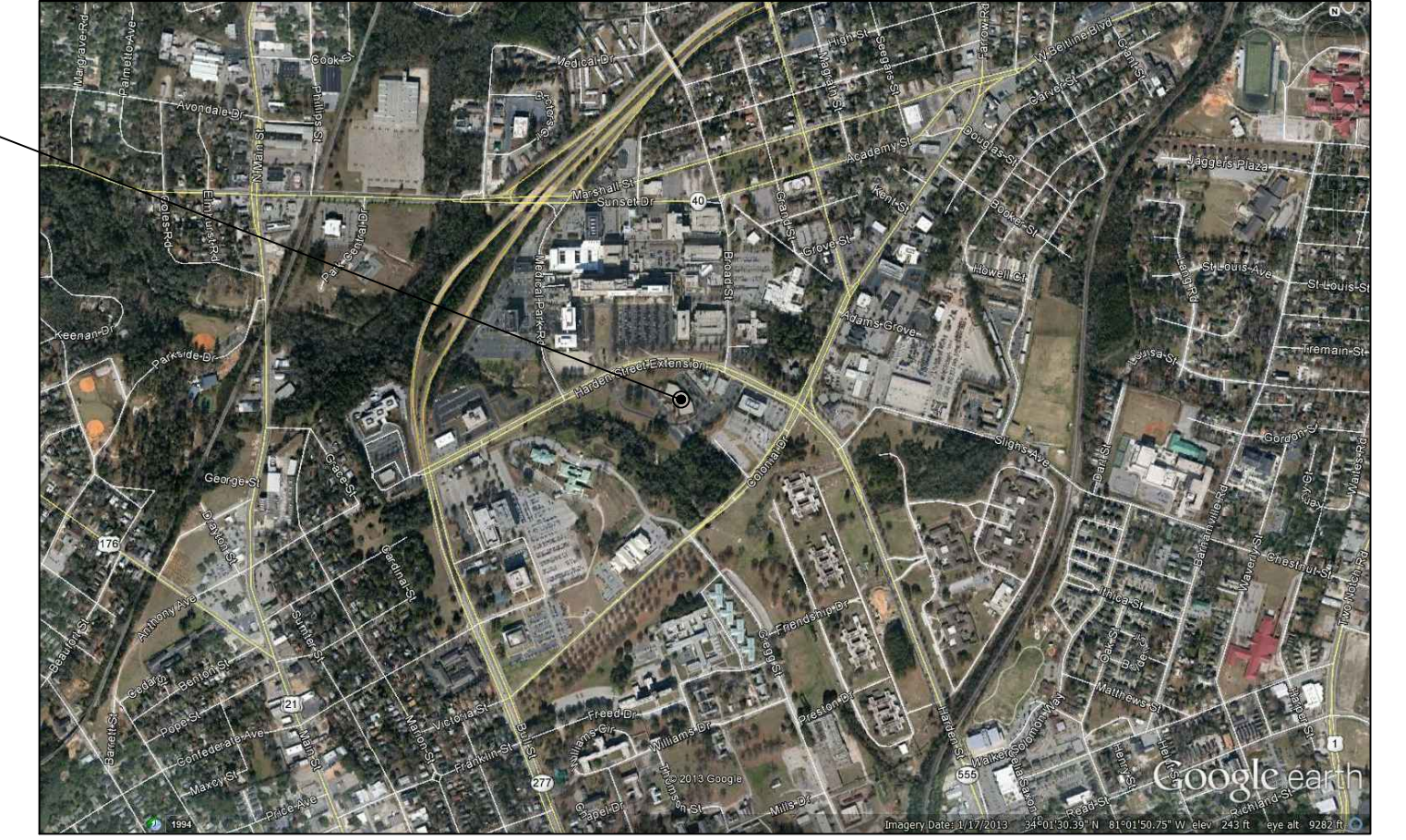
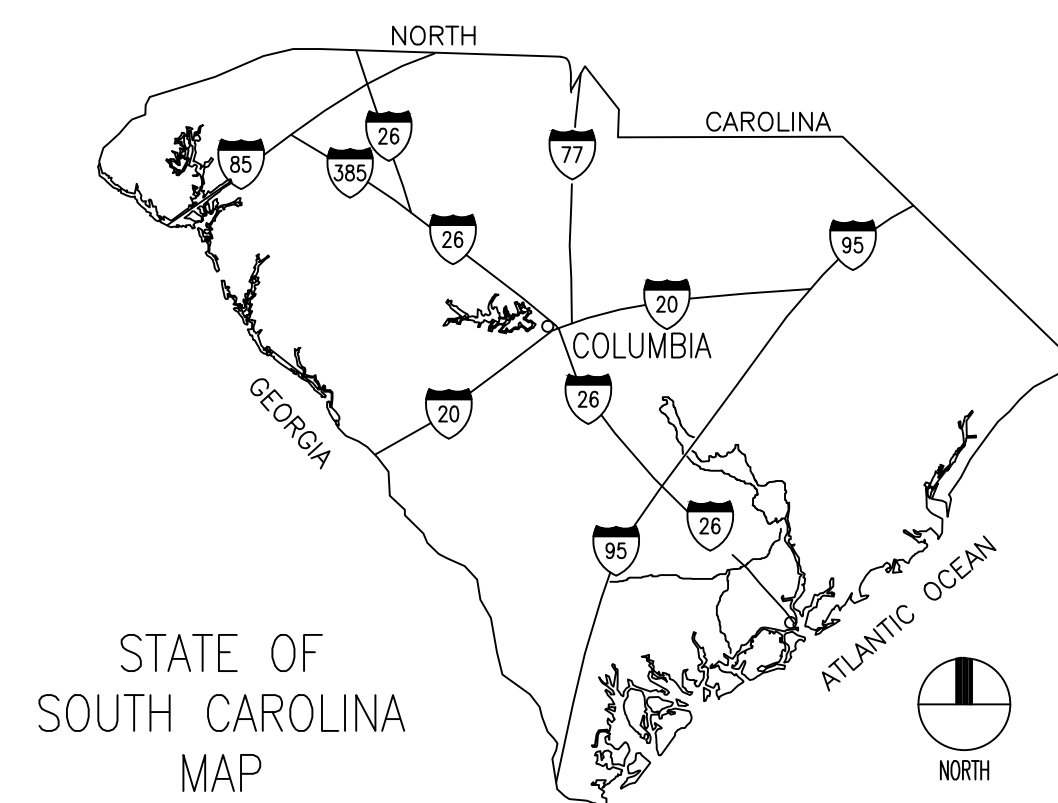


SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION)

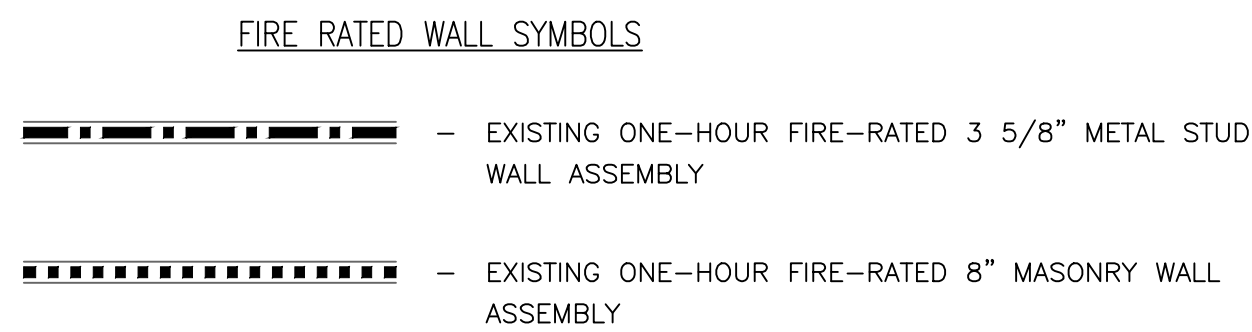
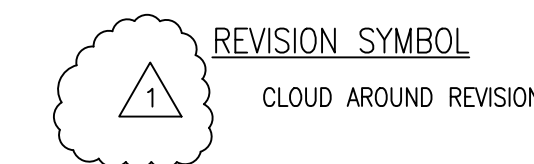
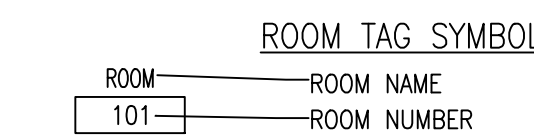
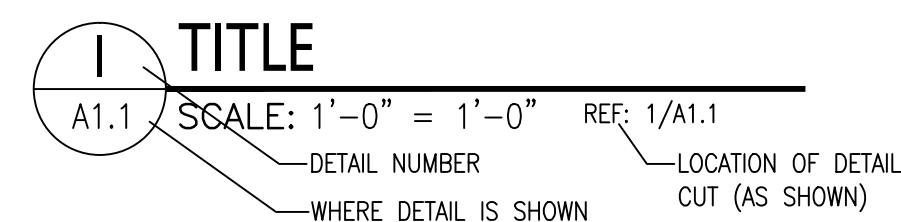
COLUMBIA, SOUTH CAROLINA
STATE PROJECT NO. J13-9863-FW-A
CONSTRUCTION DOCUMENTS
MARCH 31, 2014



ABBREVIATIONS

∠	ANGLE
Ⓢ	AT
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
ARCH	ARCHITECTURAL
BLKG	BLOCKING
BUR	BUILT-UP ROOF
CL	CENTERLINE
CJ	CONTROL JOINT
CLG	CEILING
CTR	CENTER
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CONT	CONTINUOUS
DIA	DIAMETER
DS	DOWN SPOUT
DWG	DRAWING
EXT	EXTERIOR
EXIST	EXISTING
EA	EACH
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
EL	ELEVATION
ELEV	ELEVATOR
EQUIP	EQUIPMENT
EWG	ELECTRIC WATER COOLER
FIN	FINISH
FD	FLOOR DRAIN
FOF	FACE OF FINISH
FOS	FACE OF STUD
FR	FIRE RETARDANT
FV	FIELD VERIFY
GA	GALVE
GYP BD	GYPSUM BOARD
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING VENTILATION AIR-CONDITIONING
ID	INSIDE DIAMETER
INSUL	INSULATION
JOINT	JOINT
LAV	LAVATORY
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MO	MASONRY OPENING
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPNG	OPENING
OPP	OPPOSITE
P	PAINT
PAIR	PAIR
PL	PROPERTY LINE
PT	PRESSURE TREATED
R, RAD	RADIUS
REQD	REQUIRED
RD	ROOF DRAIN
RO	ROUGH OPENING
SF	SQUARE FEET
SIM	SIMILAR
SPEC	SPECIFICATIONS
SS	STAINLESS STEEL
STD	STANDARD
STR	STRUCTURAL
SUSP	SUSPENDED
TOS	TOP OF STEEL
TOW	TOP OF WALL
TP	TYPICAL
UNQ	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VCT	VINYL COMPOSITION TILE
W/	WITH
WC	WATER CLOSET
WR	WATER RESISTANT
WWF	WELDED WIRE FABRIC
WD	WOOD
P.I.P.	POURED-IN-PLACE
CSU	CAST STONE UNIT

