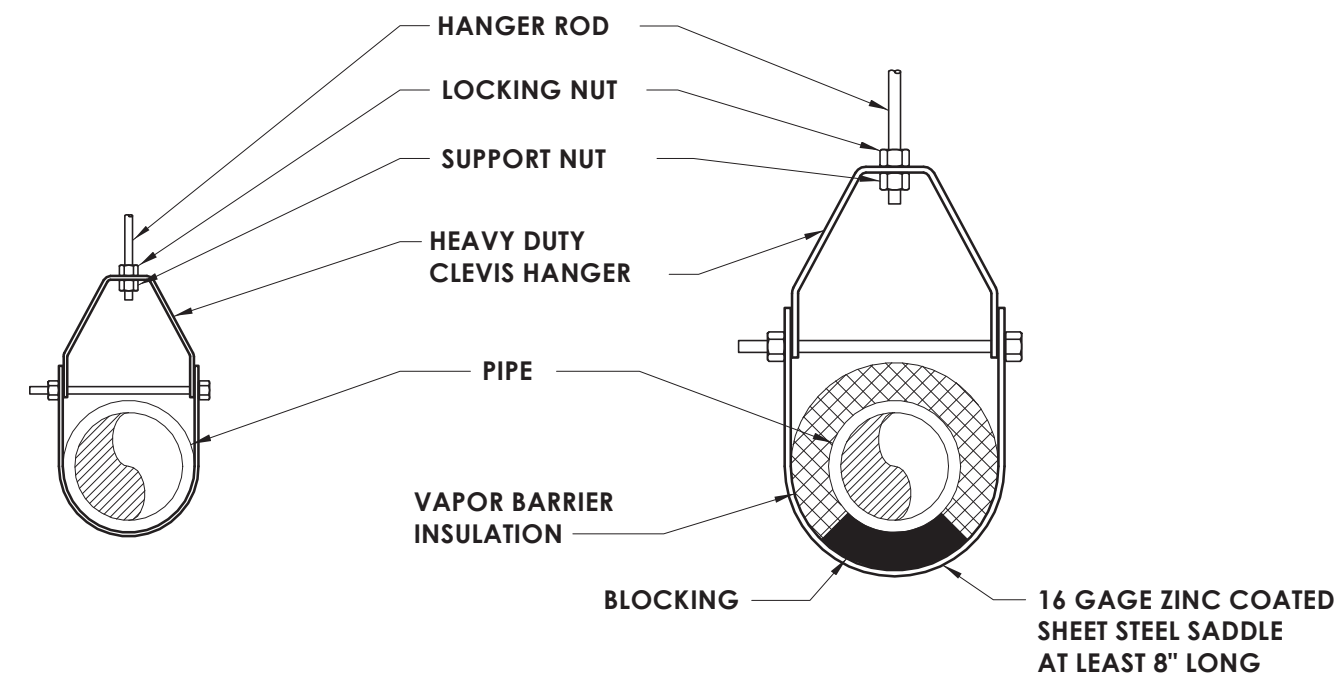


7
H801 NTS
UNIT VENTILATOR DETAIL WITH HOT WATER RADIATION

NOTES:
1) PIPE COIL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PIPING ARRANGEMENT SHALL ALLOW FOR REMOVAL OF COIL WITHOUT REMOVAL OF PIPING BEYOND UNIONS.



11
H801 12" = 1'-0"
AHU-3 & AHU-4 HOT WATER COIL PIPING DETAIL

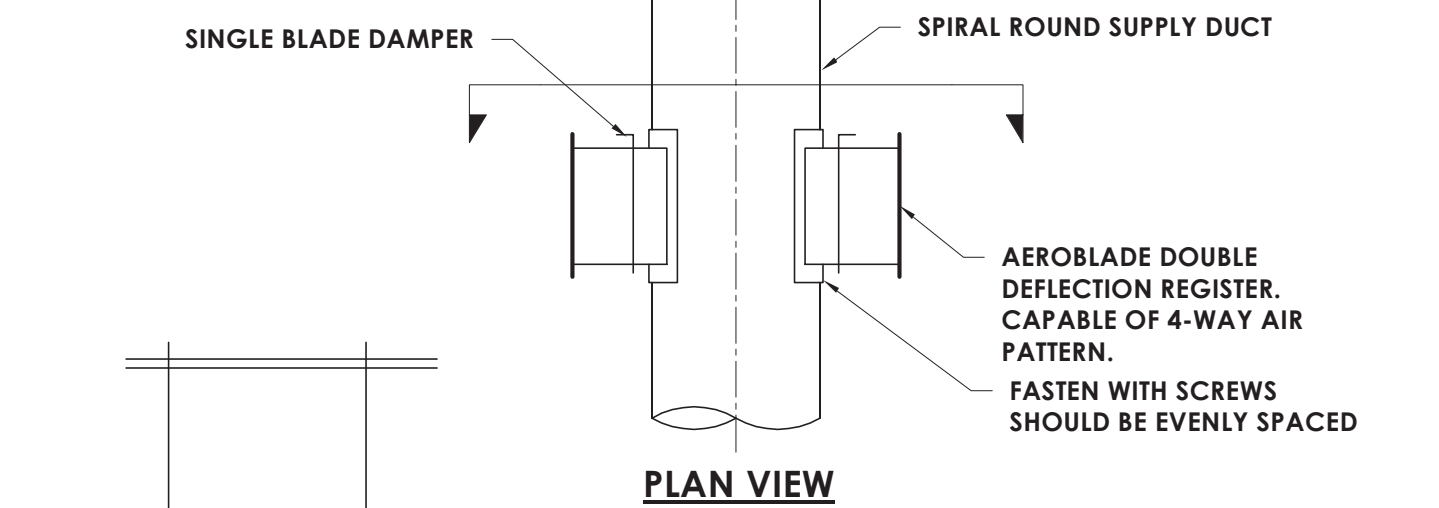


**CLEVIS HANGER
SINGLE HORIZONTAL RUNS
NO VAPOR BARRIER INSULATION**

**CLEVIS HANGER
SINGLE HORIZONTAL RUNS
WITH VAPOR BARRIER INSULATION**

4
H801 NTS
PIPE SUPPORT DETAIL

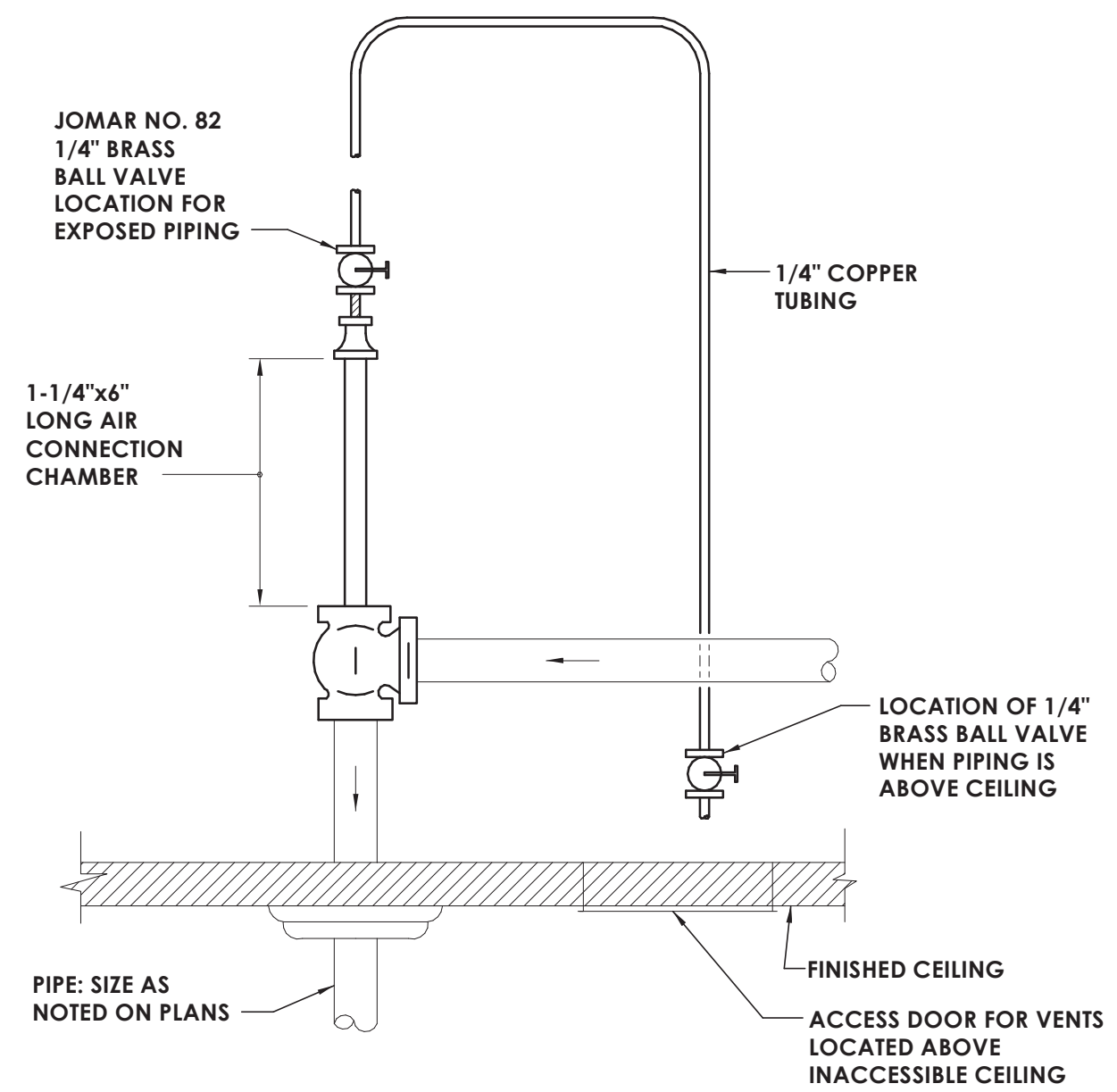
PRIME AND PAINT DUCT TO COINCIDE WITH FRICASSEE AND/OR FURNITURE. COORDINATE COLOR WITH ARCHITECT.



