

# MECHANICAL INDEFINITE DELIVERY CONTRACT - BLATT PE CENTER REPLACE AHU#2

## STATE PROJECT NUMBER H27-D205-FW COLUMBIA, SC CONSTRUCTION DOCUMENTS

### DESIGN CODES AND STANDARDS

**PROJECT DESIGNED IN ACCORDANCE WITH:**

1. INTERNATIONAL BUILDING CODE (IBC), 2012 EDITION
2. INTERNATIONAL EXISTING BUILDING CODE, 2012 EDITION
3. INTERNATIONAL ENERGY CONSERVATION CODE, 2009 EDITION
4. INTERNATIONAL FIRE CODE, 2012 EDITION
5. INTERNATIONAL MECHANICAL CODE, 2012 EDITION
6. INTERNATIONAL PLUMBING CODE, 2012 EDITION
7. NATIONAL ELECTRICAL CODE, NFPA 70, 2011 EDITION
8. STATE FIRE MARSHALL REGULATIONS, LATEST REVISION
9. ASHRAE/IESNA 90.1 ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS, 2007 EDITION
10. ICC/ANSI-A117.1-1998, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

**BUILDING CODE REVIEW INFORMATION:**

- ORIGINAL CONSTRUCTION: JULY 1969  
MAJOR RENOVATION: DECEMBER 1995
1. OCCUPANCY (EXISTING OCCUPANCY TO REMAIN: A-1, SMALL ASSEMBLY WITHOUT STAGE)
  2. TYPE OF CONSTRUCTION
    - A. EXISTING BUILDING: IV UNPROTECTED, NONCOMBUSTIBLE (1994 SBC)
  3. GENERAL BUILDING DESIGN, ALLOWABLE AREA, HEIGHT AND OCCUPANT LOAD

BUILDING AREA: EXISTING BUILDING AREA WILL NOT BE MODIFIED

BUILDING HEIGHT: EXISTING BUILDING HEIGHT WILL NOT BE MODIFIED

GENERAL BUILDING DESIGN: ALLOWABLE AREA, HEIGHT AND OCCUPANT LOAD: EXISTING AREA, HEIGHT AND OCCUPANCY LOAD WILL NOT BE MODIFIED

**4. FIRE RESISTANCE RATING OF BUILDING ELEMENTS**

FIRE RESISTANCE RATING OF BUILDING ELEMENTS: THE EXISTING FIRE RESISTANCE RATINGS OF BUILDING ELEMENTS WILL NOT BE MODIFIED.

BUILDING ELEMENT	RATING AS REQUIRED (IN HOURS)	RATING AS DESIGNED (IN HOURS)	TESTING AGENCY & DESIGN NUMBER (UL, FM, ETC.)
STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS AND TRUSSES (PER 1994 SBC TABLE 603)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
BEARING WALLS, EXTERIOR (PER 1994 SBC TABLE 603)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
BEARING WALLS, INTERIOR (PER 1994 SBC TABLE 603)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
NONBEARING WALLS & PARTITIONS, EXTERIOR (PER 1994 SBC TABLE 603)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS & JOISTS (PER 1994 SBC TABLE 603)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS & JOISTS (PER 1994 SBC TABLE 603)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
FIRE WALLS (PER 1994 SBC TABLE 703)	4	4	NONE IN PROJECT
SHAFT ENCLOSURES (PER 1994 SBC TABLE 703)	2	2	**
EXITS AND STARWAYS (PER 1994 SBC TABLE 703)	1	1	**

\*\* ASSUMED RATING BASED ON ORIGINAL DRAWINGS.

**5. OTHER FIRE PROTECTION REQUIREMENTS**

ITEM	YES	NO	COMMENTS
ARE SPRINKLERS REQUIRED? (PER 1994 SBC SECTION 903)	-	X	-
ARE STANDPIPES REQUIRED? (PER 1994 SBC SECTION 903)	-	X	-
IS A FIRE ALARM SYSTEM REQUIRED? (PER 1994 SBC SECTION 903)	X	-	EXISTING

### DRAWING INDEX

**GENERAL**

**T1 TITLE SHEET**

**MECHANICAL**

- M1 MECHANICAL DEMOLITION PLAN**
- M2 MECHANICAL RENOVATION PLAN**
- M3 DETAILS, NOTES, SCHEDULES, AND LEGEND**

**ELECTRICAL**

**E1 ELECTRICAL DEMOLITION AND RENOVATION PLANS**

CAMPUS PLANNING  
AND CONSTRUCTION  
COLUMBIA, SC 29208

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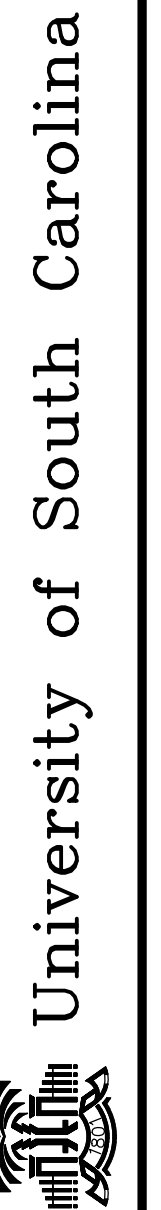
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PROJECT TITLE: MECHANICAL IDC  
BLATT PE CENTER - REPLACE AHU#2  
STATE PROJECT NUMBER H27-D205-FW