SYMBOLS



DESIGN CODES AND STANDARDS

- PROJECT DESIGNED IN ACCORDANCE WITH:**
- INTERNATIONAL BUILDING CODE (IBC), 2012 EDITION
 - INTERNATIONAL EXISTING BUILDING CODE, 2012 EDITION
 - INTERNATIONAL ENERGY CONSERVATION CODE, 2009 EDITION
 - INTERNATIONAL FIRE CODE, 2012 EDITION
 - INTERNATIONAL MECHANICAL CODE, 2012 EDITION
 - INTERNATIONAL PLUMBING CODE, 2012 EDITION
 - NATIONAL ELECTRICAL CODE, NFPA 70, 2011 EDITION
 - STATE FIRE MARSHALL REGULATIONS, LATEST REVISION
 - ASHRAE/IESNA 90.1 ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS, 2007 EDITION
 - ICC/ANSI-A117.1-1998, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

- BUILDING CODE REVIEW INFORMATION:**
- OCCUPANCY (EXISTING OCCUPANCY TO REMAIN - BUSINESS GROUP B)
 - TYPE OF CONSTRUCTION
A. EXISTING BUILDING; TYPE IV - UNPROTECTED (1988 SBC)
 - 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			
FIRE RESISTANCE RATING OF BUILDING ELEMENTS: THE EXISTING FIRE RESISTANCE RATINGS OF BUILDING ELEMENTS WILL NOT BE MODIFIED.			
FIRE RESISTANCE RATING OF BUILDING ELEMENTS			
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 1988 SBC TABLE 600)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
BEARING WALLS, EXTERIOR (PER 1988 SBC TABLE 600)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
BEARING WALLS, INTERIOR (PER 1988 SBC TABLE 600)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
NONBEARING WALLS & PARTITIONS, EXTERIOR (PER 1988 SBC TABLE 600)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS & JOISTS (PER 1988 SBC TABLE 600)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS & JOISTS (PER 1988 SBC TABLE 600)	NONCOMBUSTIBLE	NONCOMBUSTIBLE	-
FIRE WALLS (PER 1988 SBC TABLE 600)	N/A	N/A	-
SHAFT ENCLOSURES (PER 1988 SBC TABLE 700)	1	1	-
OCCUPANCY SEPARATION (PER 1988 SBC TABLE 700)	1	1	-
EXIT ACCESS CORRIDORS (PER 1988 SBC TABLE 700)	1	1	-
BOILER ROOMS (PER 1988 SBC SECTION 806)	1	1	-
OTHER FIRE PROTECTION REQUIREMENTS			
ITEM	YES	NO	COMMENTS
ARE SPRINKLERS REQUIRED? (PER 1988 SBC SECTION 901)	-	X	-
ARE STANDPIPES REQUIRED? (PER 1988 SBC SECTION 902)	-	X	-
IS A FIRE ALARM SYSTEM REQUIRED? (PER 1988 SBC SECTION 903)	X	-	NEW FIRE ALARM SYSTEM UNDER SEPARATE CONTRACT

- MECHANICAL INFORMATION:**
- OVERALL ROOF THERMAL TRANSFER VALUE (OTV): 1.97 BTUH/S.F.
 - OVERALL WALL THERMAL TRANSFER VALUE (OTV): 30.3 BTUH/S.F.
 - COOLING LOAD: 386 S.F./TON
 - HEATING LOAD: 18.2 BTUH/S.F.
 - OUTSIDE AIR (CFM/PERSON): PER ASHRAE 62.1 - 2010
 - INSULATION R-VALUE: EXTERIOR WALLS: EXIST. ROOF: EXIST.
 - GLASS: U-FACTOR: EXIST. SC: EXIST.

INDEX TO DRAWINGS

TITLE SHEET:	
T1	TITLE SHEET, CODE ANALYSIS, INDEX TO DRAWINGS
ARCHITECTURAL:	
A1	FIRST FLOOR PLAN
A2	SECOND FLOOR PLAN
A3	FIRST FLOOR REFLECTED CEILING PLAN
A4	SECOND FLOOR REFLECTED CEILING PLAN
A5	FIRST FLOOR CEILING SCHEDULE
A6	SECOND FLOOR CEILING SCHEDULE
STRUCTURAL:	
S1	PARTIAL SECOND FLOOR FRAMING PLAN AND GENERAL NOTES
S2	PARTIAL ROOF FRAMING PLAN AND DETAILS
MECHANICAL:	
MD1	FIRST FLOOR DEMOLITION PLAN
MD2	SECOND FLOOR DEMOLITION PLAN
MD3	FIRST FLOOR DEMOLITION PLAN - PIPING
MD4	SECOND FLOOR DEMOLITION PLAN - PIPING
M1	FIRST FLOOR PLAN
M2	SECOND FLOOR PLAN
M3	FIRST FLOOR PLAN - PIPING
M4	SECOND FLOOR PLAN - PIPING
M5	ROOF PLAN
M6	ENLARGED MECHANICAL ROOM PLANS AND DETAILS
M7	DETAILS
M8	DETAILS AND SCHEDULES
M9	NOTES, SCHEDULES, AND LEGEND
PLUMBING:	
PD1	FIRST FLOOR DEMOLITION PLAN
PD2	SECOND FLOOR DEMOLITION PLAN
P1	FIRST FLOOR PLAN
P2	SECOND FLOOR PLAN
P3	DETAILS, NOTES, SCHEDULE, AND LEGEND
ELECTRICAL:	
E1	FIRST FLOOR ELECTRICAL DEMOLITION PLAN
E2	SECOND FLOOR, ROOF & COOLING TOWER ELECTRICAL DEMOLITION PLAN
E3	FIRST FLOOR ELECTRICAL PLAN
E4	SECOND FLOOR ELECTRICAL PLAN
E5	ROOF ELECTRICAL PLAN
E6	ELECTRICAL RISER AND DETAILS



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A & E STATE NO.

SHEET TITLE

TITLE SHEET

PROJECT TITLE

**SCDDSN-CENTRAL OFFICE
SAFETY/CODE/ENERGY REPAIRS
(HVAC RENOVATION)
COLUMBIA, SOUTH CAROLINA**

DIVISION

REVISION

DATE

BY

APP.

A & E PROJECT NO.

12770

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CHECKED BY: WCL

FINAL APP.: BJJ

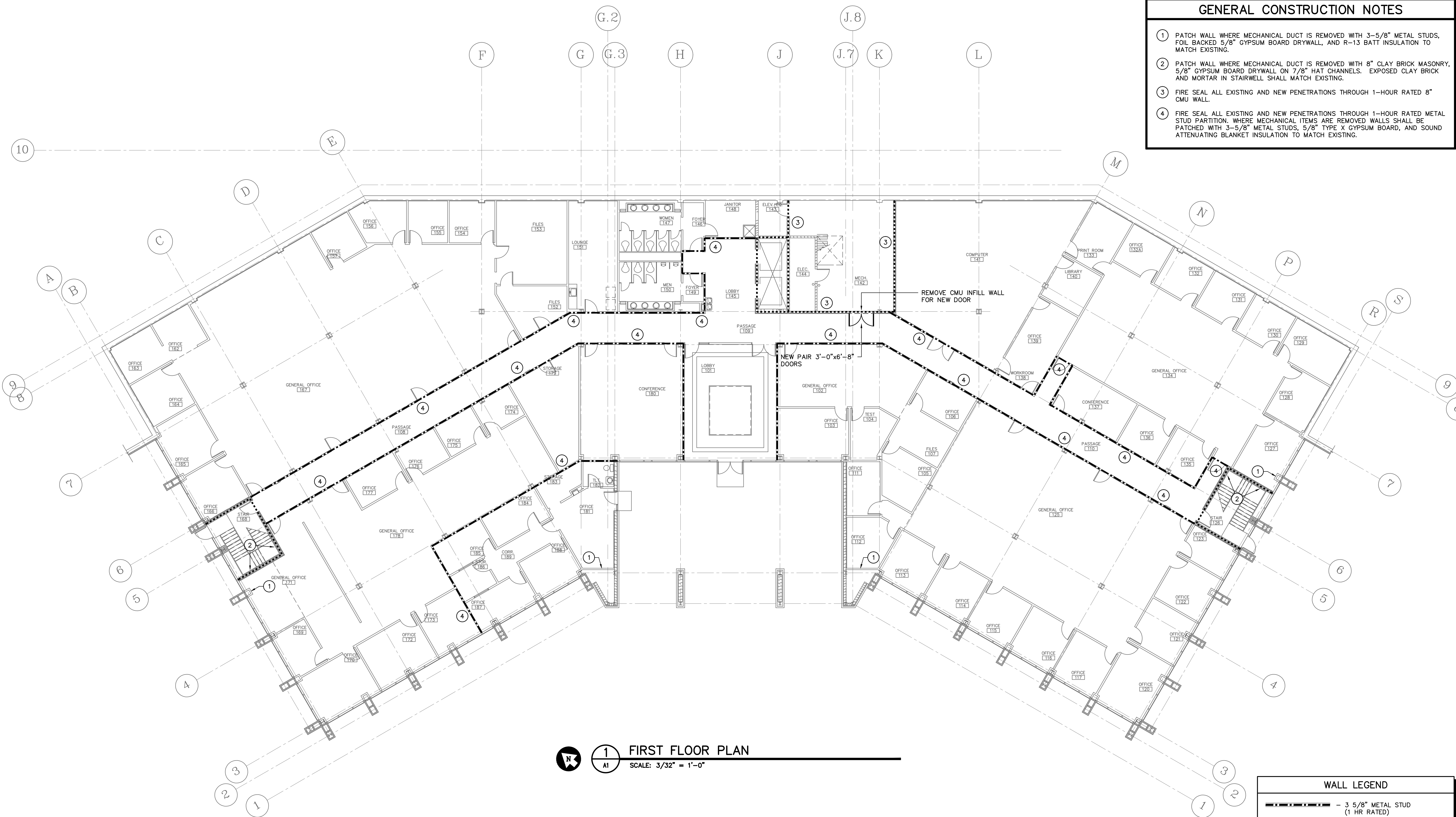
STATE PROJECT NO.
J13-9863-FW-A

DRAWING NO.
DATE 5/5/2014

SHEET
T1 of 1

33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

- GENERAL CONSTRUCTION NOTES**
- 1 PATCH WALL WHERE MECHANICAL DUCT IS REMOVED WITH 3-5/8" METAL STUDS, FOIL BACKED 5/8" GYPSUM BOARD DRYWALL, AND R-13 BATT INSULATION TO MATCH EXISTING.
 - 2 PATCH WALL WHERE MECHANICAL DUCT IS REMOVED WITH 8" CLAY BRICK MASONRY, 5/8" GYPSUM BOARD DRYWALL ON 7/8" HAT CHANNELS. EXPOSED CLAY BRICK AND MORTAR IN STAIRWELL SHALL MATCH EXISTING.
 - 3 FIRE SEAL ALL EXISTING AND NEW PENETRATIONS THROUGH 1-HOUR RATED 8" CMU WALL.
 - 4 FIRE SEAL ALL EXISTING AND NEW PENETRATIONS THROUGH 1-HOUR RATED METAL STUD PARTITION. WHERE MECHANICAL ITEMS ARE REMOVED WALLS SHALL BE PATCHED WITH 3-5/8" METAL STUDS, 5/8" TYPE X GYPSUM BOARD, AND SOUND ATTENUATING BLANKET INSULATION TO MATCH EXISTING.