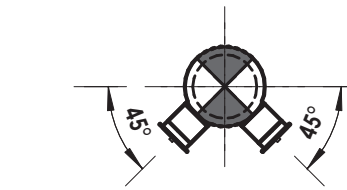
DUCT HANGER SECTION

SECTION

9
H801 NTS
CLASSROOM AIR DISTRIBUTION DETAIL

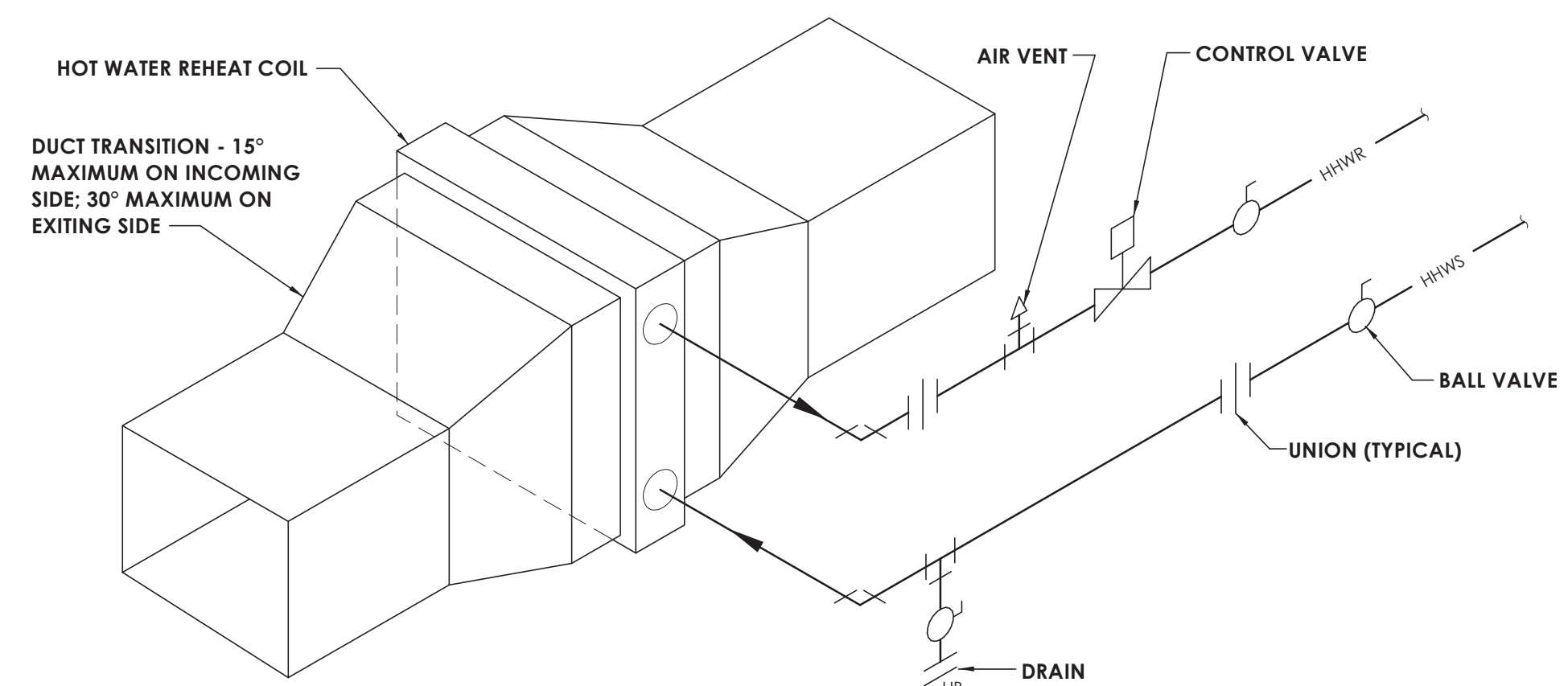


6
H801 NTS
MANUAL AIR VENT DETAIL - WATER PIPING



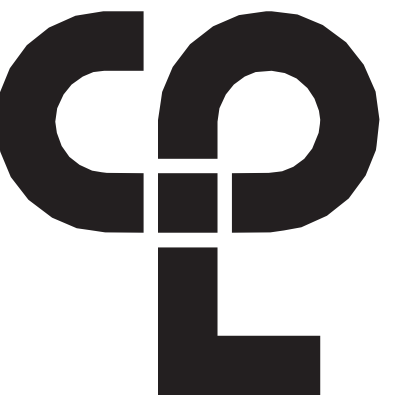
REFER TO 9 / H801 FOR MORE INFORMATION

9A
H801 1/4" = 1'-0"
TYPICAL GYM DIFFUSER



THIS DETAIL APPLIES TO VAV BOXES AND REHEAT COILS

12
H801 12" = 1'-0"
HOT WATER REHEAT COIL DETAIL



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NEWBURGH, NY 12550
CPLteam.com

PROJECT INFORMATION

Project Number
13940.20

Client Name

**NEWBURGH ENLARGED CITY
SCHOOL DISTRICT**

Project Name

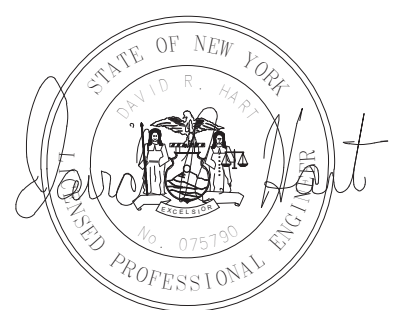
**PHASE 5: 2019 CAPITAL
IMPROVEMENTS PROJECT**

SED # 44-16-00-01-0-018-009

Project Address
400 Old Forge Hill Rd, New Windsor, NY
12553

REVISION SCHEDULE

Date Description



SHEET INFORMATION

Issued
03/05/21

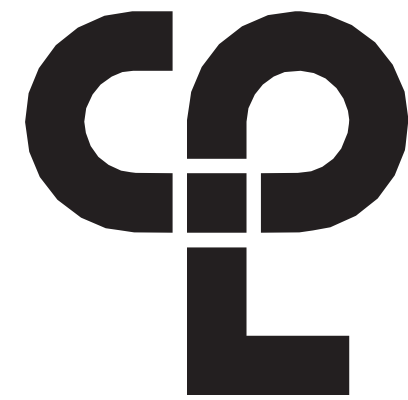
BID SUBMISSION

Drawn By
ACS

Drawing Title
HVAC DETAILS

Checked By
EM

VG
H801



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50 FRONT ST. SUITE 102
NEWBURGH, NY 12550
CPLteam.com