Swygert & Associates  
CONSULTING ENGINEERS

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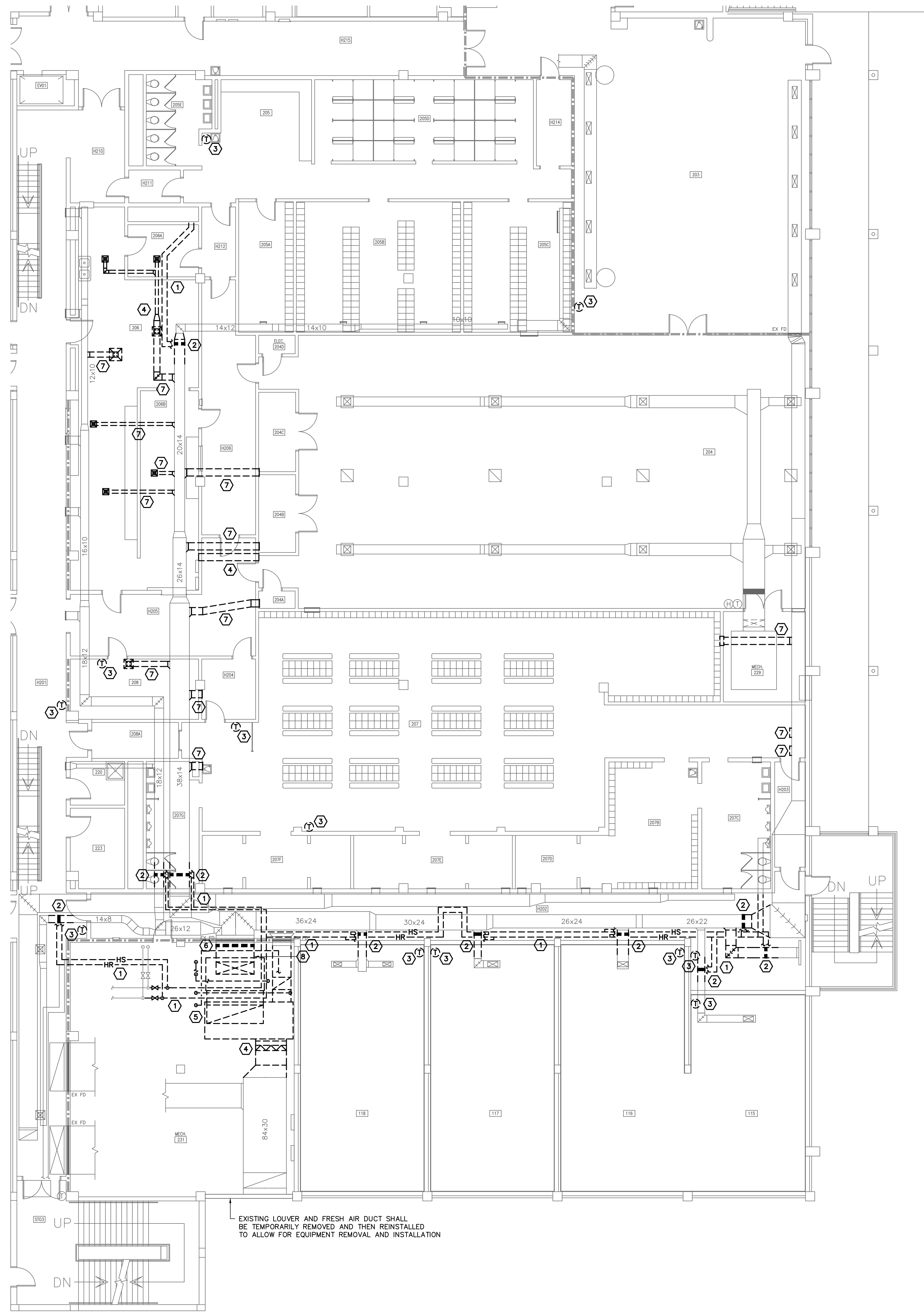
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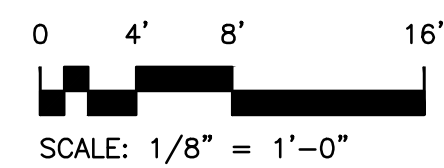
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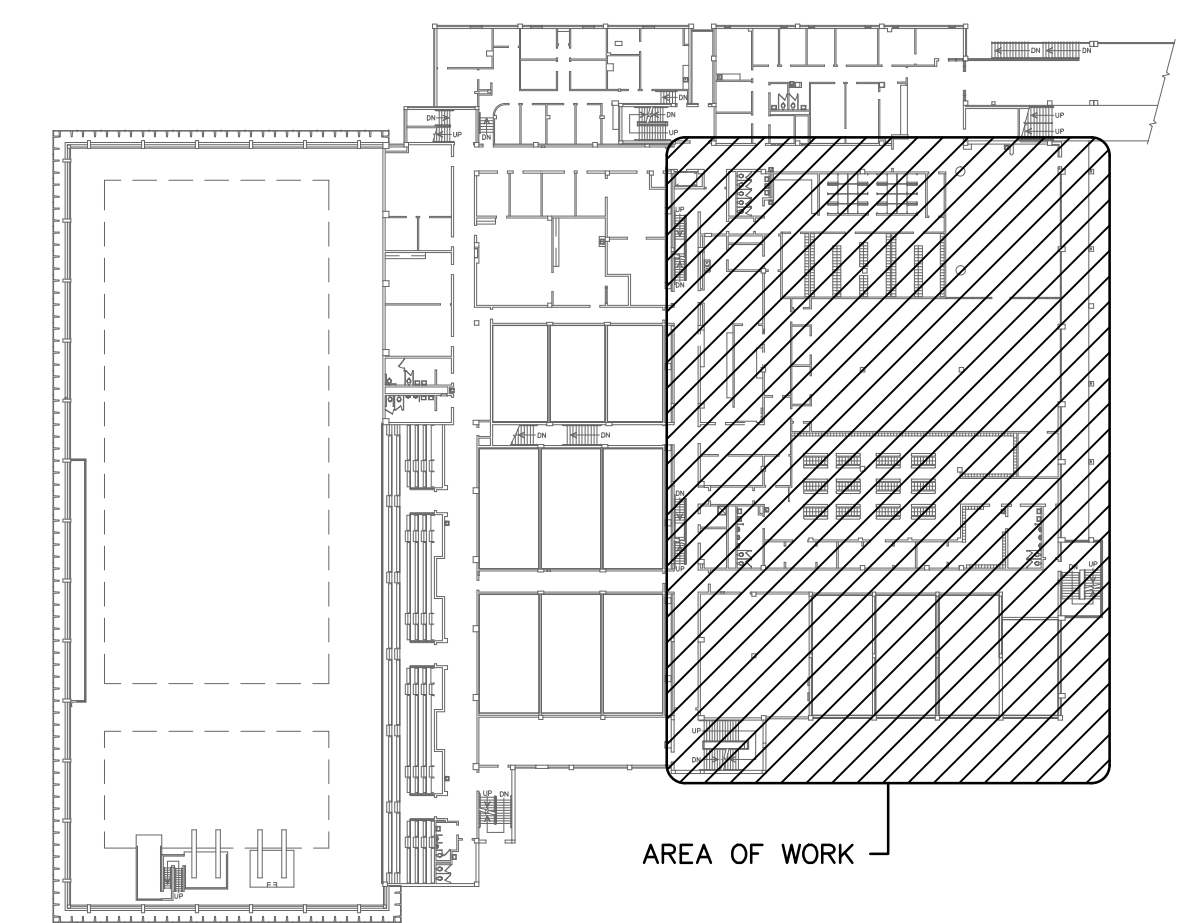
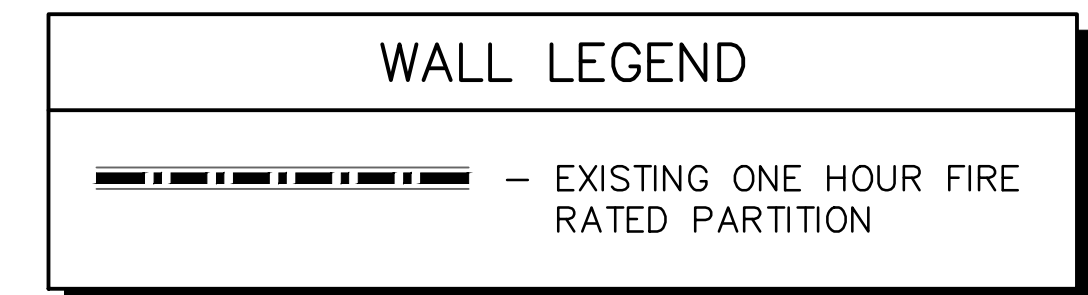
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**1 PARTIAL SECOND FLOOR DEMOLITION PLAN**  
SCALE: 1/8" = 1'-0"



DEMOLITION NOTES	
①	REMOVE EXISTING HOT WATER PIPING AS SHOWN.
②	REMOVE EXISTING HOT WATER COIL AND CONTROLS COMPLETE.
③	REMOVE EXISTING THERMOSTAT.
④	REMOVE EXISTING DUCT AND GRILLES AS SHOWN.
⑤	REMOVE AIR HANDLER COMPLETE INCLUDING CONCRETE PAD.
⑥	REMOVE SMOKE DAMPER.
⑦	REMOVE RUNOUT DUCT/GRILLE AND PATCH DUCT AND INSULATION AT MAIN TRUNK.
⑧	REMOVE DUCT MOUNTED STEAM COIL COMPLETE.



**KEY PLAN - SECOND FLOOR - 138**  
NO SCALE

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<b>CAMPUS PLANNING AND CONSTRUCTION</b> COLUMBIA, SC 29208	
BUILDING: 138 REV:	PROJECT TITLE: MECHANICAL IDC BLATT PE CENTER - REPLACE AHU#2 STATE PROJECT NUMBER H27-D205-FW University of South Carolina
DRAWING: 14420-M1 DESCRIPTION:	DATE: 23FEB15
CHECKED BY: BJJ DATE:	DRAWN BY: BJJ DATE:
ORIG. BY:	DATE:
SHEET: <b>M1</b> OF 3 SHEET IN SET: OF	

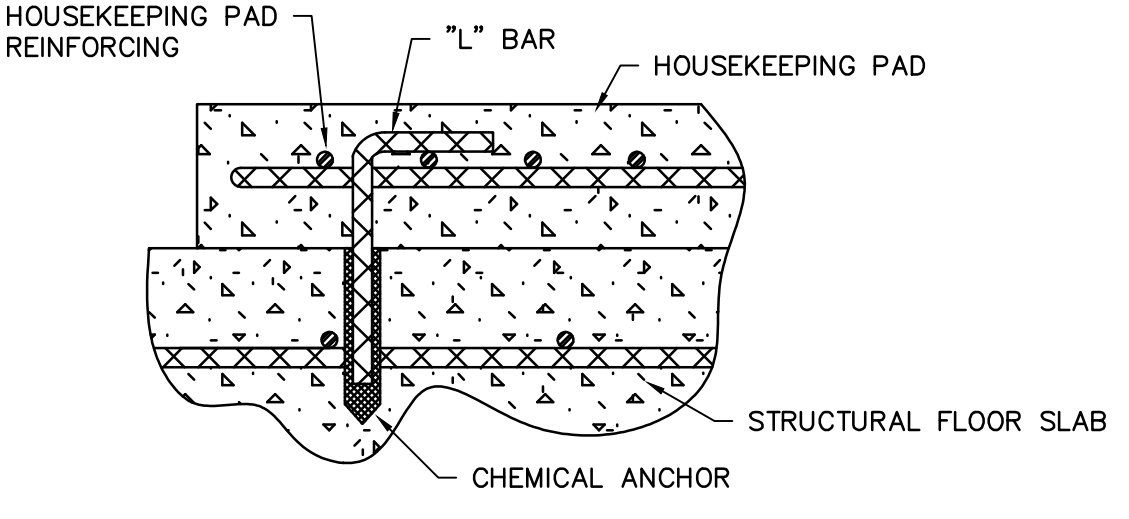




TAG	DAIKIN MODEL	TOTAL CFM	OUTDOOR AIR-CFM	ESP IN. WG	BRAKE H.P.	MOTOR H.P.	STEAM HEATING COIL			COOLING COIL			FACE VEL. MAX-FPM	REMARKS	
							EADB	LADB	STEAM LBS./HR.	EADB/WB	LADB/WB (GROSS)	GPM			WTR. P.D. FT. WTR.
AHU-2	CAH035GDAC	16,000	8,000	1.5	14.2	15	30	70	729	87.0/72.5	54.3/54.1	156	14.0	500	1-8