1 FIRST FLOOR PLAN
SCALE: 3/32" = 1'-0"

WALL LEGEND

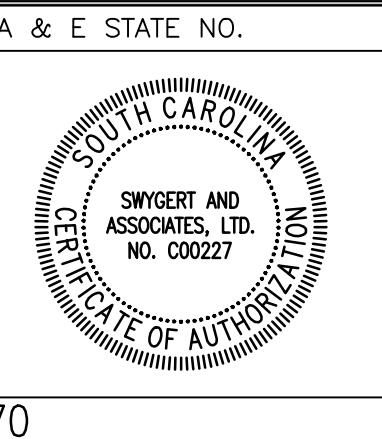
	- 3 5/8" METAL STUD (1 HR RATED)
	- 8" MASONRY (1 HR RATED)



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A & E STATE NO.
SHEET TITLE
FIRST FLOOR PLAN

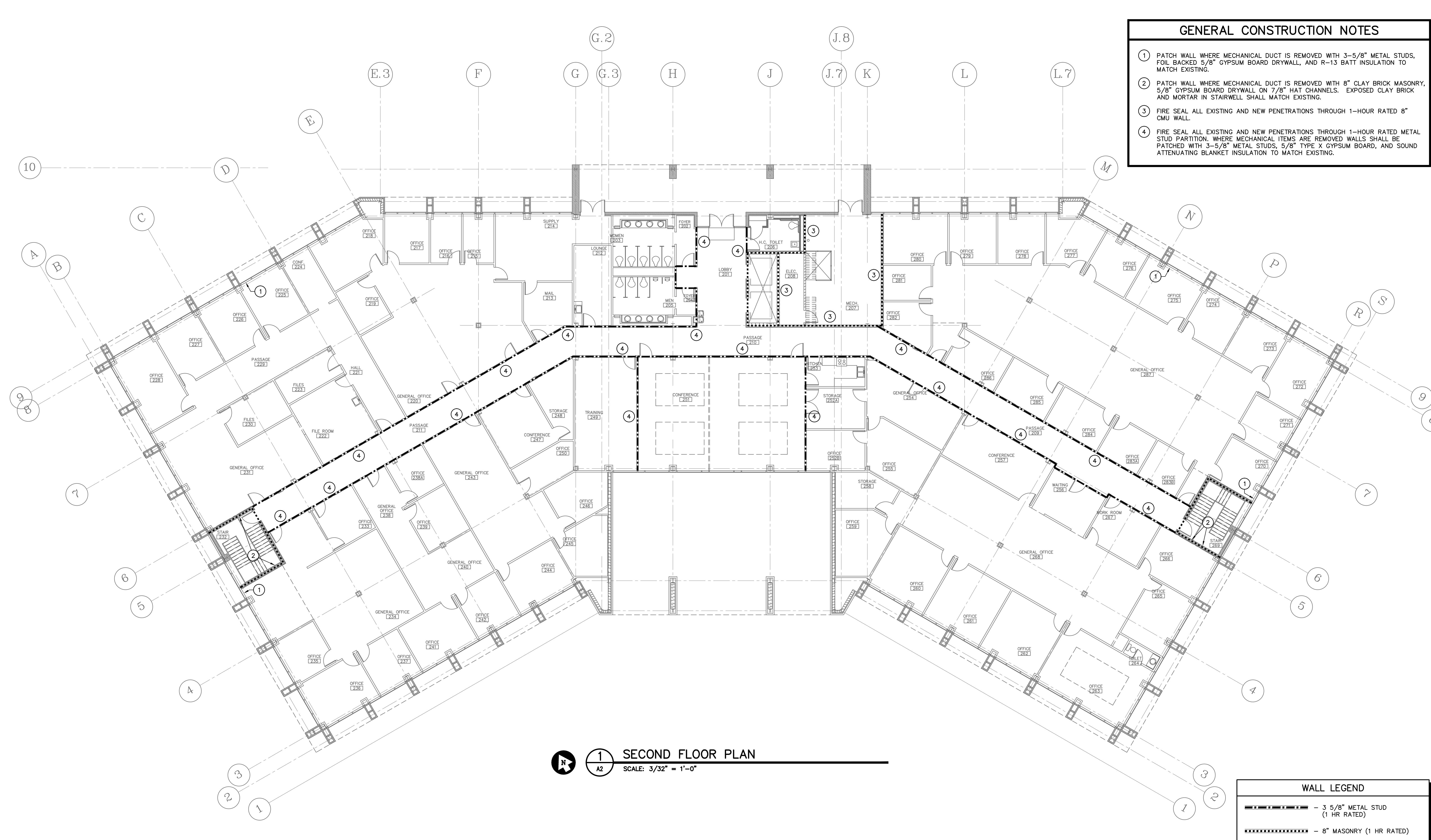
PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. 5/5/2014	SHEET A1 of 6
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DIVISION	REVISION	DATE	BY	APP.	A & E PROJECT NO. 12770	DRAWN BY: BJJ	CHECKED BY: WCL	FINAL APP.: BJJ
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33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

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1 SECOND FLOOR PLAN
 SCALE: 3/32" = 1'-0"

WALL LEGEND

	- 3 5/8" METAL STUD (1 HR RATED)
	- 8" MASONRY (1 HR RATED)

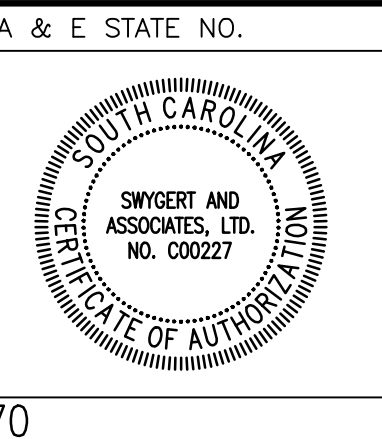


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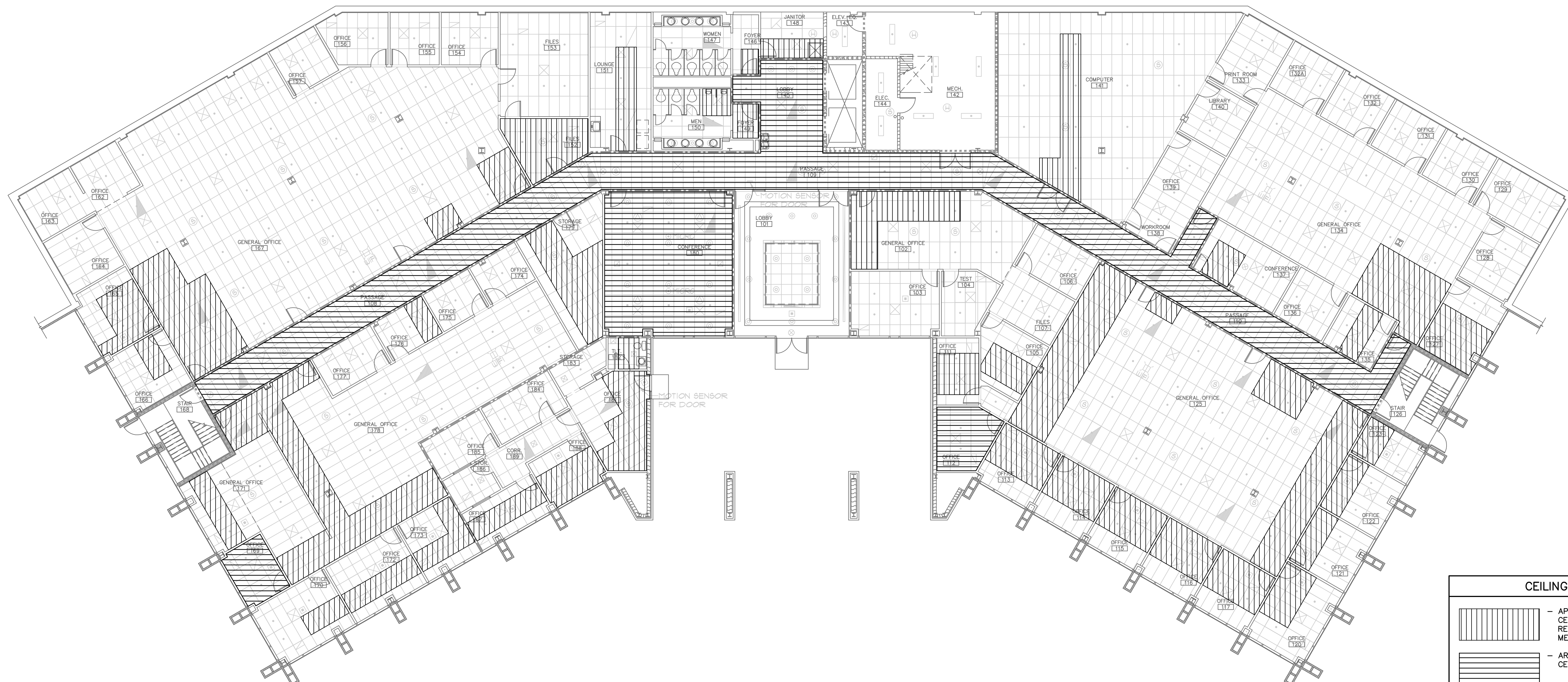
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 SHEET TITLE
SECOND FLOOR PLAN
 DRAWN BY: BJJ CHECKED BY: WCL FINAL APP.: BJJ

PROJECT TITLE
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STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. DATE 5/5/2014	SHEET A2 of 6
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CEILING NOTES

1. PROVIDE NEW CEILING TILES FOR ALL CEILINGS IN ACCORDANCE WITH THE CEILING SCHEDULES AND THE SPECIFICATIONS.
2. WHERE REQUIRED FOR COMPLETION OF MECHANICAL, ELECTRICAL, AND STRUCTURAL WORK REMOVE AND SALVAGE EXISTING CEILING GRID. RE-INSTALL EXISTING GRID, CEILING DEVICES, AND NEW CEILING TILES AFTER WORK IS COMPLETE. EXISTING LIGHTING TO BE REPLACED UNDER SEPARATE CONTRACT.
3. IN ADDITION TO AREAS SHOWN, IF IN A PARTICULAR SPACE THE ENTIRE CEILING ASSEMBLY IS REMOVED A NEW CEILING SHALL BE PROVIDED PER THE CEILING SCHEDULES AND SPECIFICATIONS. NEW CEILING HEIGHTS SHALL MATCH EXISTING.