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BID SUBMISSION

Drawn By

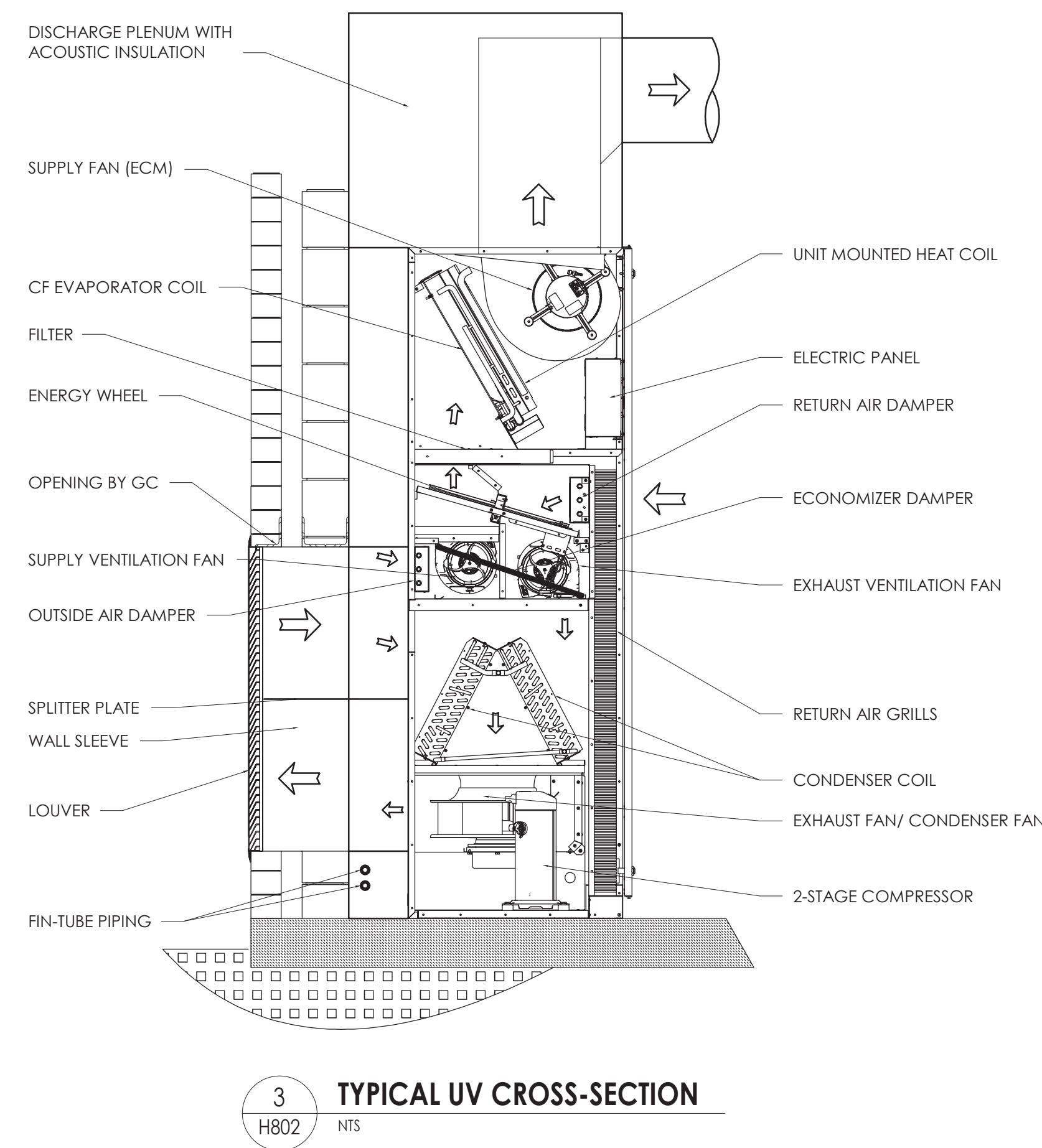
ACS

Drawing Title

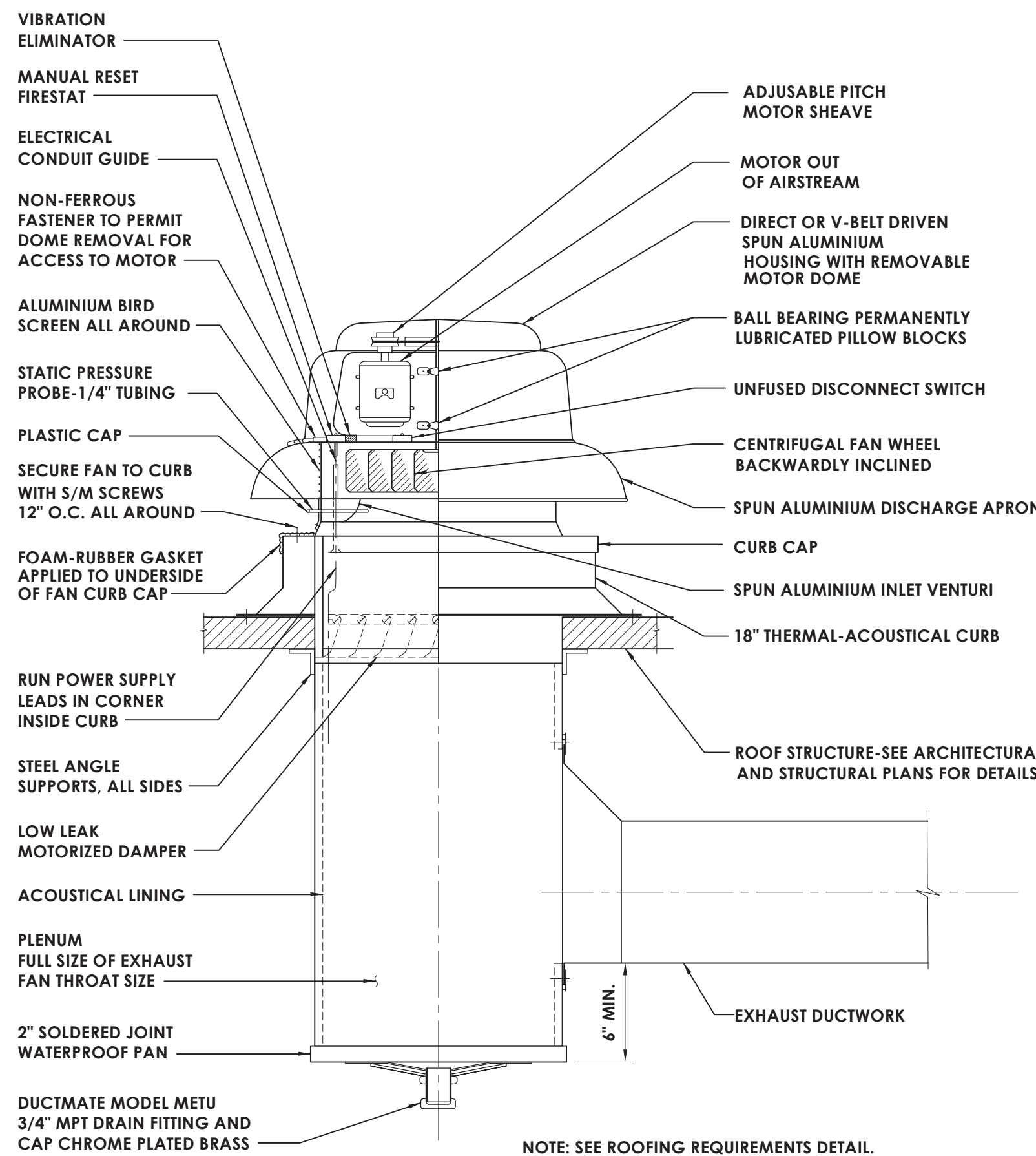
HVAC DETAILS

VG

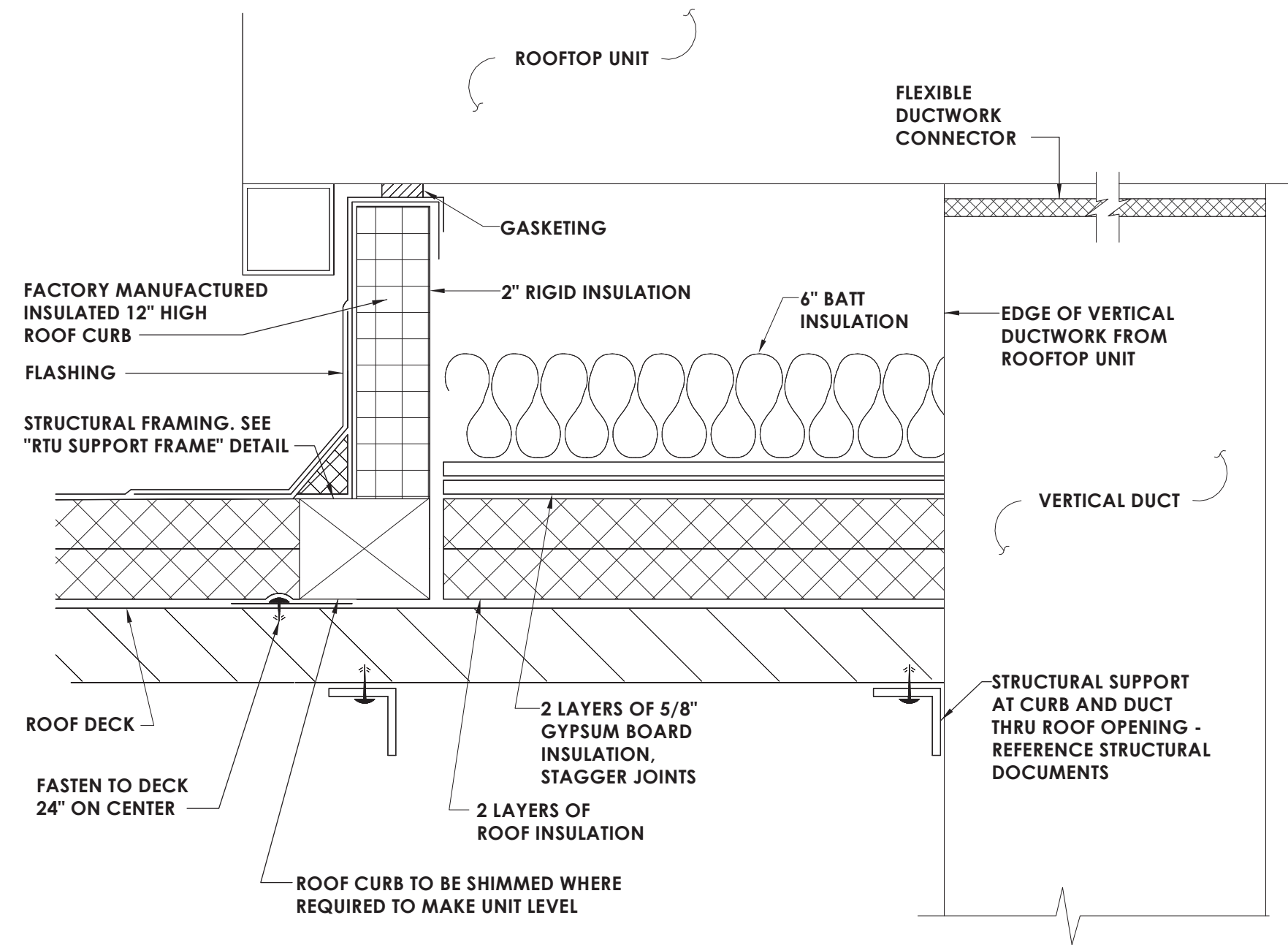
H802



3 TYPICAL UV CROSS-SECTION
H802 NTS

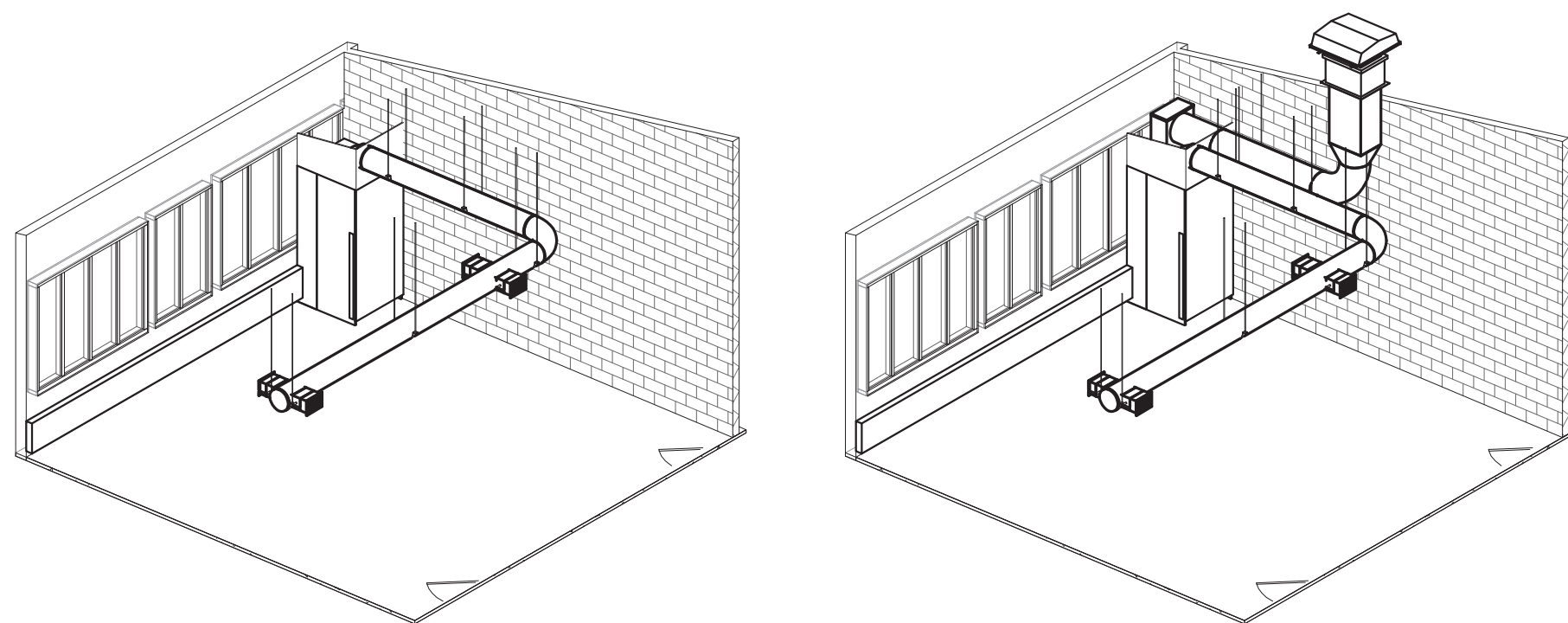


2 EXHAUST FAN DETAIL
H802 NTS



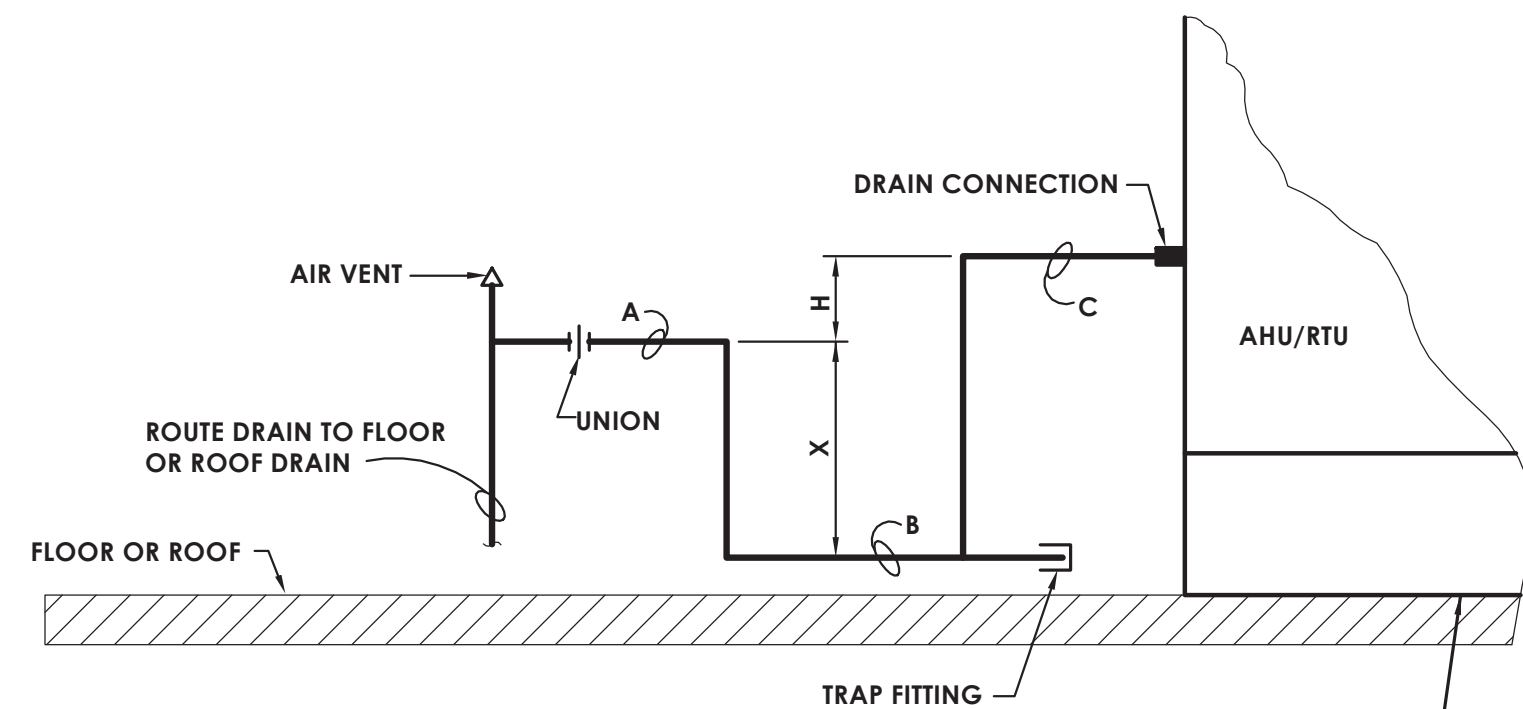
NOTE:
ALL ROOFTOP HVAC UNITS REQUIRED TO HAVE CURB AND CURB INTERIOR AS SHOWN.