- UNIT SELECTION SHALL INCLUDE 0.59" FILTER LOAD AND 3% BELT AND DRIVE LOSSES.
- ENTERING CHILLED WATER TEMPERATURE SHALL BE 45°F AND THE WATER TEMPERATURE RISE SHALL BE 12°F.
- STEAM PRESSURE SHALL BE 2 P.S.I.
- PROVIDE MIXING BOX AND FILTER SECTION WITH TWO INCH MERV 8 FILTERS, 2 EXTRA SETS OF FILTERS, AND WITH AIRFLOW MEASURING STATIONS FOR RETURN AND OUTSIDE AIR PROVIDED BY THE CONTROLS CONTRACTOR.
- INSTALL DUCT SMOKE DETECTORS PROVIDED BY THE ELECTRICAL CONTRACTOR, WIRED TO SHUT THE UNIT DOWN UPON SENSING PRODUCTS OF COMBUSTION.
- FAN SECTION TO BE INTERNALLY ISOLATED WITH EXTENDED LUBE LINES.
- FURNISH HAND/OFF/AUTO VARIABLE FREQUENCY DRIVE AND UNIT MOUNTED FUSIBLE DISCONNECT.
- AIR HANDLER SHALL BE HORIZONTAL DRAW THRU. CONFIGURATION SHALL BE MIXING & FILTER/STEAM COIL/ACCESS/CW COIL/FAN.

- ### GENERAL NOTES
- VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
  - DO NOT SCALE DRAWINGS. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
  - EXISTING PIPE, DUCTWORK, CONDUIT, ETC THAT INTERFERES WITH THE ROUTING OF NEW SYSTEMS SHALL BE RELOCATED. THIS CONTRACTOR SHALL INCLUDE THE COST OF SUCH IN HIS BID UNLESS NOTED OTHERWISE.
  - WATER SYSTEMS SHALL BE DRAINED BY THIS CONTRACTOR AS REQUIRED FOR INSTALLATION OF WORK. UPON COMPLETION, SYSTEM SHALL BE FILLED WITH WATER AND VENTED OF ALL AIR.
  - ALL PIPING AND DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS, ROOFS AND PARTITIONS.
  - ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATION.
  - ALL WATER PIPING SHALL PITCH DOWN IN DIRECTION OF FLOW ONE-INCH PER FIFTY FEET WITH MANUAL AIR VENTS AT ALL HIGH POINTS AND 3/4-INCH DRAIN VALVES WITH STANDARD HOSE CONNECTION AT ALL LOW POINTS.
  - ALL VALVES AND SPECIALTIES SHALL BE LINE SIZE UNLESS NOTED OTHERWISE. USE ECCENTRIC REDUCERS ON AUTOMATIC VALVES AS REQUIRED.
  - MINIMUM PIPE SIZE SHALL BE 3/4-INCH UNLESS INDICATED OTHERWISE.
  - ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE 2012 IMC AND FURTHER SUPPORTS OR HANGERS SHALL BE PROVIDED TO PREVENT WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.
  - PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT.
  - ALL ITEMS OF EQUIPMENT IN MECHANICAL ROOM SHALL BE LOCATED ON REINFORCED CONCRETE FOUNDATIONS, MINIMUM 6-INCH THICK AND 6 INCHES LARGER THAN EQUIPMENT IN EACH DIRECTION. PADS SHALL BE REINFORCED PER THE HOUSEKEEPING PAD SECTION OF THE ASHRAE PRACTICAL GUIDE FOR SEISMIC RESTRAINT. ALL UNITS SHALL BE SECURED TO THE HOUSEKEEPING PAD WITH SEISMIC RESTRAINTS. PROVIDE 1-INCH CHAMFERS ON ALL SIDES.
  - INSTALL ALL VAV BOXES WITHIN 24" OF CEILING TO ALLOW FOR SERVICE ACCESS.
  - THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.
  - CONTACT JOHNSON CONTROLS FOR CONTROLS AND WIRING. ALL NEW CONTROLS SHALL BE DDC, INCLUDING SENSORS, CONTROLLERS AND CONTROL VALVES. NEW VAV BOXES WILL INCLUDE NEW CONTROLLERS AND SENSORS, BUT WILL NOT BE CONNECTED TO THE CENTRAL ENERGY MANAGEMENT SYSTEM. CONTROLLERS WILL BE COMPATIBLE FOR CONNECTION AT A FUTURE DATE. CONTROL WIRING SHALL BE RUN IN EMT CONDUIT AND SHALL BE PLENUM RATED CABLE, IN A PROTECTIVE COVER.
  - LOCATE ALL SPACE CONTROL INSTRUMENTS 4'-0" ABOVE FINISHED FLOOR TO TOP OF DEVICE.
  - THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY DISMANTLING OF EQUIPMENT TO BE REMOVED. ITEMS REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY.
  - THIS CONTRACTOR SHALL PATCH ALL WALLS AND FINISHES TO MATCH EXISTING WHERE ALL ITEMS OR EQUIPMENT ARE REMOVED.