CEILING LEGEND

- APPROX. AREA OF 2'x4' LAY-IN CEILING TO BE REMOVED AND REINSTALLED. COORDINATE WITH MECHANICAL CONTRACTOR.
- AREA OF NEW 2'x4' LAY-IN CEILING.

WALL LEGEND

- 3 5/8" METAL STUD (1 HR RATED)
- 8" MASONRY (1 HR RATED)

1 FIRST FLOOR REFLECTED CEILING PLAN
 SCALE: 3/32" = 1'-0"



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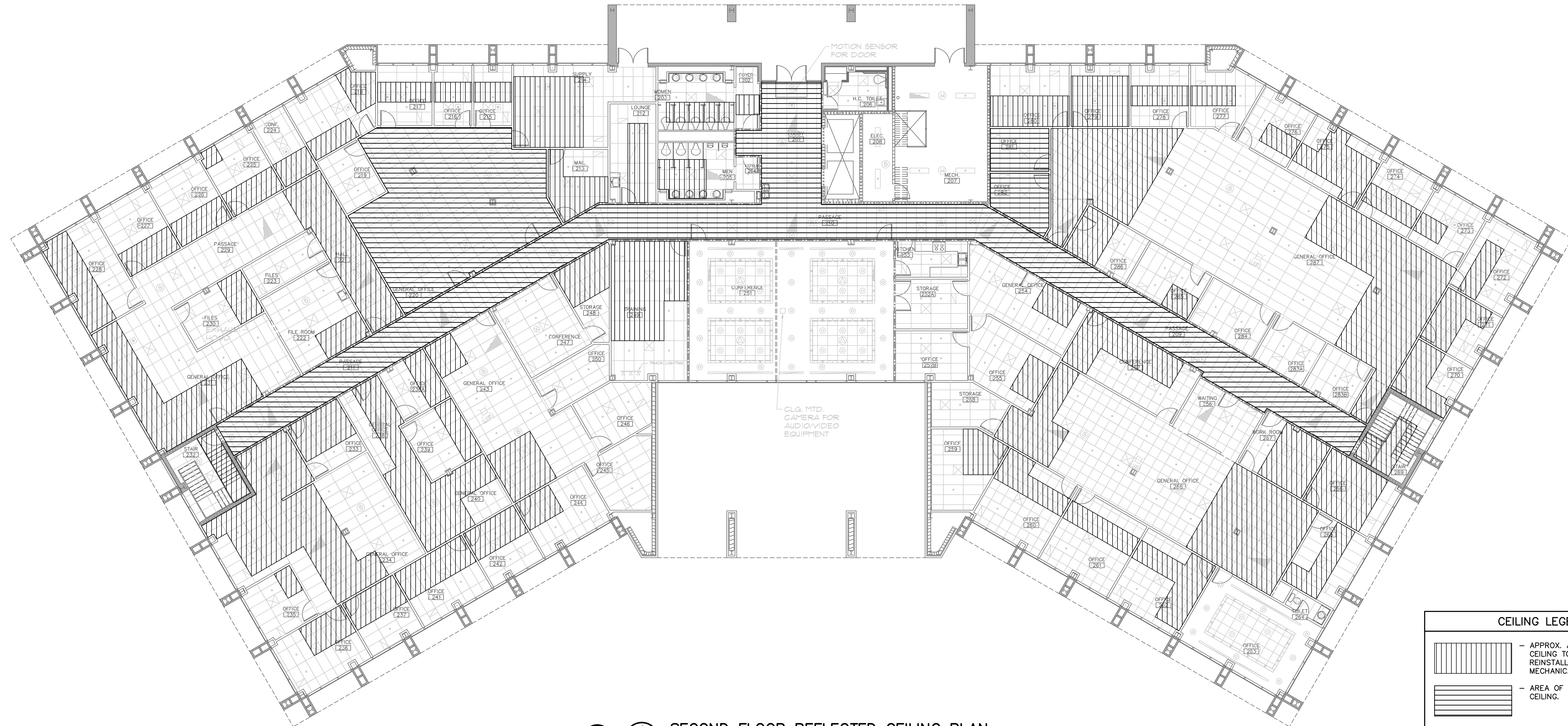
 A & E PROJECT NO. 12770

SHEET TITLE
FIRST FLOOR REFLECTED CEILING PLAN
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PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA
 STATE PROJECT NO. DRAWING NO. SHEET
J16-9863-FW-A **A3** of 6
 DATE 5/5/2014

CEILING NOTES

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1 SECOND FLOOR REFLECTED CEILING PLAN
 SCALE: 3/32" = 1'-0"

CEILING LEGEND

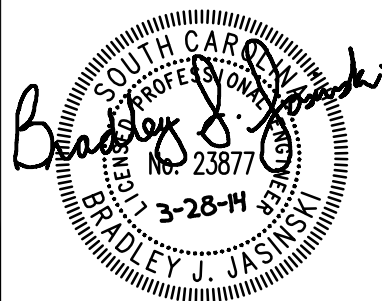
- APPROX. AREA OF 2'x4' LAY-IN CEILING TO BE REMOVED AND REINSTALLED. COORDINATE WITH MECHANICAL CONTRACTOR.
- AREA OF NEW 2'x4' LAY-IN CEILING.

WALL LEGEND


- 3 5/8" METAL STUD (1 HR RATED)
- 8" MASONRY (1 HR RATED)



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A & E STATE NO. SHEET TITLE

SECOND FLOOR REFLECTED CEILING PLAN

PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

STATE PROJECT NO. DRAWING NO. SHEET
J16-9863-FW-A **A4** of 6

DATE 5/5/2014

DRAWN BY: BJJ CHECKED BY: WCL FINAL APP.: BJJ

FIRST FLOOR-CEILING SCHEDULE

RM. NO.	ROOM NAME	SUSPENDED CEILING SYSTEM		REMARKS	RM. NO.	ROOM NAME	SUSPENDED CEILING SYSTEM		REMARKS
		SUSPENDED CEILING GRID	ACOUSTICAL CEILING TILES				SUSPENDED CEILING GRID	ACOUSTICAL CEILING TILES	
101	LOBBY	EXISTING	EXISTING		152	STORAGE	EXISTING	ACT-1	
102	GEN. OFFICE	EXISTING	ACT-1		153	WORKROOM	EXISTING	ACT-1	
103	OFFICE	EXISTING	ACT-1		154	OFFICE	EXISTING	ACT-1	
104	TEST	EXISTING	ACT-1		155	OFFICE	EXISTING	ACT-1	
105	OFFICE	EXISTING	ACT-1		156	OFFICE	EXISTING	ACT-1	
106	OFFICE	EXISTING	ACT-1		157	OFFICE	EXISTING	ACT-1	
107	FILES	EXISTING	ACT-1		-	-	-	-	
108	PASSAGE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT	-	-	-	-	
109	PASSAGE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT	-	-	-	-	
110	PASSAGE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT	-	-	-	-	
111	OFFICE	EXISTING	ACT-1		162	OFFICE	EXISTING	ACT-1	
112	OFFICE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT	163	OFFICE	EXISTING	ACT-1	
113	OFFICE	EXISTING	ACT-2		164	OFFICE	EXISTING	ACT-1	
114	OFFICE	EXISTING	ACT-1		165	OFFICE	EXISTING	ACT-2	
115	OFFICE	EXISTING	ACT-1		166	OFFICE	EXISTING	ACT-2	
116	OFFICE	EXISTING	ACT-1		167	GEN. OFFICE	EXISTING	ACT-1	
117	OFFICE	EXISTING	ACT-1		168	STAIR	-	-	
-	-	-	-		169	OFFICE	EXISTING	ACT-1	
-	-	-	-		170	OFFICE	EXISTING	ACT-1	
120	OFFICE	EXISTING	ACT-1		171	GEN. OFFICE	EXISTING	ACT-1	
121	OFFICE	EXISTING	ACT-1		172	OFFICE	EXISTING	ACT-2	
122	OFFICE	EXISTING	ACT-1		173	OFFICE	EXISTING	ACT-2	
123	OFFICE	EXISTING	ACT-1		174	OFFICE	EXISTING	ACT-1	
-	-	-	-		175	OFFICE	EXISTING	ACT-1	
125	GEN. OFFICE	EXISTING	ACT-1		176	OFFICE	EXISTING	ACT-1	
126	STAIR	-	-		177	OFFICE	EXISTING	ACT-1	
127	OFFICE	EXISTING	ACT-1		178	GEN. OFFICE	EXISTING	ACT-1	
128	OFFICE	EXISTING	ACT-1		179	STORAGE	EXISTING	ACT-1	
129	OFFICE	EXISTING	ACT-1		180	CONFERENCE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT
130	OFFICE	EXISTING	ACT-1		181	WAITING	EXISTING	ACT-1	
131	OFFICE	EXISTING	ACT-1		182	TOILET	EXISTING	ACT-1	
132	OFFICE	EXISTING	ACT-1		183	STORAGE	EXISTING	ACT-1	
132A	OFFICE	EXISTING	ACT-1		184	OFFICE	EXISTING	ACT-1	
133	PRINT RM.	EXISTING	ACT-1		185	OFFICE	EXISTING	ACT-1	
134	GEN. OFFICE	EXISTING	ACT-1		186	STORAGE	EXISTING	ACT-1	
135	OFFICE	EXISTING	ACT-1		187	OFFICE	EXISTING	ACT-1	
136	OFFICE	EXISTING	ACT-1		188	OFFICE	EXISTING	ACT-1	
137	CONFERENCE	EXISTING	ACT-1		189	CORRIDOR	EXISTING	ACT-1	
138	WORKROOM	EXISTING	ACT-1						
-	-	-	-						
140	LIBRARY	EXISTING	ACT-1						
141	COMPUTER	EXISTING	ACT-1						
142	MECH.	-	-						
143	ELEV. EQ.	-	-						
144	ELEC.	-	-						
145	LOBBY	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT					
146	FOYER	EXISTING	ACT-1						
147	WOMEN	EXISTING	ACT-1						
148	JANITOR	EXISTING	ACT-1						
149	FOYER	EXISTING	ACT-1						
150	MEN	EXISTING	ACT-1						
151	LOUNGE	EXISTING	ACT-1						

NOTE: REFER TO TECHNICAL SPECIFICATIONS IN PROJECT MANUAL FOR INFORMATION ON SUSPENDED CEILING GRID (SCG-1) AND ACOUSTICAL CEILING TILES (ACT-1), (ACT-2, & (ACT-3).