1 CURB INTERIOR REQUIREMENTS ROOFTOP/DOAS UNIT - ROOF CURB DETAILS
H802 NTS



4 TYPICAL CLASSROOM
WITH THRU WALL OA
H802

5 TYPICAL CLASSROOM
WITH DUCTED OA
H802



TOTAL TRAP HEIGHT = X+H+(1 1/2xPIPE DIAMETER)
= B.O.P. AT A TO T.O.P. AT B
= B.O.P. AT A TO T.O.P. AT C

X = B.O.P. AT A TO T.O.P. AT B

H = B.O.P. AT A TO T.O.P. AT C

POSITIVE STATIC PRESSURES:

X = AT LEAST 1" PLUS CASING STATIC PRESSURE

H = AT LEAST 1"

NEGATIVE STATIC PRESSURES:

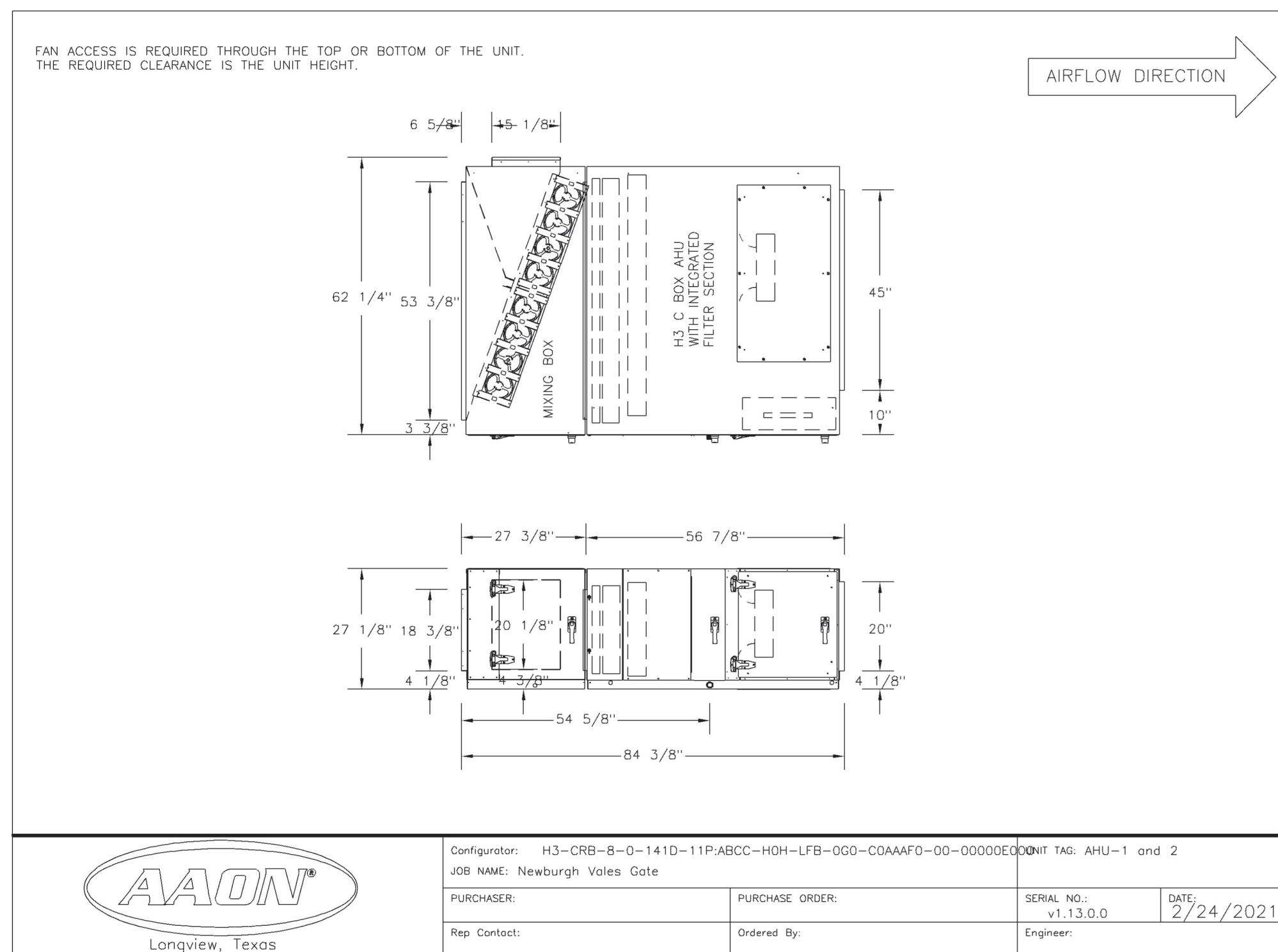
X = 1/2H

H = AT LEAST 1" PLUS CASING STATIC PRESSURE

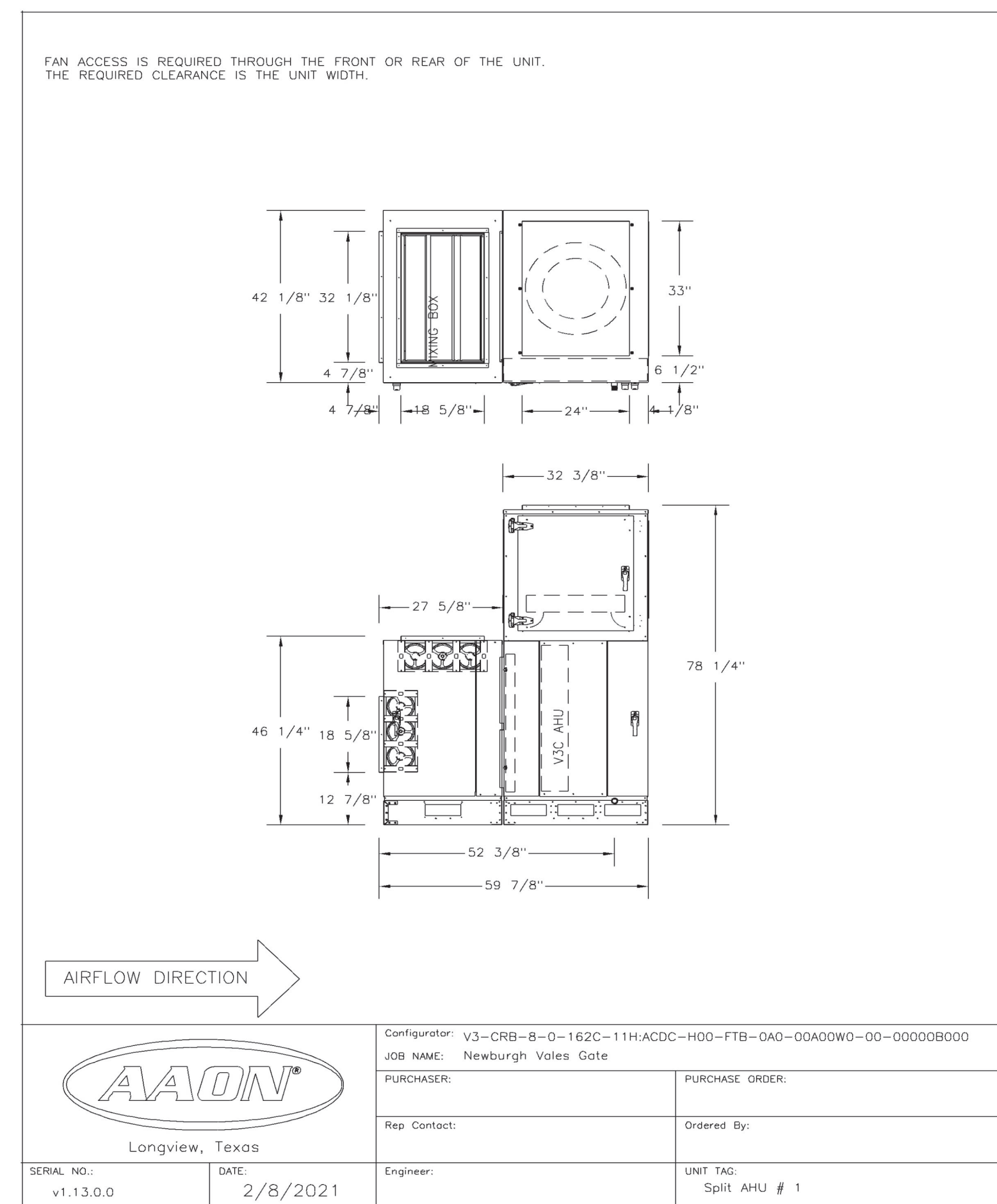
B.O.P. = BOTTOM OF PIPE

T.O.P. = TOP OF PIPE

8 TYPICAL AHU/RTU CONDENSATE DRAIN DETAIL
H802 NOT TO SCALE



6 AHU-1 & AHU-2 DIMENSIONS
H802 NOT TO SCALE



7 AHU-3 & AHU-4 DIMENSIONS
H802 NTS

S:\Projects\Newburgh ECDD\Vol-Gate E3 Admin & Reno\CD Design\08 CAD Rev\A CENTRAL FILES 9/23/2021 5:49:45 PM

PACKAGED ROOFTOP AIR HANDLING UNITS																																								
TAG	SERVICE	MANUF.	MODEL	SUPPLY FAN				OA (CFM)	EXHAUST FAN				GAS HEATING					DX COOLING					ENERGY RECOVERY WHEEL								FILTERS	ELECTRICAL			REMARKS					
				AIRFLOW (CFM)	E.S.P. (INH2O)	BREAK HP	MOTOR HP		AIRFLOW (CFM)	E.S.P. (INH2O)	BREAK HP	MOTOR HP	EAT (°F)	LAT (°F)	INPUT (MBH)	OUTPUT (MBH)	TURN DOWN	EAT EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	AMBIENT (°F)	STAGES	REFRIG-ERANT	AIR FLOW (CFM)	SUMMER				WINTER				VOLTAGE	FLA	MOCP		
RTU-1	MUSIC WING	AAON	RN-015	4,550	1.00	3.46	5	2,725	2,725	0.50	2.08	3	54.7	86.4	195.0	156.0	1.4 : 1	78.9	65.3	51.7	51.2	181.6	130.9	92.0/75.0	2	R410A	2725	92.0/75.0	75.0/62.0	81.5/67.4	78.3/31.1	0	70	44	180.1/130.9	MERV 13	208/3	91	110	ALL
REMARKS:				1. PROVIDE WITH FACTORY MOUNTED AND WIRED DISCONNECT. 2. PROVIDE WITH MANUFACTURER'S 32" HIGH INSULATED ROOF CURB. COMPLY WITH THE WIND RESTRAINT REQUIREMENTS OF THIS PROJECT. 3. PROVIDE WITH DIRECT-DRIVE PLENUM FANS WITH ELECTRONICALLY COMMUTATED FAN MOTORS. 4. PROVIDE ENERGY RECOVERY WHEEL. 5. PROVIDE WITH MODULATING HOT GAS REHEAT. 6. 409 SS DRIP PAN 7. 409 SS HEAT EXCHANGER AND BURNERS 8. PROVIDE FACTORY MOUNTED AND WIRED 115V GFI SERVICE RECEPTACLE. 9. PROVIDE FACTORY CONTROLLER WITH BACNET IP INTERFACE. REFER TO SCHEMATICS AND SPECIFICATIONS FOR ADDITIONAL BAS CONTROLS REQUIREMENTS.																																				