### SINGLE DUCT TERMINAL UNIT SCHEDULE

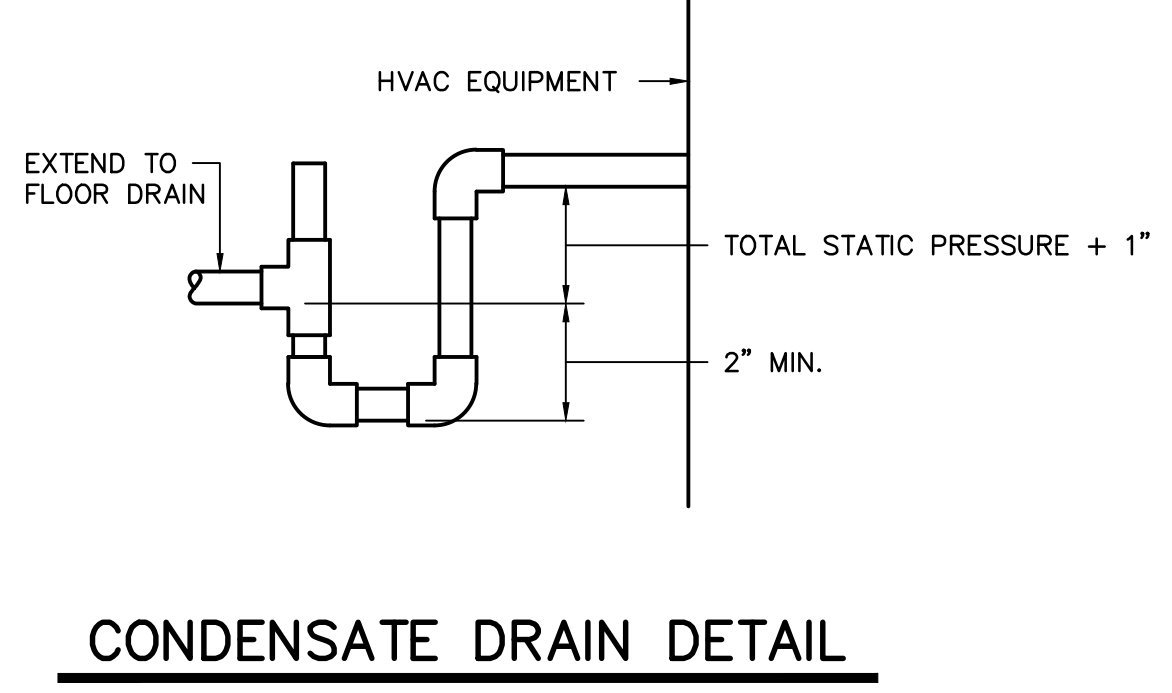
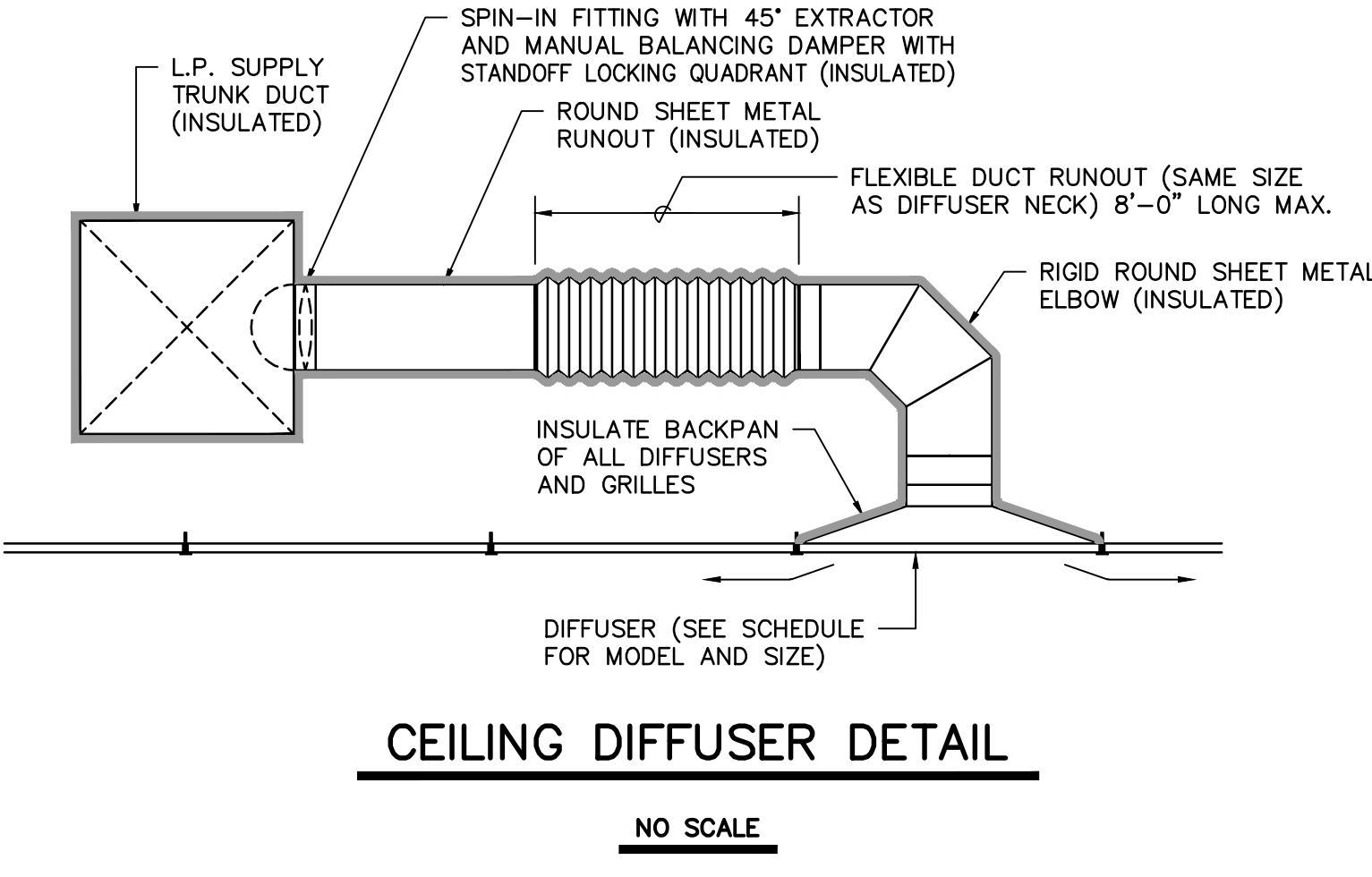
TAG	ENVIRO-TEC MODEL	AIR INLET (NOM. DIA.)	CFM		HEATING		COIL FLUID P.D. FT. W.G.	RUNOUTS	MAX. UNIT A.P.D. INCHES W.C.	REMARKS
			MAX./MIN.	HEATING	MBH	GPM				
2-1	SDR	6"	500/150	250	15.0	1.0	0.18	3/4"	0.25	1,2
2-2	SDR	12"	1,300/390	650	41.1	2.5	1.5	3/4"	0.29	1,2
2-3	SDR	12"	1,200/360	600	38.8	2.4	1.3	3/4"	0.25	1,2
2-4	SDR	28"x14"	3,000	3,000	153.0	11.8	6.7	1 1/4"	0.31	1,2,3
2-5	SDR	10"	1,000	1,000	49.3	3.7	2.4	3/4"	0.31	1,2,3
2-6	SDR	14"	1,400/420	700	30.8	2.3	6.2	3/4"	0.09	1,2
2-7	SDR	10"	900/270	270	16.4	1.1	0.06	3/4"	0.26	1,2
2-8	SDR	14"	1,500/450	750	32.0	2.4	6.5	3/4"	0.11	1,2
2-9	SDR	14"	1,500/450	750	32.0	2.4	6.5	3/4"	0.11	1,2
2-10	SDR	5"	300/90	150	7.8	0.6	0.02	3/4"	0.11	1,2
2-11	SDR	28"x14"	3,000/900	1,500	93.7	5.8	1.7	1"	0.31	1,2

- HEATING COIL SELECTION BASED ON 180°F EWT WITH 30°F DROP.
- PROVIDE FACTORY MOUNTING OF CONTROLS BY JOHNSON CONTROLS.
- BOX TO OPERATE AS CONSTANT VOLUME.

### AIR DISTRIBUTION SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL	FRAME	CFM	NECK SIZE	FACE SIZE	MAX. NO.	REMARKS
(A)	SQ. CONE SUPPLY	PRICE	ASCD	LAY-IN	0-125	6"	24"x24"	30	1,2
(B)	SQ. CONE SUPPLY	PRICE	ASCD	LAY-IN	126-225	8"	24"x24"	30	1,2
(C)	SQ. CONE SUPPLY	PRICE	ASCD	LAY-IN	226-350	10"	24"x24"	30	1,2
(D)	SIDEWALL SUPPLY	PRICE	620	SURFACE	750	18"x10"	20"x12"	30	1,2,3,4
(E)	LOUVERED RETURN	PRICE	630	SURFACE	0-1500	22"x22"	24"x24"	30	1,2

- PROVIDE WITH STANDARD WHITE FINISH.
- PROVIDE ALUMINUM OR ALUMINIZED STEEL CONSTRUCTION.
- PROVIDE WITH OPPOSED BLADE DAMPER.
- PROVIDE WITH DOUBLE DEFLECTION BLADES WITH FRONT BLADES PARALLEL TO SHORT DIMENSION.