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A & E FIRM

A & E PROJECT NO.

SHEET TITLE

**FIRST FLOOR-
CEILING SCHEDULE**

DRAWN BY: CHECKED BY: FINAL APP.:

PROJECT TITLE


**SCDDSN-CENTRAL OFFICE
SAFETY/CODE/ENERGY REPAIRS
(HVAC RENOVATIONS)
COLUMBIA, SOUTH CAROLINA**

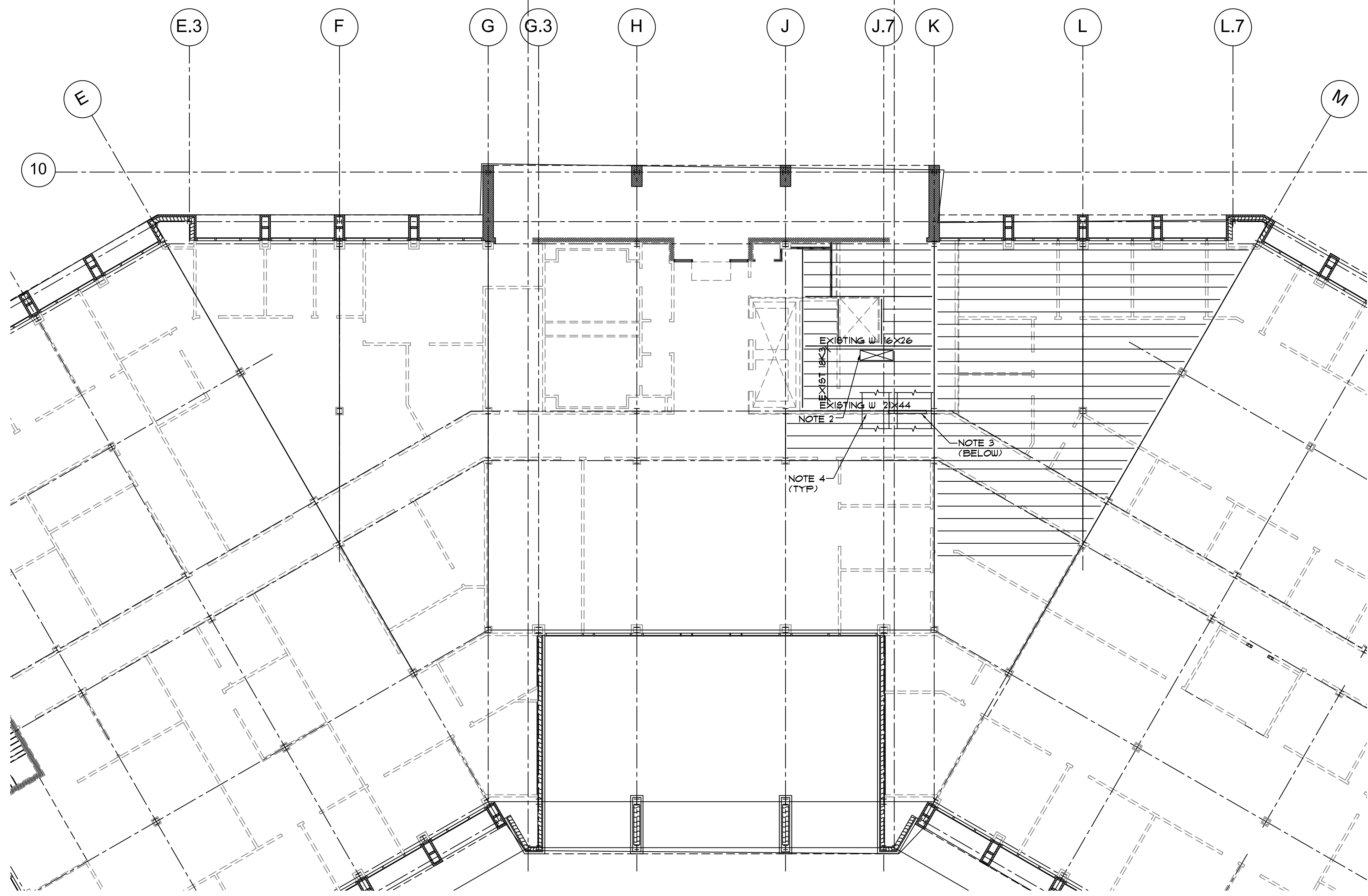
STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. DATE	SHEET A5 of 6 5/5/2014
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SECOND FLOOR-CEILING SCHEDULE

RM. NO.	ROOM NAME	SUSPENDED CEILING SYSTEM		REMARKS	RM. NO.	ROOM NAME	SUSPENDED CEILING SYSTEM		REMARKS
		SUSPENDED CEILING GRID	ACOUSTICAL CEILING TILES				SUSPENDED CEILING GRID	ACOUSTICAL CEILING TILES	
201	LOBBY	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT	252A	STORAGE	EXISTING	ACT-1	
202	FOYER	EXISTING	ACT-1		252B	OFFICE	EXISTING	ACT-1	
203	WOMEN	EXISTING	ACT-1		253	KITCHEN	EXISTING	ACT-1	
204	FOYER	EXISTING	ACT-1		254	GEN. OFFICE	EXISTING	ACT-1	
205	MEN	EXISTING	ACT-1		255	OFFICE	EXISTING	ACT-1	
206	ACCESSIBLE TLT.	EXISTING	ACT-1		256	WAITING	EXISTING	ACT-3	
207	MECHANICAL	—	—		257	CONFERENCE	EXISTING	ACT-3	
208	ELECTRICAL	—	—		258	STORAGE	EXISTING	ACT-1	
209	PASSAGE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT	259	OFFICE	EXISTING	ACT-1	
210	PASSAGE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT	260	OFFICE	EXISTING	ACT-3	
211	PASSAGE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT	261	OFFICE	EXISTING	ACT-3	
212	LOUNGE	EXISTING	ACT-1		262	OFFICE	EXISTING	ACT-3	
213	MAIL	EXISTING	ACT-1		263	OFFICE	EXISTING	EXISTING	
214	SUPPLY	EXISTING	ACT-1		264	TOILET	EXISTING	ACT-1	
215	OFFICE	EXISTING	ACT-1		265	OFFICE	EXISTING	ACT-1	
216	OFFICE	EXISTING	ACT-1		266	OFFICE	EXISTING	ACT-1	
217	OFFICE	EXISTING	ACT-1		267	WORKROOM	EXISTING	ACT-1	
218	OFFICE	EXISTING	ACT-1		268	GEN. OFFICE	EXISTING	ACT-3	
219	OFFICE	EXISTING	ACT-1		269	STAIR	EXISTING	ACT-1	
220	GEN. OFFICE	EXISTING	ACT-1		270	OFFICE	EXISTING	ACT-2	
221	HALL	EXISTING	ACT-1		271	OFFICE	EXISTING	ACT-2	
222	FILE ROOM	EXISTING	ACT-1		272	OFFICE	EXISTING	ACT-1	
223	FILES	EXISTING	ACT-1		273	OFFICE	EXISTING	ACT-2	
224	CONFERENCE	EXISTING	ACT-1		274	OFFICE	EXISTING	ACT-2	
225	OFFICE	EXISTING	ACT-1		275	OFFICE	EXISTING	ACT-1	
226	OFFICE	EXISTING	ACT-1		276	OFFICE	EXISTING	ACT-2	
227	OFFICE	EXISTING	ACT-1		277	OFFICE	EXISTING	ACT-1	
228	OFFICE	EXISTING	ACT-1		278	OFFICE	EXISTING	ACT-2	
229	PASSAGE	EXISTING	ACT-1		279	OFFICE	EXISTING	ACT-2	
230	FILES	EXISTING	ACT-1		280	OFFICE	EXISTING	ACT-1	
231	GEN. OFFICE	EXISTING	ACT-1		281	OFFICE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT
232	STAIR	EXISTING	ACT-1		282	OFFICE	SCG-1	ACT-1	MATCH EXISTING CEILING HEIGHT
233	OFFICE	EXISTING	ACT-1		283A	OFFICE	EXISTING	ACT-1	
234	GEN. OFFICE	EXISTING	ACT-1		283B	OFFICE	EXISTING	ACT-1	
235	OFFICE	EXISTING	ACT-1		284	OFFICE	EXISTING	ACT-1	
236	OFFICE	EXISTING	ACT-1		285	OFFICE	EXISTING	ACT-1	
237	OFFICE	EXISTING	ACT-1		286	OFFICE	EXISTING	ACT-1	
238	GEN. OFFICE	EXISTING	ACT-1		287	GEN. OFFICE	EXISTING	ACT-1	
238A	OFFICE	EXISTING	ACT-1						
239	OFFICE	EXISTING	ACT-1						
240	GEN. OFFICE	EXISTING	ACT-1						
241	OFFICE	EXISTING	ACT-1						
242	OFFICE	EXISTING	ACT-1						
243	GEN. OFFICE	EXISTING	ACT-1						
244	OFFICE	EXISTING	ACT-1						
245	OFFICE	EXISTING	ACT-1						
246	OFFICE	EXISTING	ACT-1						
247	CONFERENCE	EXISTING	ACT-1						
248	STORAGE	EXISTING	ACT-1						
249	TRAINING	EXISTING	ACT-1						
250	OFFICE	EXISTING	ACT-1						
251	CONFERENCE	—	—						