AIR HANDLING UNIT SCHEDULE																													
TAG	LOCATION	SERVICE	SUPPLY AIR FLOW (CFM)	DCV MIN. OA CFM	FULLY OCCUP. MIN. OA CFM	EXT. SP W.C.	DX COOLING COIL DATA					HOT WATER HEATING COIL DATA								SUPPLY FAN MOTOR DATA				TYPICAL UNIT MFG & MODEL NO.	REMARKS:				
							TOTAL	SENS	FACE AREA SQ. FT.	ROWS	OAT °F DB/WB	EAT °F DB/WB	LAT °F DB/WB	APD IN-W.C.	MBH	FACE AREA SQ. FT.	EWT	LWT	EAT (°F)	LAT (°F)	APD IN-W.C.	GPM	WPD FT-W.C.			BHP/HP	RPM	VOLTS/Ø	MCA
AHU-1	GYM	101 - GYMNASIUM	2000	450	825	1.0	71.3	53.3	3.8	4	92.0/75.0	81.4/67.6	56.1/55.8	0.52	89.5	7.22	160	149.8	43.5	84.9	0.13	18.0	3.7	1.01/1.5	1978	230/3/60	7	AAON: H3-CRB-8-0-141D-11P	ALL
AHU-2	GYM	101 - GYMNASIUM	2000	450	825	1.0	71.3	53.3	3.8	4	92.0/75.0	81.0/69.2	57.9/56.4	0.52	89.5	7.22	160	149.8	43.5	84.9	0.13	18.0	3.7	1.01/1.5	1978	230/3/60	7	AAON: H3-CRB-8-0-141D-11P	ALL
AHU-3	STORAGE	CAFETORIUM	3000	775	3000	1.0	149.85	120.6	6	6	92.0/75.1	92.0/75.1	56.6/56.3	0.5	165.3	7.22	160	144.3	0	53.2/35.8	0.05	21.5	2.2	1.28/4.0	1181	208/3/60	11	AAON: V3-CRB-8-0-162C-11H	ALL
AHU-4	STOR.	CAFETORIUM	3000	775	3000	1.0	149.85	120.6	6	6	92.0/75.1	92.0/75.1	56.6/56.3	0.5	165.3	7.22	160	144.3	0	53.2/35.8	0.05	21.5	2.2	1.28/4.0	1181	208/3/60	11	AAON: V3-CRB-8-0-162C-11H	ALL
REMARKS: 1. PROVIDE LOCAL DISCONNECT. 2. REMOTE MOUNTED CONDENSING UNIT.																													

FAN COIL UNIT SCHEDULE																		
TAG	LOCATION & SERVICE	TYPE	SA (CFM)	OA (CFM)	HEATING							ELECTRICAL DATA			MAX UNIT DIMENSIONS (LXWXH)	TYPICAL UNIT MFG & MODEL NO.	REMARKS:	
					EWT (°F)	WATER ΔT (°F)	GPM	WPD (FTWC)	MBH	EAT (°F)	LAT (°F)	HP	VOLTS	PHASE				FLA
FC-1	CORRIDOR	HORIZ. CONCEALED	400	250	160	20	2.9	1	28.6	41	85	1/2	120	1	5.15	38×29×12.5	PRICE FCHG-40	1-2
FC-2	CORRIDOR	HORIZ. CONCEALED	400	140	160	20	1.7	1	17.1	46	85	1/2	120	1	4.86	38×24×10.5	PRICE FCHG-30	1-2
FC-3	CORRIDOR	HORIZ. CONCEALED	400	160	160	20	1.9	1	18.6	42	85	1/2	120	1	4.86	38×24×10.5	PRICE FCHG-30	1-2
REMARKS: 1. PROVIDE DISCONNECT 2. PROVIDE WITH MERV 8 FILTERS																		

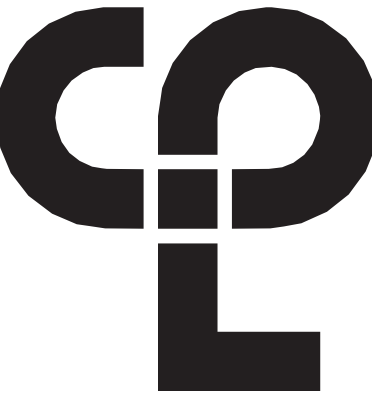
CAFETORIUM/KITCHEN BALANCING SCHEDULE				
EQUIPMENT	MODE HOOD ON		MODE HOOD OFF	
	FULL OCCUPANCY	MINIMUM OCCUPANCY	FULL OCCUPANCY	MINIMUM OCCUPANCY
AHU-3	3000 CFM SA	3000 CFM SA	3000 CFM SA	3000 CFM SA
	3000 CFM OA	3000 CFM OA	3000 CFM OA	775 CFM OA
	0 CFM RA	0 CFM RA	0 CFM RA	2225 CFM RA
AHU-4	3000 CFM SA	3000 CFM SA	3000 CFM SA	3000 CFM SA
	3000 CFM OA	3000 CFM OA	3000 CFM OA	775 CFM OA
	0 CFM RA	0 CFM RA	0 CFM RA	2225 CFM RA
EXISTING EF-9 (KITCHEN HOOD)	4000 CFM EXH	4000 CFM EXH	0 CFM EXH	0 CFM EXH
EXISTING EF-8 (GENERAL)	685 CFM EXH	685 CFM EXH	685 CFM EXH	685 CFM EXH
EXISTING RELIEF DAMPER	1315 CFM EXH	1315 CFM EXH	5315 CFM EXH	865 CFM EXH

HOT WATER COIL SCHEDULE															
TAG	LOCATION	SERVICE	AIR DATA					WATER DATA				MFG SIZE H×L (IN.)	ROWS	TYPICAL UNIT MFG & MODEL NO.	REMARKS:
			CFM	TEMP (°F)		APD (IN. WC)	MIN. MBH	GPM	TEMP (°F)		APD (IN. WC)				
ENT	LVG	ENT		LVG											
RHC-1	7 - PSYCH SUITE.	6 - ENL SUITE AND OFFICES	410	65	90	3.5	11.1	0.7	160	130	0.125	12 × 8	2	GREENHECK HW12C	-
RHC-2	7 - PSYCH SUITE.	7 - PSYCHOLOGY SUITE AND OFFICES	375	65	90	3.5	10.1	0.7	160	130	0.125	12 × 8	2	GREENHECK HW12C	-
RHC-3	7 - PSYCH SUITE.	8 - SPEECH SUITE AND OFFICES	275	65	90	3.5	7.4	0.5	160	130	0.125	12 × 8	2	GREENHECK HW12C	-
RHC-4	CORRIDOR	4 - MUSIC	970	65	90	3.5	26.2	1.7	160	130	0.125	18 × 12	2	GREENHECK HW12C	-
RHC-5	CORRIDOR	5 - VOCAL	970	65	90	3.5	26.2	1.7	160	130	0.125	18 × 12	2	GREENHECK HW12C	-
RHC-6	CORRIDOR	CORRIDOR & TOILETS	530	65	90	3.5	14.3	1.0	160	130	0.125	12 × 9	2	GREENHECK HW12C	-
RHC-7	CORRIDOR	1 THRU 3 - OFFICES	390	65	90	3.5	10.5	0.7	160	130	0.125	12 × 9	2	GREENHECK HW12C	-

AIR COOLED CONDENSING UNIT SCHEDULE														
TAG	LOCATION	SERVICE	NOMINAL TONS	COMPRESSOR/ CIRCUIT	SST °F	ELECTRICAL DATA						OPERATING WEIGHT (LBS.)	TYPICAL UNIT MFG & MODEL NO.	REMARKS:
						FAN		COMPRESSOR		VOLT/Ø	FLA			
						NO.	HP	QTY	RLA					
ACCU-1	BOILER/LOCKER ROOM ROOF	GYM AHU	7	1 / 1	45.59	1	1/3	1	20.4	208/3	45	474	AAON CFA-007	1-2
ACCU-2	BOILER/LOCKER ROOM ROOF	GYM AHU	7	1 / 1	45.59	1	1/3	1	20.4	208/3	45	474	AAON CFA-007	1-2
ACCU-3	KITCHEN ROOF	CAFE. AHU	13	2 / 2	45.59	2	3/4	1	20.4/22.4	208/3	50	1154	AAON CFA-013	1-2
ACCU-4	KITCHEN ROOF	CAFE. AHU	13	2 / 2	45.59	2	3/4	1	20.4/22.4	208/3	50	1154	AAON CFA-013	1-2
CU-215	GRADE	RM 215	1.5	1 / 1	45.77	1	1/12	1	9.7	208/1	20	125	AIRDALE YCE18	1, 3
REMARKS: 1. PROVIDE PROVIDE HEAVY DUTY NEMA 3R DISCONNECTS. 2. PROVIDE ON EQUIPMENT RAIL. 3. PROVIDE ON REINFORCED EQUIPMENT PAD.														

SPLIT SYSTEM OUTDOOR UNITS											
TAG	LOCATION	MANUF.	MODEL	COOLING CAPACITY	REFRIGERANT TYPE	SEER	SOUND PRESSURE LEVELS (dB)	ELECTRICAL		WEIGHT	REMARKS
								POWER	MCA		
SSO-1	AT GRADE	MITSUBISHI ELECTRIC	RKN15KEVJU5	18000.0 Btu/h	R-410A	15.3	46	208-230 VAC/60 HZ/1Ø	13 A	97.00 lbf	1-2
REMARKS: 1. PROVIDE NEMA 3 DISCONNECT. 2. PROVIDE MODULATING, INVERTER DUTY COMPRESSORS.											

SPLIT SYSTEM INDOOR UNITS											
TAG	LOCATION	MANUF.	MODEL	FAN CAPACITY (CFM)	TOTAL COOLING CAPACITY	REFRIGERANT	SEER	ELECTRICAL		WEIGHT	REMARKS
								POWER	MCA		
SSI-1	SERVER	MITSUBISHI ELECTRIC	FTXN15KVJU	425 CFM-370 CFM-320 CFM	18000.0 Btu/h	R-410A	15	208-230 VAC/60 HZ/1Ø	13 A	29.00 lbf	-



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PROJECT INFORMATION

Project Number
13940.20
Client Name

NEWBURGH ENLARGED CITY
SCHOOL DISTRICT

Project Name

PHASE 5: 2019 CAPITAL
IMPROVEMENTS PROJECT

SED # 44-16-00-01-0-018-009

Project Address
400 Old Forge Hill Rd, New Windsor, NY
12553

REVISION SCHEDULE

Date Description



SHEET INFORMATION

Issued
03/05/21
BID SUBMISSION
Drawn By
ACS
Checked By
EM
Drawing Title
HVAC SCHEDULES