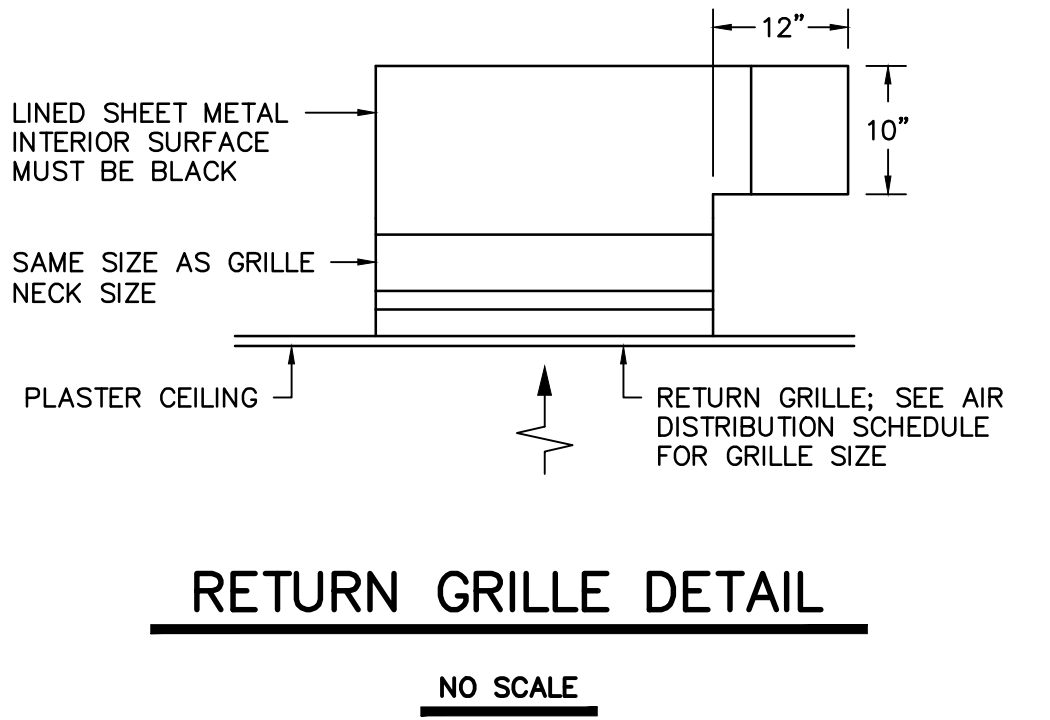


### ISOLATION AND SEISMIC SCHEDULE

RISK CATEGORY = II SEISMIC DESIGN CATEGORY = D

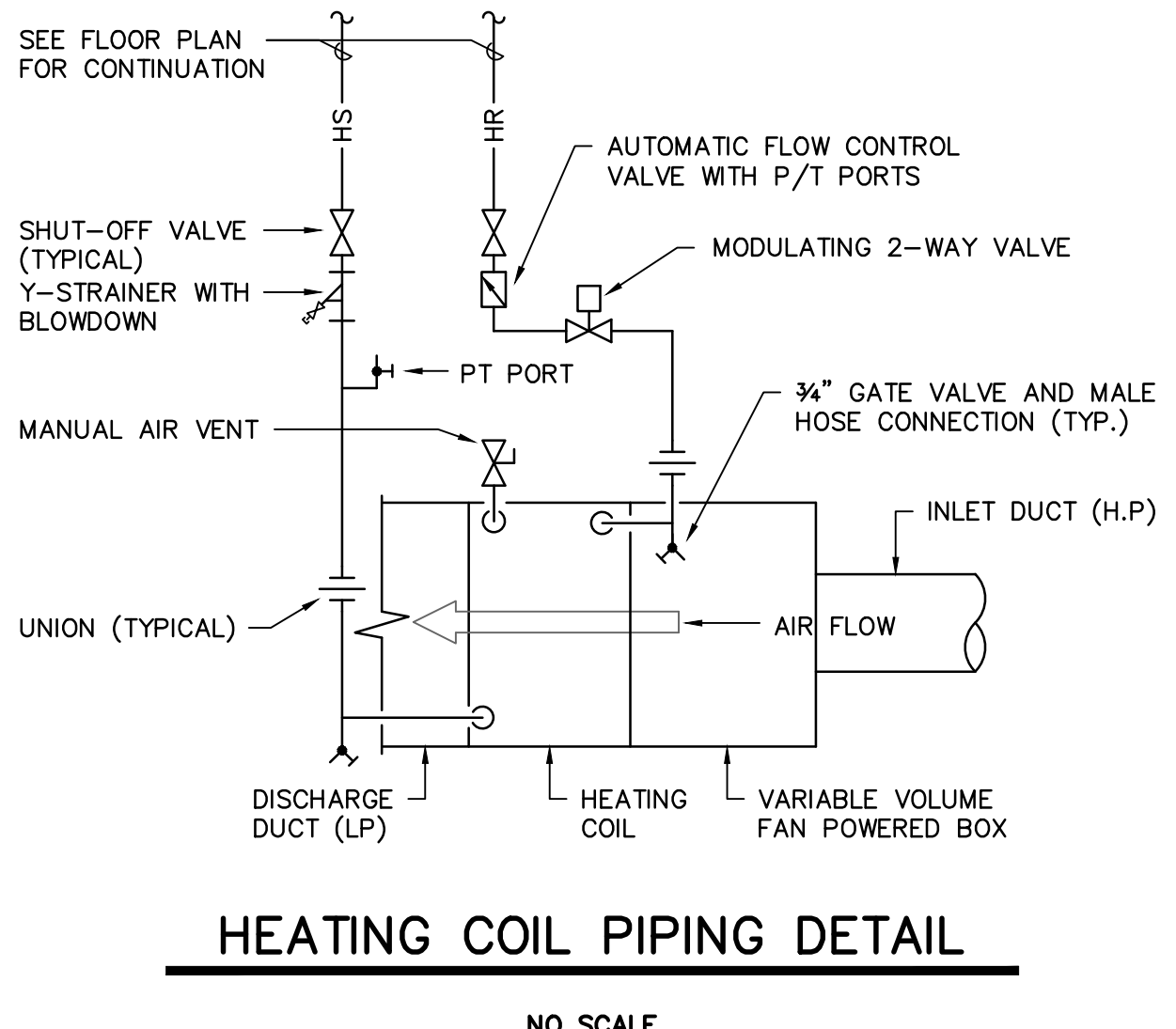
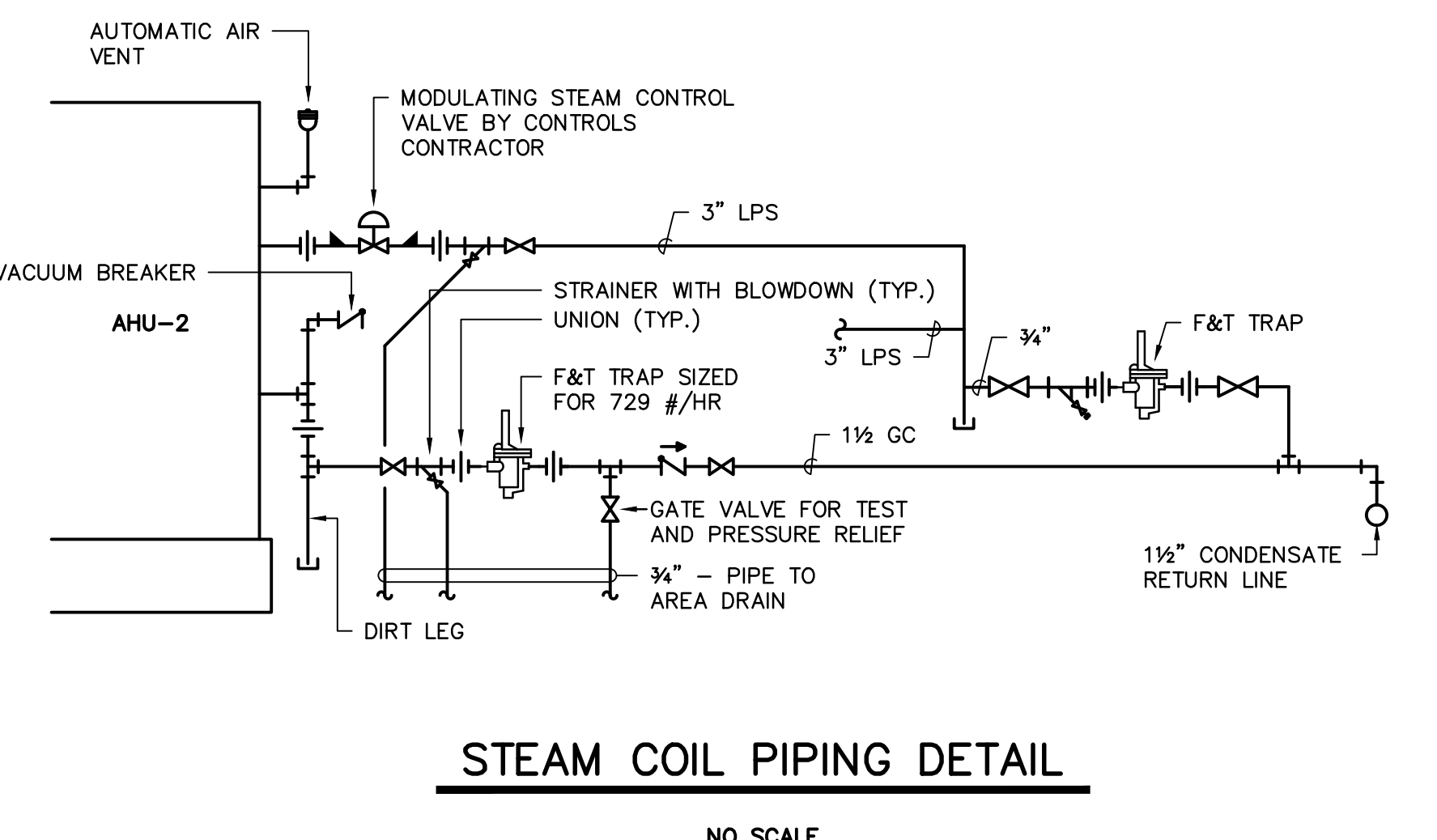
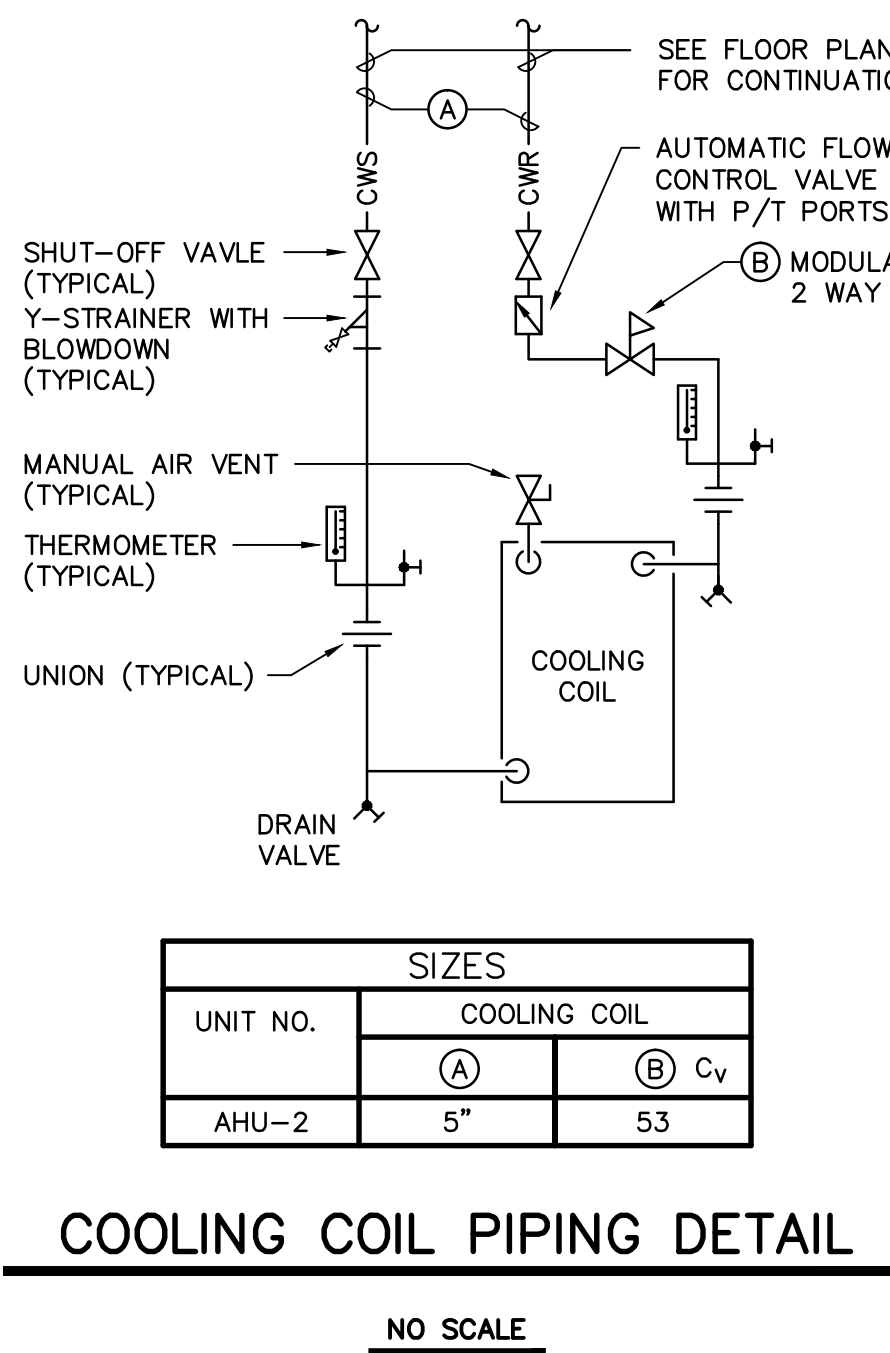
EQUIPMENT TAG	COMPONENT ID	ISOLATION SPECIFICATION	SEISMIC REST. SPECIFICATION	ISOLATION DEFLECTION
AIR HANDLING UNITS (FLOOR)	1.0	INTERNAL BY MANUFACTURER	NOTE 1,2	2"
VAV (NON-FAN) < 75 LBS	1.0	NONE	NONE	N/A
VAV (NON-FAN) > 75 LBS	1.0	NONE	SPEC SC	N/A
AIR DISTRIBUTION ≥ 20 LBS	1.0	NONE	TWO 12 GA WIRE TO STRUCTURE	N/A
AIR DISTRIBUTION < 20 LBS	1.0	NONE	NOTE 3	N/A