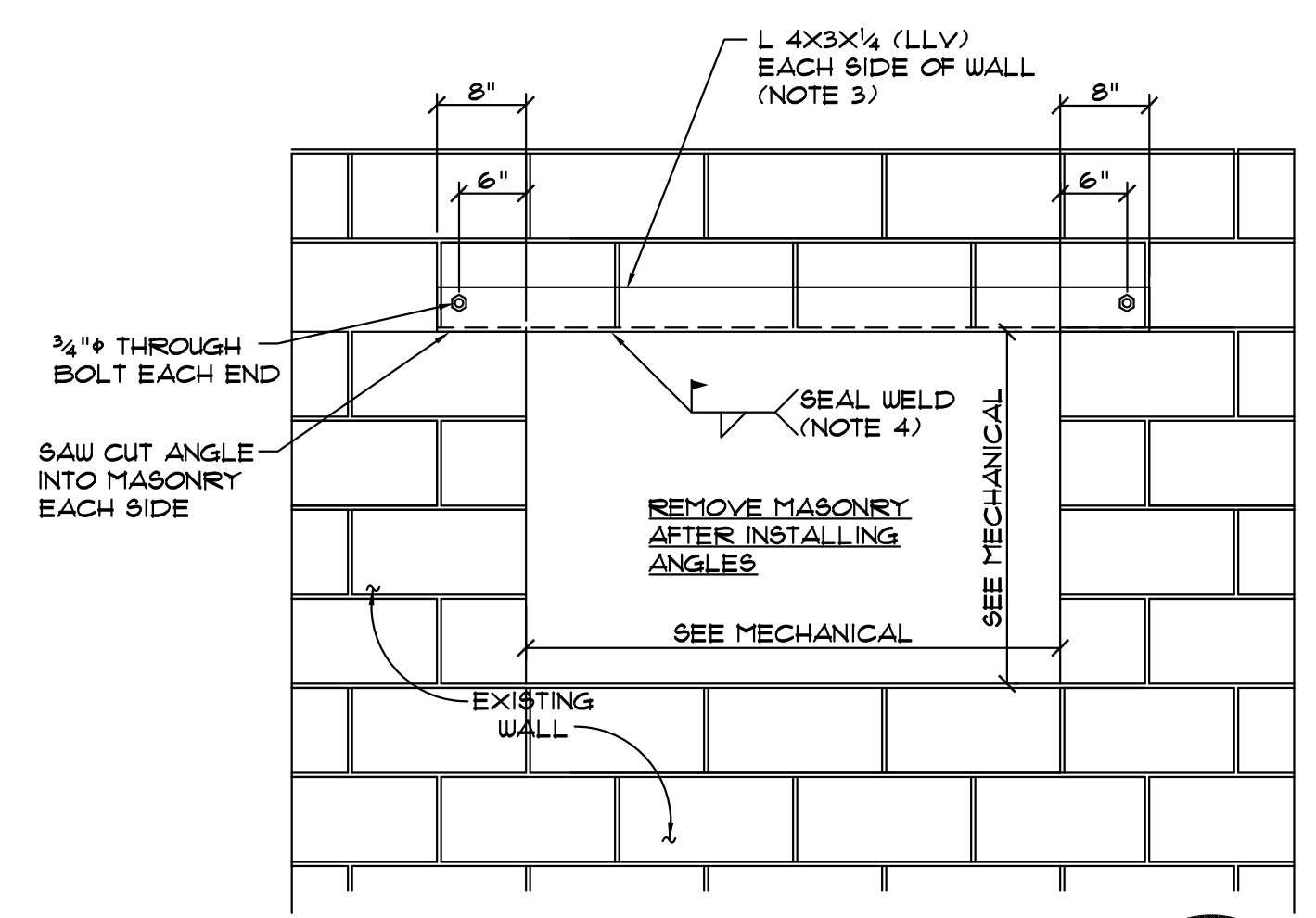
NOTE: REFER TO TECHNICAL SPECIFICATIONS IN PROJECT MANUAL FOR INFORMATION ON SUSPENDED CEILING GRID (SCG-1) AND ACOUSTICAL CEILING TILES (ACT-1), (ACT-2, & (ACT-3).

 <p><i>The State of South Carolina</i></p>	AGENCY OR INSTITUTION Department of Disabilities and Special Needs	PROFESSIONAL SEAL _____ _____ _____	A & E FIRM _____ _____ _____	SHEET TITLE SECOND FLOOR-CEILING SCHEDULE	PROJECT TITLE SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATIONS) COLUMBIA, SOUTH CAROLINA	
	DIVISION _____	REVISION _____	DATE _____	BY _____	APP. _____	A & E PROJECT NO. _____
				DRAWN BY: _____	CHECKED BY: _____	FINAL APP.: _____
				STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. _____	SHEET A6 of 6
				DATE 5/5/2014		



GENERAL NOTES

- IN CASE OF A DISCREPANCY BETWEEN THE ARCHITECTURAL, MECHANICAL AND STRUCTURAL DRAWINGS, CONSULT WITH THE MECHANICAL ENGINEER. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS RELATED TO EXISTING CONSTRUCTION.
- EXISTING STRUCTURAL INFORMATION IS BASED ON THE ORIGINAL STRUCTURAL DRAWINGS DATED 4/1/88.
- DESIGN CRITERIA
 - BUILDING CODE: 2012 INTERNATIONAL BUILDING CODE
 - RISK CATEGORY II
 - SEISMIC DESIGN DATA
 - IMPORTANCE FACTOR 1.00
 - $S_a = 0.415$ $S_1 = 0.142$
 - $S_{ps} = 0.406$ $\phi_{ps} = 0.211$
 - SITE CLASS D (ASSUMED) SEISMIC DESIGN CATEGORY D
 - WIND VELOCITY 115 MPH, EXPOSURE B, INTERNAL PRESSURE COEFFICIENT 1.0
- NEW MECHANICAL UNITS (SEE A/52 FOR WEIGHTS)
 - GRAVITY LOADS OF NEW UNITS ON EXISTING STRUCTURE CONFORM TO CODE REQUIREMENTS FOR NEW STRUCTURES (IBC 3404.3)
 - SEISMIC LOADS OF NEW UNITS ON EXISTING STRUCTURE INCREASE THE SEISMIC FORCE IN ANY EXISTING STRUCTURAL ELEMENT BY LESS THAN 10% (IBC 3404.4). NOTE THAT EXISTING ROOF LOAD WILL BE REDUCED CONCURRENTLY IN AN ASSOCIATED ROOFING PROJECT MORE THAN THE ADDITIONAL WEIGHT OF THE NEW UNITS.
- STEEL MATERIALS
 - STRUCTURAL STEEL: ASTM A36, PRIME MEMBERS WITH MANUFACTURER'S STANDARD RUST INHIBITIVE PRIMER
 - WELDING ELECTRODES: E70XX.
- SPECIAL INSPECTOR SHALL INSPECT COMPLETED STEEL MEMBERS IN ACCORDANCE WITH IBC 1705.2. INSPECT JOIST MODIFICATIONS INCLUDING STEEL REINFORCING AND HEADERS.



"L" LINTEL ELEVATION B
SCALE 3/4" = 1'-0"

- NOTES:
- USE THIS LINTEL DETAIL FOR NEW MECHANICAL OPENINGS OVER 20" WIDE IN EXISTING CMU WALLS.
 - SEE THE MECHANICAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
 - THIS DETAIL IS FOR 8" CMU WALLS. IF AN "L" LINTEL IS REQUIRED AT AN 8" CMU WALL, USE L 4x4x1/4 ANGLES.
 - EXISTING WALLS ARE FILLED WITH SAND OR VERMICULITE. TAKE CARE WHEN INSTALLING LINTELS NOT TO ALLOW SAND OR VERMICULITE TO ESCAPE. SEAL WELD BOTTOM LEGS OF ANGLES TOGETHER TO PREVENT SAND OR VERMICULITE FROM ESCAPING. REBUILD MASONRY AT JAMBS AND SILL OF OPENINGS TO SEAL WALL COMPLETELY.

PARTIAL SECOND FLOOR FRAMING PLAN
SCALE 3/32" = 1'-0"

- PLAN NOTES:
- EXISTING FLOOR STRUCTURE IS A 3" CONCRETE SLAB ON CORRUGATED STEEL DECK SUPPORTED ON STEEL BAR JOISTS @ 24" OC. NOT ALL EXISTING FLOOR FRAMING IS SHOWN ON THIS PLAN.
 - WHERE "NOTE 2" IS INDICATED, CUT NEW DUCT OPENING FOR DUCT SHOWN ON MECHANICAL DRAWINGS. DUCT MUST FIT BETWEEN EXISTING JOISTS. CONTACT MECHANICAL ENGINEER FOR AN ADJUSTED DUCT SIZE IF FIELD MEASUREMENTS SHOW THAT DUCT WILL NOT FIT BETWEEN JOISTS. DO NOT CUT JOISTS AND DO NOT OVERCUT CORNERS OF OPENING.
 - WHERE "NOTE 3" IS INDICATED, SAW CUT NEW DOUBLE DOOR OPENING IN CMU WALL BELOW IN FIRST STORY. CUT OPENING IN LOCATION WHERE FUTURE DOOR WAS PLANNED, INDICATED BY EXISTING CONSTRUCTION JOINTS IN WALL. DO NOT OVERCUT OPENING AT CORNERS AND DO NOT DAMAGE BOND BEAM LINTEL OVER OPENING. LEAVE 24" OF EXISTING MASONRY OVER TOP OF NEW DOOR OPENING. SEE ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
 - AT THE TWO NEW DUCT OPENINGS NEAR WHERE "NOTE 4" IS INDICATED, REMOVE EXISTING MASONRY FOR DUCT OPENING UP TO BOTTOM OF EXISTING STEEL BEAM ABOVE. LEAVE 16" OF MASONRY BETWEEN THE TWO DUCT OPENINGS. SEE NOTE 4 ON DETAIL B/S1.

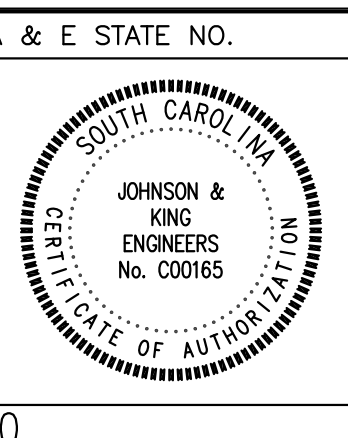


AGENCY OR INSTITUTION
Department of Disabilities and Special Needs



REVISION	DATE	BY	APP.