VG
H900

UNIT VENTILATORS																																					
UNIT				SUPPLY FAN						POWER EXHAUST			SELF-CONTAINED COOLING COIL						HOT WATER COIL						ENERGY RECOVERY WHEEL								REMARKS				
TAG	MANUF.	MODEL	VOLTAGE PHASE	FLA	MCA	MOCP	DESIGN AIRFLOW (CFM)	OUTDOOR AIRFLOW (CFM)	EXT. STATIC PRESSURE (INWG)	MOTOR POWER (HP)	AIRFLOW (CFM)	EXT. STATIC PRESSURE (INWG)	MOTOR POWER (HP)	EAT		LAT		TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	AIR TEMP.		EWT (°F)	LWT (°F)	FLOW RATE (GPM)	WPD (PSI)	COIL CAPACITY (MBH)	SUMMER				WINTER						
														EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)			EDB (°F)	LDB (°F)						FLOW CFM	OA	RA	SA	MBH	FLOW CFM		OA	RA	SA	MBH
UV-102[ALT]	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	92	0.45	3/4	2300	0.2	2 1/2	72.5	62.3	55.0	54.1	15.8	11.8	63	85	160	146	3.00	0.37	21.38	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 11, 15
UV-102	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	67.0	55.1	53.8	13.1	9.6	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7, 9
UV-104	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	67.0	55.2	53.8	13.1	9.6	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-105	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.3	55.3	53.9	15.3	11.3	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-106	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	67.0	55.4	53.8	13.1	9.6	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-107	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.3	55.5	53.9	15.3	11.3	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-108	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	67.0	55.6	53.8	13.1	9.6	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-109	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.5	55.7	53.9	15.4	11.8	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-111	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	65.1	58.9	55.8	54.4	16.9	12.9	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-113	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	65.3	58.7	55.9	54.4	17.2	13.2	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-115	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.4	55.10	53.9	14.2	10.8	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-116	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	67.0	55.11	53.8	13.6	10	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 8
UV-117	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	67.0	55.12	53.8	13.9	10.2	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-118	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.4	55.13	53.9	14.2	10.8	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-119	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.4	55.14	53.9	14.2	10.8	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-121	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.4	55.15	53.9	14.2	10.8	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-123	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.4	55.16	53.9	14.2	10.8	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-125	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.4	55.17	53.9	15.0	11.5	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-127	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.8	67.1	55.18	53.8	15.9	13.3	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-128	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	570	0.45	3/4	2300	0.2	2 1/2	80.9	66.4	55.37	53.7	21.2	16.6	26	85	160	123	3.10	0.37	57.35	570	1.2	1.2	80.4	13.2	570.0	36.0	75.0	59.9	13.1	1-7
UV-129	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	64.8	58.3	55.20	54.4	15.8	13.2	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-130	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	66.8	55.21	53.8	15.0	11.6	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7
UV-131	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	67.2	55.22	53.9	16.0	12.2	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 8
UV-132	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	66.8	55.23	53.8	14.9	11.5	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 8
UV-133	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	66.0	59.0	55.24	54.5	22.0	18.1	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 8
UV-134[ALT]	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	72.1	61.6	55.25	54.0	21.4	17.4	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-7, 11
UV-135	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	330	0.45	3/4	2300	0.2	2 1/2	80.9	67.0	55.27	53.8	13.3	2.1	44	85	160	133	3.00	0.37	39.85	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 8
UV-144	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	65.7	58.8	55.28	54.3	17.3	14.2	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 8
UV-145	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	66.2	55.29	53.7	15.2	11.5	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 8
UV-146	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	65.6	58.8	55.30	54.3	16.4	13.2	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 8
UV-147	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/4	2300	0.2	2 1/2	80.9	66.5	55.31	53.8	15.8	11.9	39	85	160	130	3.00	0.37	44.71	400	1.2	1.2	80.4	13.2	400.0	36.0	75.0	59.9	13.1	1-6, 8
UV-148	MODINE AIRDALE	CMD24	208/60/1	24.4	27.3	35.0	900	400	0.45	3/																											

FIN TUBE RADIATION SCHEDULE																			
TAG	MANUF. & MODEL	LOCATION	ENCLOSURE					FIN ELEMENT					TIERS	FLUID			CAPACITY (MBH)	REMARKS	
			TYPE	DEPTH	HEIGHT	LENGTH	STYLE	FIN LENGTH	MATERIAL	DIA.	FIN SIZE	SPACING FIN/FT		BTU/ HR/FT	EWTF/LWT (°F)	GPM			
FT-A-102	STERLING: JVB-S-C3/4-434	RM 102	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2,4	
FT-A-102C	STERLING: JVB-S-C3/4-434	RM 102C	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	4'-2"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	3.4 MBH	1,2,5	
FT-A-102D	STERLING: JVB-S-C3/4-434	RM 102D	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2,5	
FT-A-104	STERLING: JVB-S-C3/4-434	RM 104	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-105	STERLING: JVB-S-C3/4-434	RM 105	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-106	STERLING: JVB-S-C3/4-434	RM 106	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-107	STERLING: JVB-S-C3/4-434	RM 107	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-108	STERLING: JVB-S-C3/4-434	RM 108	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-109	STERLING: JVB-S-C3/4-434	RM 109	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-111	STERLING: JVB-S-C3/4-434	RM 111	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-113	STERLING: JVB-S-C3/4-434	RM 113	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-115	STERLING: JVB-S-C3/4-434	RM 115	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-116	STERLING: JVB-S-C3/4-434	RM 116	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-117	STERLING: JVB-S-C3/4-434	RM 117	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-118	STERLING: JVB-S-C3/4-434	RM 118	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-119	STERLING: JVB-S-C3/4-434	RM 119	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-121	STERLING: JVB-S-C3/4-434	RM 121	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-123	STERLING: JVB-S-C3/4-434	RM 123	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-125	STERLING: JVB-S-C3/4-434	RM 125	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-A-127	STERLING: JVB-S-C3/4-434	RM 127	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-B-128	STERLING: JVB-S-C3/4-434	RM 128	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	20'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.6	16.4 MBH	1,2	
FT-A-129	STERLING: JVB-S-C3/4-434	RM 129	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	20'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.6	16.4 MBH	1,2	
FT-B-130	STERLING: JVB-S-C3/4-434	RM 125	CU/AL	4.375	20	23'-6"	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,3	
FT-B-131	STERLING: JVB-S-C3/4-434	RM 131	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	20'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.6	16.4 MBH	1,3	
FT-B-132	STERLING: JVB-S-C3/4-434	RM 132	CU/AL	4.375	20	19'-0"	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-B-133	STERLING: JVB-S-C3/4-434	RM 133	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	20'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.6	16.4 MBH	1,2	
FT-B-134[ALT]	STERLING: JVB-S-C3/4-434	RM 134	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2, 5	
FT-B-135	STERLING: JVB-S-C3/4-434	RM 135	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	12'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.0	9.8 MBH	1,2	
FT-B-137A	STERLING: JVB-S-C3/4-434	RM 174	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	6'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	4.9 MBH	1,2	
FT-B-144	STERLING: JVB-S-C3/4-434	RM 144	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-B-145	STERLING: JVB-S-C3/4-434	RM 145	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-B-146	STERLING: JVB-S-C3/4-434	RM 146	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-B-147	STERLING: JVB-S-C3/4-434	RM 147	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	20'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.6	16.4 MBH	1,2	
FT-B-148	STERLING: JVB-S-C3/4-434	RM 148	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-B-149	STERLING: JVB-S-C3/4-434	RM 149	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	20'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.6	16.4 MBH	1,2	
FT-B-157	STERLING: JVB-S-C3/4-434	RM 157	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	16'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.3	13.1 MBH	1,2	
FT-B-214	STERLING: JVB-S-C3/4-434	RM 214	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	20'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.6	16.4 MBH	1,2	
FT-C-217	STERLING: JVB-S-C3/4-434	RM 217	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	32'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	2.6	26.2 MBH	1,3	
FT-C-219	STERLING: JVB-S-C3/4-434	RM 229	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	14'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.1	11.5 MBH	1,2	
FT-C-202	STERLING: JVB-S-C3/4-434	RM 230	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	4'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	3.3 MBH	1,2	
FT-C-203	STERLING: JVB-S-C3/4-434	RM 231	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	6'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	4.9 MBH	1,2	
FT-C-204	STERLING: JVB-S-C3/4-434	RM 232	CU/AL	4.375	20	8'-0"	SLOP TOP	8'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.7	6.6 MBH	1,3	
FT-C-205	STERLING: JVB-S-C3/4-434	RM 233	CU/AL	4.375	20	22'-0"	SLOP TOP	14'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	1.1	11.5 MBH	1,3	
FT-C-206	STERLING: JVB-S-C3/4-434	RM 234	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	5'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	4.1 MBH	1,2	
FT-C-206A	STERLING: JVB-S-C3/4-434	RM 235	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	4'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	3.3 MBH	1,2	
FT-C-206B	STERLING: JVB-S-C3/4-434	RM 236	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	4'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	3.3 MBH	1,2	
FT-C-207B	STERLING: JVB-S-C3/4-434	RM 237	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	4'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	3.3 MBH	1,2	
FT-C-207C	STERLING: JVB-S-C3/4-434	RM 238	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	4'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	3.3 MBH	1,2	
FT-C-208	STERLING: JVB-S-C3/4-434	RM 239	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	4'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	3.3 MBH	1,2	
FT-C-208A	STERLING: JVB-S-C3/4-434	RM 240	CU/AL	4.375	20	WALL TO WALL	SLOP TOP	4'-0"	CO/AL	3/4"	3-5/8"X4-1/4"	50	3/4"	820	160 / 140	0.5	3.3 MBH	1,2	
REMARKS: 1. COLOR TO BE SELECTED BY ARCHITECT 2. PROVIDE WITH WALL TO WALL ENCLOSURE ASSEMBLIES, ACCESSORIES AND MAINTENANCE ACCESS DOOR. 3. PROVIDE WITH ENCLOSURE ASSEMBLIES, END CAPS, ACCESSORIES AND MAINTENANCE ACCESS DOOR. 4. PROVIDE AS PART OF BASE BID. OMIT FROM ALTERNATE. 5. PROVIDE AS PART OF ALTERNATE. OMIT FROM BASE BID.																			

DAMPER SCHEDULE						
MARK	LOCATION	SERVICE	DUCT PRESSURE CLASS (IN WG)	SIZE W&H(IN)	TYPICAL UNIT MFG. & MODEL NO.	REMARKS:
FD-1	CASEWORKERS OFFICE	RTU-1/RHC-7 SA	-	10/10	-	-
FD-2	CASEWORKERS OFFICE	RTU-1 RA	-	10/12	-	-
F/SD-3	MUSIC [4] & MEN'S TLT[172]	RTU-1/RHC-6 SA	-	8/8	-	-
F/SD-4	MUSIC [4] & CORRIDOR	RTU-1/RHC-6 SA	-	10/10	-	-
FD-5	MUSIC [4] & CORRIDOR	RTU-1 SA	-	12/9	-	-
FD-6	MUSIC [4] & CORRIDOR	RTU-1 SA	-	18/12	-	-
FD-7	VOCAL [5] & CORRIDOR	RTU-1 SA	-	18/12	-	-
FD-8	ENL SUITE [6] & CORRIDOR	RTU-1 RA	-	16/16	-	-
FD-9	PSYCH. SUITE [7] & CORRIDOR	RTU-1 RA	-	6/6	-	-
FD-10	PSYCH. SUITE [7] & CORRIDOR	RTU-1 RA	-	32/16	-	-
FD-11	PSYCH. SUITE [7] & CORRIDOR	RTU-1 SA	-	24/14	-	-
FD-12	SPEECH SUITE [8] & CORRIDOR	RTU-1 RA	-	10/10	-	-
FD/SD-13	SPEECH SUITE [8] & CORRIDOR	RTU-1 SA	-	12/10	-	-
FD-14	CAF & KITCHEN	KITCHEN TA	-	30/18	-	-
FD-15	CAF & KITCHEN	KITCHEN TA	-	30/18	-	-
REMARKS: 1. PROVIDE AS PART OF ALTERNATE. OMIT FROM BASE BID. 2. PROVIDE AS PART OF BASE BID. OMIT FROM ALTERNATE. 3.-						

CONVECTOR SCHEDULE							
MARK	MBH	LENGTH	HEIGHT	DEPTH	GPM	TYPICAL UNIT MFG & MODEL NO.	REMARKS
CONV-1	2.15	40"	20"	4 13/16"	0.22	STERLING: PWG-A 434-20	1,2,3
CONV-2	2.15	40"	20"	4 13/16"	0.22	STERLING: PWG-A 434-20	1,2,3
REMARKS: 1. PARTIAL WALL RECESSED WITH FRONT INLET AND OUTLET LOUVERS 2. 150° AWT 3. PROVIDE WITH ACCESS DOORS AND END POCKET.							