- ANCHOR BOLTS FOR NON-ISOLATED AND INTERNALLY ISOLATED EQUIPMENT SHALL BE SIZED BY THE SEISMIC RESTRAINT SUPPLIER. IF REQUIRED, SPEC. SL SNUBBERS OR SPEC. SC CABLE KITS SHALL BE PROVIDED.
- PADS REINFORCED AND DOWELED IN ACCORDANCE WITH ASHRAE SEISMIC GUIDELINES.
- DIFFUSERS WEIGHING LESS THAN 20 LBS MUST BE MECHANICALLY ATTACHED TO CEILING GRID, BUT REQUIRE NO ADDITIONAL RESTRAINT.



### LEGEND

SYMBOL	DESCRIPTION
→ CWS →	CHILLED WATER SUPPLY LINE
→ CWR →	CHILLED WATER RETURN LINE
→ HS →	HOT WATER SUPPLY LINE
→ HR →	HOT WATER RETURN LINE
→ LPS →	LOW PRESSURE STEAM LINE
→ GC →	GRAVITY CONDENSATE LINE
○	BALL VALVE
⊥	CHECK VALVE
⊥	STRAINER WITH BLOWDOWN
⊥	UNION
↻	PIPE TURNS TO, AWAY
⊕	THERMOMETER / PRESSURE GAGE
⊕	THERMOMETER WELL CAPPED / GAGE COCK
→	CONCENTRIC REDUCER
→	ECCENTRIC REDUCER
(A)100	TYPE "A" DIFFUSER, 100 CFM
100	EXISTING DIFFUSER BALANCED TO 100 CFM
(D)	DUCT SMOKE DETECTOR (FURNISHED BY ELECTRICAL)
(T)	THERMOSTAT
AFS	AIRFLOW MEASURING STATION
⊠	RECTANGULAR SUPPLY DUCTWORK
⊠	RETURN, EXHAUST, FRESH AIR DUCTWORK
48x24	48"x24" RECTANGULAR DUCT
⊕	CONNECTION POINT OF NEW TO EXISTING