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Post Office Box 11686 Fax: (803) 791-0830
Columbia, S.C. 29211 mail@swygart-associates.com

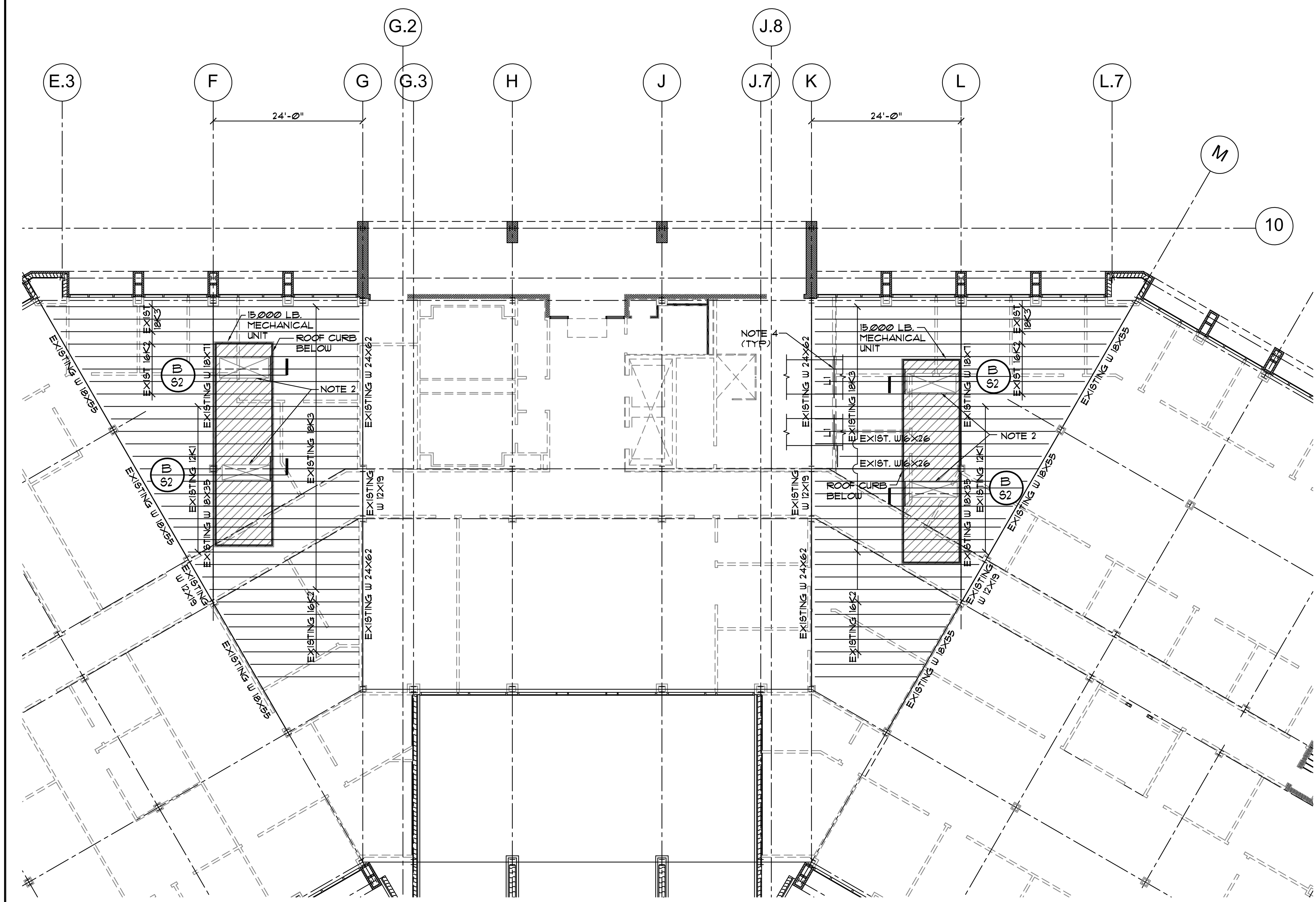


A & E STATE NO. 12770
SHEET TITLE
PARTIAL SECOND FLOOR FRAMING PLAN AND GENERAL NOTES

PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

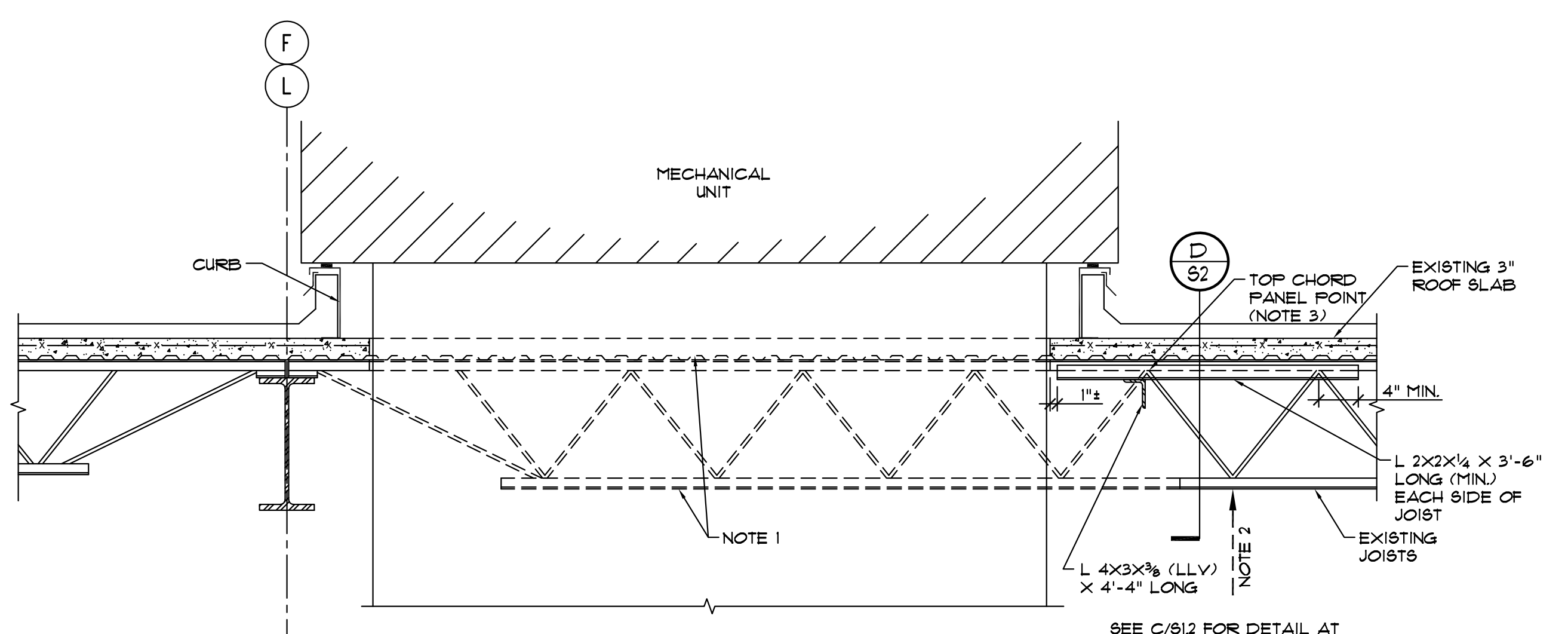
STATE PROJECT NO. J16-9863-FW-A	DRAWING NO.	SHEET
DATE 5/5/2014		S1 of 2

JOHNSON & KING ENGINEERS
structural consultants
1223 Elmwood Avenue | 803.779.8830 T
Columbia, SC 29201 | 803.779.8831 F



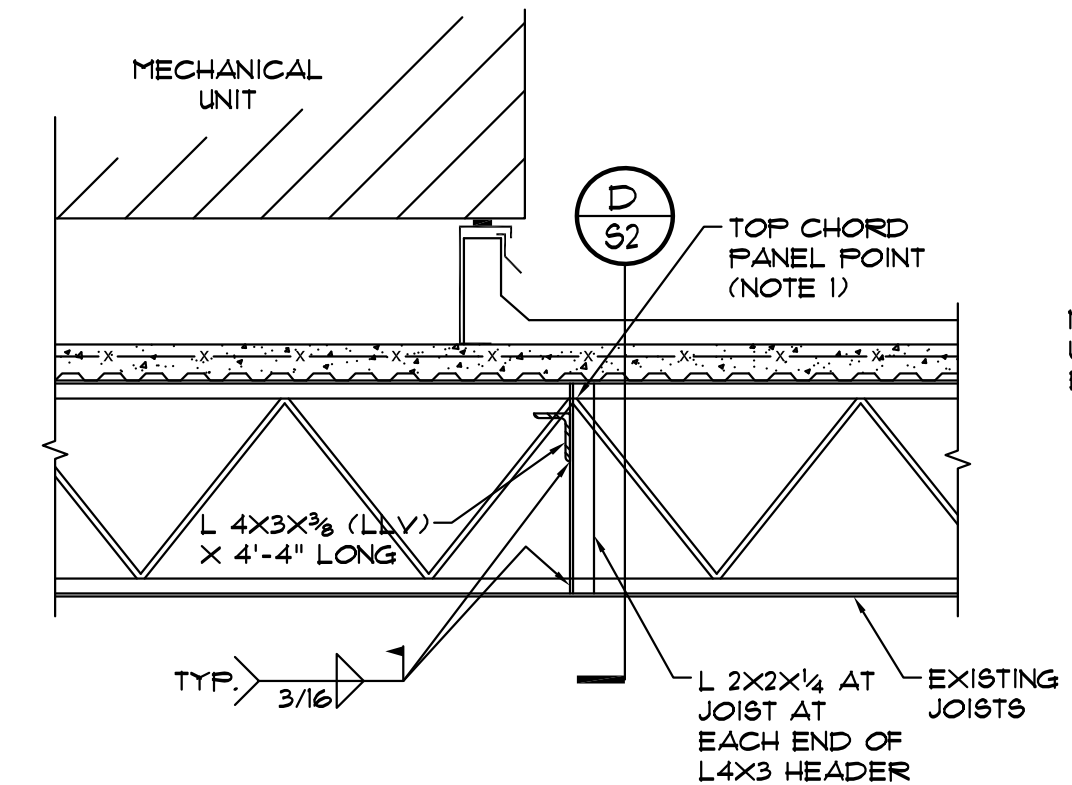
PARTIAL ROOF FRAMING PLAN A
SCALE 3/32" = 1'-0"
S2

- PLAN NOTES:**
- EXISTING ROOF STRUCTURE IS A 3" CONCRETE SLAB ON CORRUGATED STEEL DECK SUPPORTED ON STEEL BAR JOISTS @ 24" OC. NOT ALL EXISTING ROOF FRAMING IS SHOWN ON THIS PLAN.
 - WHERE "NOTE 2" IS INDICATED, CUT NEW DUCT OPENING FOR DUCTS SHOWN ON MECHANICAL DRAWINGS. CUT SLAB AND CUT A MAXIMUM OF ONE JOIST AT EACH DUCT OPENING AS SHOWN IN B/912. DO NOT OVERCUT CORNERS OF OPENING.
 - ADJUST MECHANICAL UNIT LOCATIONS AS REQUIRED SO THAT ONLY ONE JOIST HAS TO BE CUT FOR THE SUPPLY DUCT OPENING AND ONLY ONE JOIST HAS TO BE CUT FOR THE RETURN DUCT OPENING UNDER EACH UNIT AS SHOWN IN B/912. OBTAIN APPROVAL OF MECHANICAL ENGINEER FOR FINAL UNIT LOCATIONS.
 - SEE B/91 FOR LINTELS AT NEW OPENINGS IN EXISTING CMU WALLS BELOW (INDICATED "LI" ON PLAN).