CONTROL VALVE SCHEDULE																													
					TAG					SERVES					TYPE					FLOW (GPM)					REMARKS				
TAG	SERVES	TYPE	FLOW (GPM)	REMARKS	TAG	SERVES	TYPE	FLOW (GPM)	REMARKS	TAG	SERVES	TYPE	FLOW (GPM)	REMARKS	TAG	SERVES	TYPE	FLOW (GPM)	REMARKS										
TCV-AHU-1	AHU-1	2-WAY	18.0	-	TCV-FT-A-121	FT-A-121	2-WAY	1.3	-	TCV-FT-C-205	FT-C-205	2-WAY	1.1	-	TCV-UV-117	UV-117	2-WAY	3.0	-										
TCV-AHU-2	AHU-2	2-WAY	18.0	-	TCV-FT-A-123	FT-A-123	2-WAY	1.3	-	TCV-FT-C-206	FT-C-206	2-WAY	1.6	-	TCV-UV-118	UV-118	2-WAY	3.0	-										
TCV-AHU-3	AHU-3	2-WAY	21.5	-	TCV-FT-A-125	FT-A-125	2-WAY	1.3	-	TCV-FT-C-206A	FT-C-206A	2-WAY	2.6	-	TCV-UV-119	UV-119	2-WAY	3.0	-										
TCV-AHU-4	AHU-4	2-WAY	21.5	-	TCV-FT-A-127	FT-A-127	2-WAY	1.3	-	TCV-FT-C-206B	FT-C-206B	2-WAY	0.7	-	TCV-UV-121	UV-121	2-WAY	3.0	-										
TCV-CONV-1	CONV-1	2-WAY	0.2	-	TCV-FT-B-128	FT-B-128	2-WAY	1.6	-	TCV-FT-C-207B	FT-C-207B	2-WAY	0.7	-	TCV-UV-123	UV-123	2-WAY	3.0	-										
TCV-CONV-2	CONV-2	2-WAY	0.2	-	TCV-FT-A-129	FT-A-129	2-WAY	1.6	-	TCV-FT-C-207C	FT-C-207C	2-WAY	0.7	-	TCV-UV-125	UV-125	2-WAY	3.0	-										
TCV-CUH-1	CUH-1	2-WAY	1.0	-	TCV-FT-B-130	FT-B-130	2-WAY	1.3	-	TCV-FT-C-208	FT-C-208	2-WAY	1.1	-	TCV-UV-127	UV-127	2-WAY	3.0	-										
TCV-CUH-2	CUH-2	2-WAY	0.5	-	TCV-FT-B-131	FT-B-131	2-WAY	1.6	-	TCV-FT-C-208A	FT-C-208A	2-WAY	0.5	-	TCV-UV-128	UV-128	2-WAY	3.1	-										
TCV-FC-1	FC-1	2-WAY	2.9	-	TCV-FT-B-132	FT-B-132	2-WAY	1.3	-	TCV-RHC-1	RHC-1	2-WAY	0.7	-	TCV-UV-129	UV-129	2-WAY	3.0	-										
TCV-FC-2	FC-2	2-WAY	1.7	-	TCV-FT-B-133	FT-B-133	2-WAY	1.6	-	TCV-RHC-2	RHC-2	2-WAY	0.7	-	TCV-UV-130	UV-130	2-WAY	3.0	-										
TCV-FC-3	FC-3	2-WAY	1.9	-	TCV-FT-B-134[ALT]	FT-B-134[ALT]	2-WAY	1.3	1	TCV-RHC-3	RHC-3	2-WAY	0.5	-	TCV-UV-131	UV-131	2-WAY	3.0	-										
TCV-FT-A-102	FT-A-102	2-WAY	1.3	2	TCV-FT-B-135	FT-B-135	2-WAY	1.0	-	TCV-RHC-4	RHC-4	2-WAY	1.7	-	TCV-UV-132	UV-132	2-WAY	3.0	-										
TCV-FT-A-102C	FT-A-102C	2-WAY	0.5	1	TCV-FT-B-137A	FT-B-137A	2-WAY	0.5	-	TCV-RHC-5	RHC-5	2-WAY	1.7	-	TCV-UV-133	UV-133	2-WAY	3.0	-										
TCV-FT-A-102D	FT-A-102D	2-WAY	1.3	1	TCV-FT-B-144	FT-B-144	2-WAY	1.3	-	TCV-RHC-6	RHC-6	2-WAY	1.0	-	TCV-UV-134[ALT]	UV-134[ALT]	2-WAY	3.0	1										
TCV-FT-A-104	FT-A-104	2-WAY	1.3	-	TCV-FT-B-145	FT-B-145	2-WAY	1.3	-	TCV-RHC-7	RHC-7	2-WAY	0.7	-	TCV-UV-134	UV-134	2-WAY	3.0	2										
TCV-FT-A-105	FT-A-105	2-WAY	1.3	-	TCV-FT-B-146	FT-B-146	2-WAY	1.3	-	TCV-UV-102[ALT]	UV-102[ALT]	2-WAY	3.0	1	TCV-UV-135	UV-135	2-WAY	3.0	-										
TCV-FT-A-106	FT-A-106	2-WAY	1.3	-	TCV-FT-B-147	FT-B-147	2-WAY	1.6	-	TCV-UV-102	UV-102	2-WAY	3.0	2	TCV-UV-144	UV-144	2-WAY	3.0	-										
TCV-FT-A-107	FT-A-107	2-WAY	1.3	-	TCV-FT-B-148	FT-B-148	2-WAY	1.3	-	TCV-UV-104	UV-104	2-WAY	3.0	-	TCV-UV-145	UV-145	2-WAY	3.0	-										
TCV-FT-A-108	FT-A-108	2-WAY	1.3	-	TCV-FT-B-149	FT-B-149	2-WAY	1.6	-	TCV-UV-105	UV-105	2-WAY	3.0	-	TCV-UV-146	UV-146	2-WAY	3.0	-										
TCV-FT-A-109	FT-A-109	2-WAY	1.3	-	TCV-FT-B-157	FT-B-157	2-WAY	1.3	-	TCV-UV-106	UV-106	2-WAY	3.0	-	TCV-UV-147	UV-147	2-WAY	3.0	-										
TCV-FT-A-111	FT-A-111	2-WAY	1.3	-	TCV-FT-B-214	FT-B-214	2-WAY	1.6	-	TCV-UV-107	UV-107	2-WAY	3.0	-	TCV-UV-148	UV-148	2-WAY	3.0	-										
TCV-FT-A-113	FT-A-113	2-WAY	1.3	-	TCV-FT-C-217	FT-C-217	2-WAY	1.3	-	TCV-UV-108	UV-108	2-WAY	3.0	-	TCV-UV-149	UV-149	2-WAY	3.0	-										
TCV-FT-A-115	FT-A-115	2-WAY	1.3	-	TCV-FT-C-217	FT-C-217	2-WAY	1.3	-	TCV-UV-109	UV-109	2-WAY	3.0	-	TCV-UV-157	UV-157	2-WAY	3.0	-										
TCV-FT-A-116	FT-A-116	2-WAY	1.3	-	TCV-FT-C-219	FT-C-219	2-WAY	1.1	-	TCV-UV-111	UV-111	2-WAY	3.0	1	TCV-UV-214	UV-214	2-WAY	3.0	-										
TCV-FT-A-117	FT-A-117	2-WAY	1.3	-	TCV-FT-C-202	FT-C-202	2-WAY	0.5	-	TCV-UV-113	UV-113	2-WAY	3.0	-	TCV-UV-215	UV-215	2-WAY	2.0	-										
TCV-FT-A-118	FT-A-118	2-WAY	1.3	-	TCV-FT-C-203	FT-C-203	2-WAY	0.5	-	TCV-UV-115	UV-115	2-WAY	3.0	-	TCV-UV-217	UV-217	2-WAY	3.1	-										
TCV-FT-A-119	FT-A-119	2-WAY	1.3	-	TCV-FT-C-204	FT-C-204	2-WAY	0.7	-	TCV-UV-116	UV-116	2-WAY	3.0	-															
REMARKS:					1. PROVIDE AS PART OF ALTERNATE. OMIT FROM BASE BID. 2. PROVIDE AS PART OF BASE BID. OMIT FROM ALTERNATE.																								

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VENTILATION SCHEDULE (SINGLE ZONE)											
SPACE NAME	OCCUPANCY CLASSIFICATION	HVAC SYSTEM	MIN. SUPPLY AIR (CFM)	FLOOR AREA (SQ FT)	OCCUPANCY DENSITY (PEOPLE PER 1000 SF)	OCCUPANCY	OUTDOOR AIR RATE (CFM/PERSON)	OUTDOOR AIR RATE (CFM/SQ FT)	AIR DISTRIBUTION EFFECTIVENESS	BREATHING ZONE OUTDOOR AIR (CFM)	ZONE OUTDOOR AIRFLOW (CFM)
			Vpz	Az		Pz	Rp	Ra	Ez	Vbz	Voz
102 - CLASSROOM	CLASSROOM	UV-102	800	804	37.3	30	10	0.12	1	396	396
104 - 5TH GRADE CLASSROOM	CLASSROOM	UV-104	800	767	39.1	30	10	0.12	1	392	392
105 - 5TH GRADE CLASSROOM	CLASSROOM	UV-105	800	773	38.8	30	10	0.12	1	393	393
106 - 5TH GRADE CLASSROOM	CLASSROOM	UV-106	800	771	38.9	30	10	0.12	1	393	393
107 - 4TH GRADE CLASSROOM	CLASSROOM	UV-107	800	771	38.9	30	10	0.12	1	393	393
108 - 4TH GRADE CLASSROOM	CLASSROOM	UV-108	800	771	38.9	30	10	0.12	1	393	393
109 - 12:1:1	CLASSROOM	UV-109	800	810	37.0	30	10	0.12	1	397	397
111 - 4TH GRADE CLASSROOM	CLASSROOM	UV-111	800	774	38.8	30	10	0.12	1	393	393
113 - 4TH GRADE CLASSROOM	CLASSROOM	UV-113	800	772	38.9	30	10	0.12	1	393	393
115 - SPEC. ED 3RD & 4TH 12:1:1	CLASSROOM	UV-115	800	772	38.9	30	10	0.12	1	393	393
116 - 3RD GRADE CLASSROOM	CLASSROOM	UV-116	800	775	38.7	30	10	0.12	1	393	393
117 - 3RD GRADE CLASSROOM	CLASSROOM	UV-117	800	772	38.9	30	10	0.12	1	393	393
118 - 3RD GRADE CLASSROOM	CLASSROOM	UV-118	800	773	38.8	30	10	0.12	1	393	393
119 - 3RD GRADE CLASSROOM	CLASSROOM	UV-119	800	772	38.9	30	10	0.12	1	393	393
121 - 2ND GRADE CLASSROOM	CLASSROOM	UV-121	800	772	38.9	30	10	0.12	1	393	393
123 - 2ND GRADE CLASSROOM	CLASSROOM	UV-123	800	772	38.9	30	10	0.12	1	393	393
125 - 2ND GRADE CLASSROOM	CLASSROOM	UV-125	800	771	38.9	30	10	0.12	1	393	393
127 - 2ND GRADE CLASSROOM	CLASSROOM	UV-127	800	771	38.9	30	10	0.12	1	393	393
128 - ART ROOM	ART CLASSROOM	UV-128	800	811	37.0	30	10	0.18	1	446	446
129 - SPEC. ED 12:1:1	CLASSROOM	UV-129	800	832	36.1	30	10	0.12	1	400	400
130 - SCIENCE	CLASSROOM	UV-130	800	764	39.3	30	10	0.12	1	392	392
131 - 12:1:1	CLASSROOM	UV-131	800	785	38.2	30	10	0.12	1	394	394
132 - SCIENCE	CLASSROOM	UV-132	800	797	37.6	30	10	0.12	1	396	396
133 - 1ST GRADE	CLASSROOM	UV-133	800	781	38.4	30	10	0.12	1	394	394
134 - 1ST GRADE	CLASSROOM	UV-134[ALT]	800	781	38.4	30	10	0.12	1	394	394
137 - AIS INTERVENTIONS	CLASSROOM	[E]UV-137	800	214	42.1	9	10	0.12	0.8	116	145
144 - 1ST GRADE CLASSROOM	CLASSROOM	UV-144	800	793	37.8	30	10	0.12	1	395	395
145 - 1ST GRADE CLASSROOM	CLASSROOM	UV-145	800	718	41.8	30	10	0.12	1	386	386
146 - KINDERGARTEN	CLASSROOM	UV-146	800	793	37.8	30	10	0.12	1	395	395
147 - 1ST GRADE CLASSROOM	CLASSROOM	UV-147	800	775	38.7	30	10	0.12	1	393	393
148 - KINDERGARTEN	CLASSROOM	UV-148	800	785	38.2	30	10	0.12	1	394	394
149 - KINDERGARTEN	CLASSROOM	UV-149	800	829	36.2	30	10	0.12	1	399	399
157 - KINDERGARTEN	CLASSROOM	UV-157	800	1,042	40.3	42	10	0.12	1	545	545
214 - TEACHER'S ROOM	OFFICE	UV-214	800	554	5.4	3	5	0.06	0.8	48	40
215 - READING ROOM	CLASSROOM	UV-215	750	229	39.3	9	10	0.12	0.8	117	147
CORRIDOR	CORRIDOR	FC-1	400	3,319	-	-	5	0.06	0.8	199	249
CORRIDOR	CORRIDOR	FC-2	400	1,801	-	-	5	0.06	0.8	108	135
CORRIDOR	CORRIDOR	FC-3	400	2,122	-	-	5	0.06	0.8	127	159
REMARKS:											
1. BASED ON: 2020 MECHANICAL CODE OF NYS (IMC 2018)											
2. REFER TO EXHAUST SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR ART ROOM 128.											