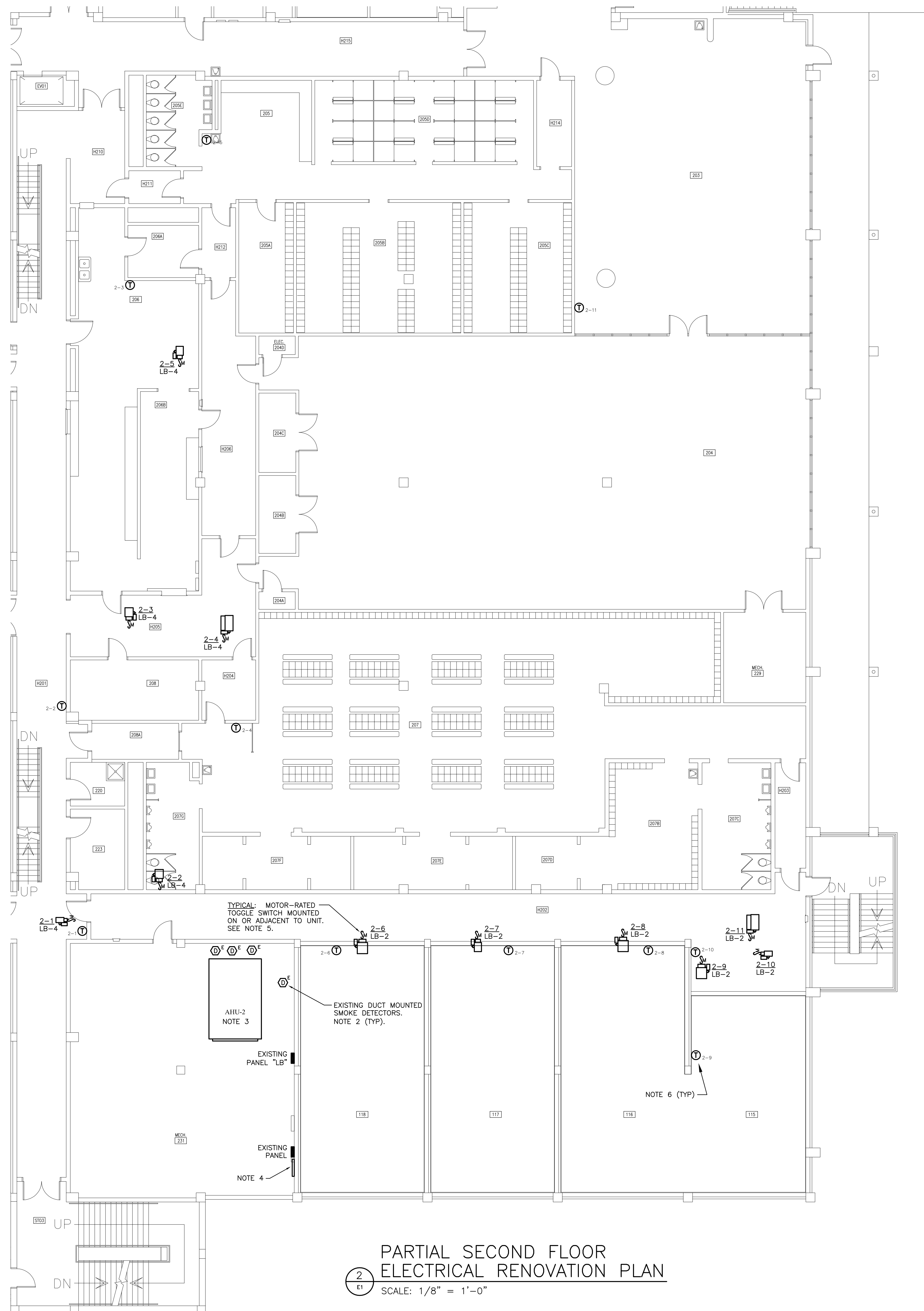


- ### CEILING NOTES
- CEILING WORK SHALL BE PERFORMED BY A CONTRACTOR NORMALLY EMPLOYED TO DO SUCH WORK.
  - WHERE REQUIRED FOR COMPLETION OF MECHANICAL AND ELECTRICAL WORK REMOVE AND SALVAGE EXISTING CEILING GRID AND TILES. RE-INSTALL EXISTING GRID, TILES, LIGHTS, AND ALL OTHER MISC. CEILING DEVICES AFTER WORK IS COMPLETE.
  - REPLACE DAMAGED CEILING GRID AND TILES TO MATCH EXISTING. DO NOT INSTALL OR RE-INSTALL NEW CEILING TILES ADJACENT TO EXISTING CEILING TILES. RELOCATE EXISTING CEILING TILES FROM OTHER ROOMS AS REQUIRED SO THAT THE ENTIRE CEILING OF EACH ROOM WILL EITHER HAVE NEW CEILING TILES OR EXISTING CEILING TILES TO PROVIDE A UNIFORM APPEARANCE IN EACH ROOM.
  - WHEN THE ENTIRE CEILING GRID IS REMOVED FROM A PARTICULAR ROOM, THE RE-INSTALLATION WITH NEW OR EXISTING GRID SHALL COMPLY WITH GRID MANUFACTURER'S REQUIREMENTS FOR SEISMIC DESIGN CATEGORY D. CEILING HEIGHTS AND GRID PATTERNS SHALL MATCH EXISTING.
  - ALL MATERIALS INSTALLED WITHIN CEILING PLENUM SPACES SHALL BE NON-COMBUSTIBLE OR SHALL BE LISTED AND LABELED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723.

CAMPUS PLANNING AND CONSTRUCTION COLUMBIA, SC 29208  
 MECHANICAL IDC BLATT PE CENTER - REPLACE AHU#2  
 STATE PROJECT NUMBER H27-D205-FW  
 University of South Carolina  
 SHEET: M3 OF 3  
 SHEET IN SET: OF

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**2**  
PARTIAL SECOND FLOOR ELECTRICAL RENOVATION PLAN  
SCALE: 1/8" = 1'-0"

120/208V, 3 PH, 4W, 60 HZ  
60 AMP M.L.O.  
SURFACE MOUNTED  
10,000 A.I.C. SYM. (MINIMUM)

EXISTING PANEL "LB"

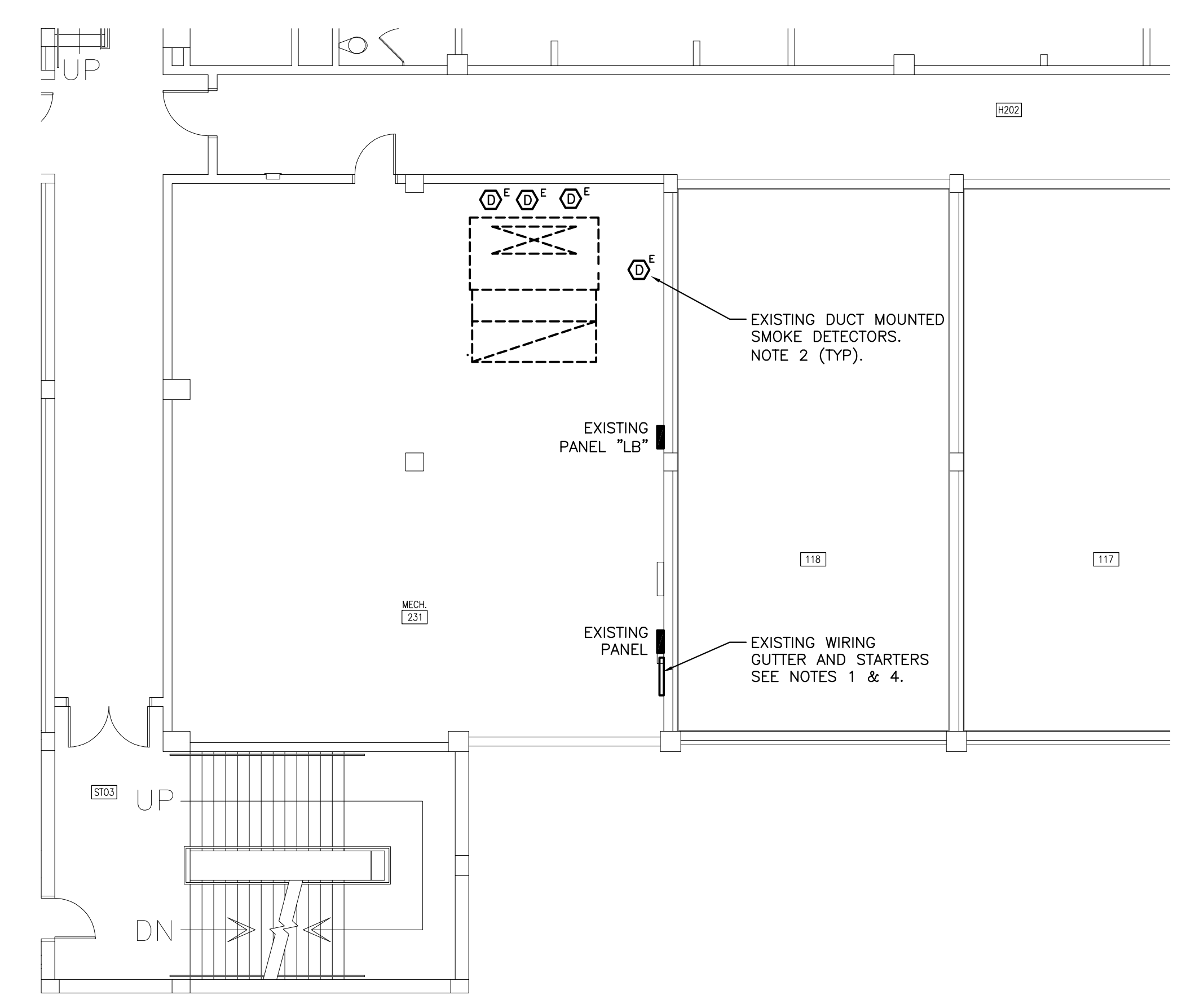
LOADS SERVED	BKR. AMP	LOAD KVA	CKT. NO.	(S / N)	CKT. NO.	LOAD KVA	BKR. AMP	LOADS SERVED
RECP'S - BIKE SHOP	20	-	1		2	-	20	VAV'S 6-11
BIKE SHOP - E.W.	20	-	3		4	-	20	VAV'S 1-5
RECP'S - BIKE SHOP	20	-	5		6	-	20	SPARE
BIKE SHOP - OVERHEAD DOOR	20	-	7		8	-	20	HAND DRYER - BIKE SHOP
FAN CF-2 - BIKE SHOP	20	-	9		10	-	20	FAN CF-1 - BIKE SHOP
SPARE	20	-	11		12	-	20	RECP'S - BIKE SHOP
ACCESS CONTROL	20	-	13		14	-	20	SPARE
SPARE	20	-	15		16	-	20	SPARE
SPARE	20	-	17		18	-	20	SPARE

CONNECTED LOADS (KVA)  
#A ### #B ### #C ###

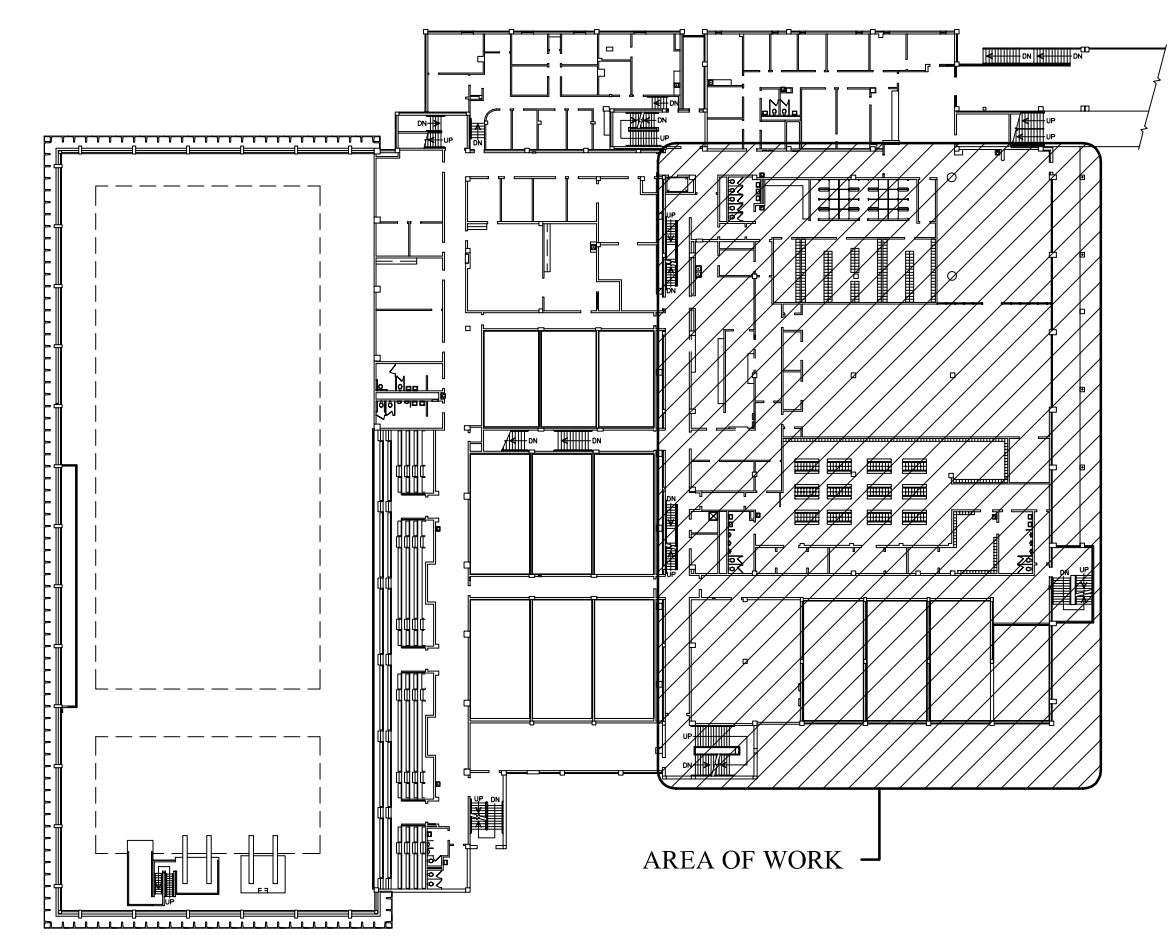
TOTAL LOADS (KVA)  
###

- LIGHT COLORED DESCRIPTIONS, AND CIRCUIT BREAKERS INDICATE EXISTING LOADS TO REMAIN IN PLACE.
- DARK COLORS INDICATE NEW BRANCH CIRCUIT DESCRIPTIONS AND/OR LOADS BEING ADDED TO THE PANEL.

- PLAN NOTES**
- DISCONNECT AND REMOVE EXISTING BRANCH CIRCUIT CONDUCTORS, STARTERS (INCLUDING ENCLOSURES), AND FLEXIBLE RACEWAY CONNECTION FROM EXISTING AHU-2. PORTIONS OF EXISTING RACEWAYS (NON-FLEXIBLE) MAY BE RE-USED AT CONTRACTOR'S OPTION. EXISTING 40-AMP, 3-POLE CIRCUIT BREAKER IN EXISTING PANEL SHALL BE RE-USED IN RENOVATION PHASE.
  - EXISTING DUCT DETECTORS SHALL BE TEMPORARILY DISCONNECTED FROM FIRE ALARM SYSTEM, REMOVED AND STORE IN A CLEAN AND DRY LOCATION DURING DEMOLITION PHASE. TURN OVER TO MECHANICAL CONTRACTOR FOR RE-INSTALLATION OF DETECTORS IN NEW AND / OR EXISTING DUCT DURING RENOVATION PHASE. RECONNECT TO FIRE ALARM SYSTEM AND MECHANICAL CONTROLS FOR UNIT SHUT-DOWN. TEST DETECTORS PER NFPA 72. COORDINATE ALL WORK WITH FIRE ALARM WITH TODD GRIFFIN AT USC.
  - PROVIDE 3-#8, #10 GROUND IN 1" EMT FROM EXISTING 40-AMP CIRCUIT BREAKER REFERENCED IN NOTE 1 TO AHU-2 THROUGH FACTORY DISCONNECT / VFD. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION OF ELECTRICAL CONNECTION POINT. PROVIDE FLEXIBLE METAL CONDUIT (MAX OF 6' IN LENGTH) FOR CONNECTION TO UNIT.
  - COORDINATE RE-WORK OF 120-VOLT CONTROL WIRING WITH MECHANICAL CONTROLS CONTRACTOR. FIELD VERIFY SOURCE OF EXISTING BRANCH CIRCUITS THAT SUPPORT EXISTING MECHANICAL CONTROLS AND MODIFY / EXTEND EXISTING BRANCH CIRCUITS TO NEW CONTROL POINTS.
  - PROVIDE 2-#12, #12 GROUND IN 3/4" EMT FOR BRANCH CIRCUIT CONNECTION TO MOTOR-RATED TOGGLE SWITCH AT EACH VAV. PROVIDE FLEXIBLE METAL CONDUIT (MAX OF 6' IN LENGTH) FOR CONNECTION TO UNIT.
  - SYMBOL REPRESENTS THERMOSTAT, PROVIDED BY MECHANICAL CONTRACTOR. PROVIDE A SINGLE-GANG JUNCTION BOX IN LOCATION DESIGNATED IN THE FIELD BY MECHANICAL CONTRACTOR, AND A 3/4" CONDUIT FROM JUNCTION BOX TO ASSOCIATED VAV. COORDINATE ALL WORK WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

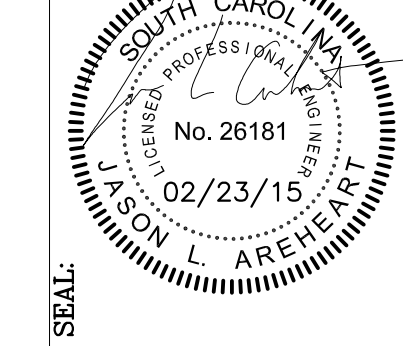
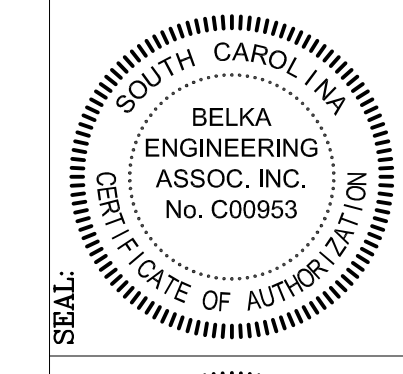


**1**  
PARTIAL SECOND FLOOR ELECTRICAL DEMOLITION PLAN  
SCALE: 1/8" = 1'-0"



**KEY PLAN - SECOND FLOOR - 138**  
NO SCALE

CAMPUS PLANNING AND CONSTRUCTION  
COLUMBIA, SC 29208



CHECKED BY:	J.L.A.	DATE:	23FEB15
ORIG. BY:	J.L.A.	DATE:	
DRAWN BY:	J.L.A.	DATE:	
DATE:	23FEB15	DISCREPTION:	
DRAWING:	138		
REV.			

MECHANICAL I.D.C.  
BLATT PE CENTER - REPLACE AHU#2  
STATE PROJECT NUMBER H27-0205-FW  
University of South Carolina

US21505 SHEET: **E1**  
OF  
SHEET IN SET: OF

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