MULTISPACE VENTILATION SCHEDULE															
SPACE NAME	OCCUPANCY CLASSIFICATION	HVAC SYSTEM	MIN. SUPPLY AIR (CFM)	FLOOR AREA (SQ FT)	OCCUPANCY DENSITY (PEOPLE PER 1000 SF)	OCCUPANCY	OUTDOOR AIR RATE (CFM/PERSON)	OUTDOOR AIR RATE (CFM/SQ FT)	AIR DISTRIBUTION EFFECTIVENESS	BREATHING ZONE OUTDOOR AIR (CFM)	ZONE OUTDOOR AIRFLOW (CFM)	UNIT UNCORRECTED OUTDOOR AIR (CFM)	PRIMARY OUTDOOR AIR FRACTION	SYSTEM VENTILATION EFFICIENCY	UNIT MINIMUM CODE OCCUPIED OA
			Vpz	Az		Pz	Rp	Ra	Ez	Vbz	Voz	Vou	Zp	Ev	Vot
101 - GYMNASIUM	GYM	AHU-1 & AHU-2	5,000	4,000	7.50	30	20	0.18	0.8	1,320	1,650	-	-	-	-
102 - NURSE'S SUITE	OFFICE	UV-102[ALT]	190	354	5.65	2	5	0.06	0.8	31	39	72	0.21	0.94	77
102B - EXAM	OFFICE	UV-102[ALT]	69	70	14.29	1	5	0.06	0.8	9	12	72	0.17	0.98	77
102C - EXAM	OFFICE	UV-102[ALT]	114	133	7.52	1	5	0.06	0.8	13	16	72	0.14	1.00	77
102D - EXAM	OFFICE	UV-102[ALT]	186	69	14.49	1	5	0.06	0.8	9	11	72	0.06	1.00	77
102E - OFFICE	OFFICE	UV-102[ALT]	140	78	12.82	1	5	0.06	0.8	10	12	72	0.09	1.00	77
134 - HEALTH	OFFICE	UV-134	150	192	5.21	1	5	0.06	0.8	17	21	67	0.14	1.00	67
134A - EXAM	OFFICE	UV-134	150	129	7.75	1	5	0.06	0.8	13	16	67	0.11	1.00	67
134B - NURSE'S SUITE	OFFICE	UV-134	300	244	7.58	2	5	0.06	0.8	26	32	67	0.11	1.00	67
134C - EXAM	OFFICE	UV-134	150	118	8.47	1	5	0.06	0.8	12	15	67	0.10	1.00	67
135 - AIS INTERVENTIONS	CLASSROOM	UV- 13	700	420	40.48	17	10	0.12	0.8	220	276	361	0.39	0.76	475
135A - ST	CLASSROOM	UV- 13	200	127	7.87	1	10	0.12	0.8	25	32	361	0.16	0.99	475
137 - AIS INTERVENTIONS	CLASSROOM	UV- 13	900	214	42.06	9	10	0.12	0.8	116	145	361	0.16	0.99	475
REMARKS:															
1. BASED ON: 2020 MECHANICAL CODE OF NYS (IMC 2018)															

EXHAUST SCHDULE				
SPACE	UNIT	AREA (SF)	REQUIRED FLOW RATE (CFM/SF)	EXHAUST FLOW (CFM)
128 - ART ROOM	UV-128	811	0.7	568
144 - KITCHEN	UV-144	979	0.7	685

VENTILATION SCHEDULE (APPENDIX A)																	
SPACE NAME	OCCUPANCY CLASSIFICATION	HVAC SYSTEM	MIN. SUPPLY AIR (CFM)	FLOOR AREA (SQ FT)	OCCUPANCY DENSITY (PEOPLE PER 1000 SF)	OCCUPANCY	OUTDOOR AIR RATE (CFM/PERSON)	OUTDOOR AIR RATE (CFM/SQ FT)	AIR DISTRIBUTION EFFECTIVENESS	BREATHING ZONE OUTDOOR AIR (CFM)	ZONE OUTDOOR AIRFLOW (CFM)	UNIT UNCORRECTED OUTDOOR AIR (CFM)	PRIMARY OUTDOOR AIR FRACTION	UNIT SUPPLY AIR (CFM)	VENTILATION EFFICIENCY PRE NYS	VENTILATION EFFICIENCY PRE APPENDIX A	UNIT MINIMUM CODE OCCUPIED OUTDOOR AIR (CFM)
			Vpz	Az		Pz	Rp	Ra	Ez	Vbz	Voz	Vou	Zp	Vps= Σ Vpz	Ev=Zp+1.15	Ev=1-Vou/Vps-Voz/Vdz	Vot = Vou / Min(Ev)
160 - STAGE	STAGE	AHU-3 & AHU-4	719	755	70.2	53	10	0.06	0.8	575	719	4,531	1.00	5,934	0.30	0.76	5,934
160 - CAFETERIUM	CAFATERIA	AHU-3 & AHU-4	4,615	3,969	100.0	397	7.5	0.18	0.8	3,692	4,615	4,531	1.00	5,934	0.30	0.76	5,934
164 - KITCHEN	KITCHEN	AHU-3 & AHU-4	600	951	20.0	20	7.5	0.12	0.8	264	330	4,531	0.55	5,934	0.60	1.21	5,934
217 - LIBRARY	LIBRARY	UV- 21	690	1,003	10.0	11	5.0	0.12	1.0	175	175	364	0.25	1,100	0.90	1.08	487
217A - MEDIA	CLASSROOM	UV- 21	310	345	40.0	14	10.0	0.12	1.0	181	181	364	0.58	1,100	0.57	0.75	487
217B - STORAGE	STORAGE	UV- 21	100	126	-	-	5.0	0.06	0.8	8	9	364	0.09	1,100	1.00	1.24	487
201 - CUST./REC.	OFFICE	RTU-1	90	164	6.1	1	5	0.06	0.8	15	19	1,021	0.21	3,920	0.94	1.05	1,405
202 - RESOURCE	CLASSROOM	RTU-1	130	85	47.1	4	10	0.12	0.8	50	63	1,021	0.48	3,920	0.67	0.78	1,405
203 - CASEWORKER	OFFICE	RTU-1	170	85	11.8	1	5	0.06	0.8	10	13	1,021	0.08	3,920	1.00	1.18	1,405
204 - MUSIC	CLASSROOM	RTU-1	920	764	39.3	30	10	0.12	0.8	392	490	1,021	0.53	3,920	0.62	0.73	1,405
204A - STORAGE	STORAGE	RTU-1	50	71	-	-	-	0.06	0.8	4	5	1,021	0.10	3,920	1.00	1.16	1,405
205 - VOCAL	CLASSROOM	RTU-1	920	770	39.0	30	10	0.12	0.8	392	491	1,021	0.53	3,920	0.62	0.73	1,405
205A - STORAGE	STORAGE	RTU-1	50	71	-	-	-	0.06	0.8	4	5	1,021	0.10	3,920	1.00	1.16	1,405
206 - ENL SUITE	OFFICE	RTU-1	180	279	7.2	2	5	0.06	0.8	27	33	1,021	0.18	3,920	0.97	1.08	1,405
206A - ENL	OFFICE	RTU-1	115	102	9.8	1	5	0.06	0.8	11	14	1,021	0.12	3,920	1.00	1.14	1,405
206B - ENL	OFFICE	RTU-1	115	101	9.9	1	5	0.06	0.8	11	14	1,021	0.12	3,920	1.00	1.14	1,405
207 - PSY. SUITE	OFFICE	RTU-1	85	129	7.8	1	5	0.06	0.8	13	16	1,021	0.19	3,920	0.96	1.07	1,405
207A - MEDITATION	OFFICE	RTU-1	60	72	13.9	1	5	0.06	0.8	9	12	1,021	0.20	3,920	0.95	1.06	1,405
207B - PSY. OFFICE	OFFICE	RTU-1	115	85	11.8	1	5	0.06	0.8	10	13	1,021	0.11	3,920	1.00	1.15	1,405
207C - PSY. OFFICE	OFFICE	RTU-1	115	85	11.8	1	5	0.06	0.8	10	13	1,021	0.11	3,920	1.00	1.15	1,405
208 - SPEECH SUITE	OFFICE	RTU-1	160	129	7.8	1	5	0.06	0.8	13	16	1,021	0.10	3,920	1.00	1.16	1,405
208A - SPEECH OFFICE	OFFICE	RTU-1	115	85	11.8	1	5	0.06	0.8	10	13	1,021	0.11	3,920	1.00	1.15	1,405
ADDITION VESTIULE	CORRIDOR	RTU-1	50	55	-	-	-	0.06	0.8	3	4	1,021	0.08	3,920	1.00	1.18	1,405
ADDITION CORRIDOR	CORRIDOR	RTU-1	310	594	-	-	-	0.06	0.8	36	45	1,021	0.15	3,920	1.00	1.12	1,405
159 - EXISTING TOILET	TOILET	RTU-1	85	137	-	-	-	-	0.8	0	-	1,021	-	3,920	1.00	1.26	1,405
161 - EXISTING TOILET	TOILET	RTU-1	85	131	-	-	-	-	0.8	0	-	1,021	-	3,920	1.00	1.26	1,405
REMARKS:																	
1. BASED ON: 2020 MECHANICAL CODE OF NYS (MCC 2018)																	
2. THE SYSTEM VENTILATION EFFICIENCY (EV) SHALL BE DETERMINED USING TABLE 403.3.1.1,2.3.2 OR APPENDIX A OF ASHRAE 62.1.																	