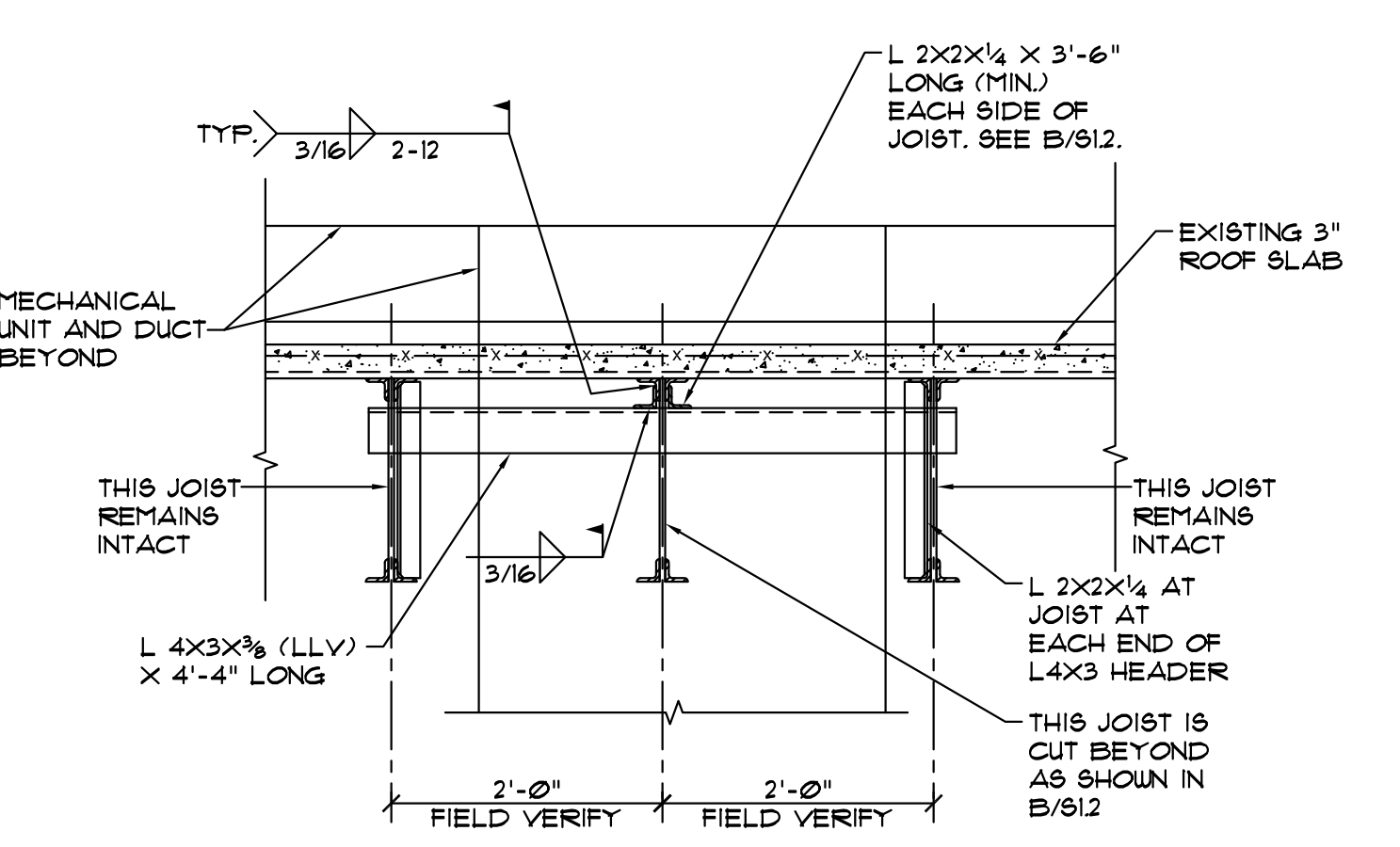
SECTION B
SCALE 3/4" = 1'-0"
S2

- NOTES:**
- CUT OUT SLAB AND ONE JOIST AT SUPPLY DUCT AND ONE JOIST AT RETURN DUCT. DO NOT OVERCUT SLAB AT CORNERS OF OPENINGS AND DO NOT DAMAGE OR CUT ADJACENT JOISTS.
 - CONTRACTOR SHALL SHORE EXISTING JOISTS BEFORE CUTTING JOISTS. CONTRACTOR IS RESPONSIBLE FOR DETERMINING SHORING LOADS AND METHOD OF SHORING.
 - L4X3 HEADER AND L2X2 JOIST REINFORCING BEYOND MUST BE INSTALLED AT A TOP CHORD PANEL POINT OF THE EXISTING JOISTS AS SHOWN ABOVE.



SECTION C
SCALE 3/4" = 1'-0"
S2

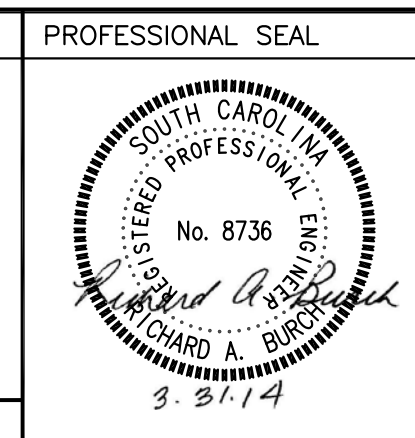
- NOTES:**
- L4X3 HEADER AND L2X2 JOIST REINFORCING MUST BE INSTALLED AT A TOP CHORD PANEL POINT OF THE EXISTING JOISTS AS SHOWN ABOVE.
 - THIS DETAIL IS TYPICAL AT JOISTS EACH SIDE OF JOISTS WHICH ARE CUT AS SHOWN IN B/912.



SECTION D
SCALE 3/4" = 1'-0"
S2

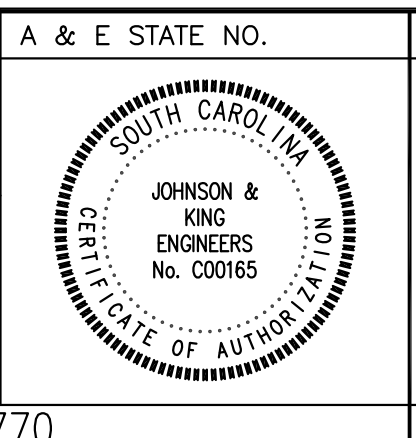


AGENCY OR INSTITUTION
Department of Disabilities and Special Needs



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A & E STATE NO.
PARTIAL ROOF FRAMING PLAN AND DETAILS
DRAWN BY: RAB CHECKED BY: JLM FINAL APP.: RAB

PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

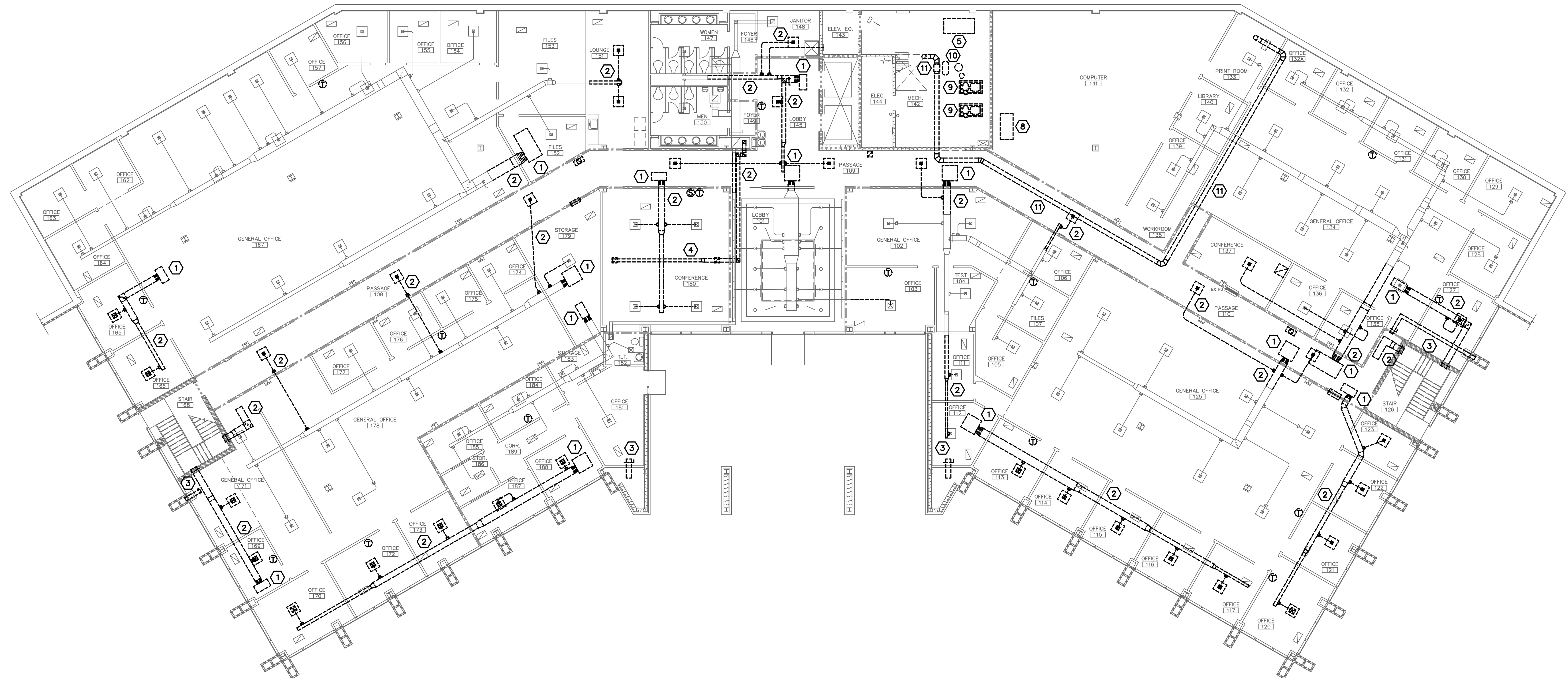
STATE PROJECT NO.	DRAWING NO.	SHEET
J16-9863-FW-A		S2 of 2
	DATE	
	5/5/2014	

JOHNSON & KING ENGINEERS
structural consultants
1223 Elmwood Avenue | 803.779.8830 T
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DEMOLITION NOTES

PHASING: COORDINATE PHASING OF DEMOLITION IN ORDER TO MAINTAIN THE EXISTING WATER SOURCE HEAT PUMP SYSTEM IN OPERATION UNTIL THE START OF PHASE TWO.

- ① REMOVE WATER SOURCE HEAT PUMP COMPLETE INCLUDING WALL THERMOSTAT, DRAIN LINE, AND CONDENSER WATER PIPING.
- ② REMOVE SUPPLY DUCT AND DIFFUSERS AS SHOWN. PATCH EXISTING TRUNK DUCTS AND INSULATION TO MATCH EXISTING WHERE REQUIRED.
- ③ REMOVE OUTSIDE AIR DUCT.
- ④ REMOVE EXHAUST DUCT AND GRILLES AS SHOWN.
- ⑤ REMOVE HEAT EXCHANGER AND ASSOCIATED PIPING IN MECHANICAL ROOM. CAP CONDENSER WATER PIPING AT EXTERIOR WALL.
- ⑥ REMOVE BOILER.
- ⑦ REMOVE COOLING TOWER, PUMPS, AND ASSOCIATED PIPING COMPLETE. CAP ABANDONED CONDENSER WATER PIPING BELOW GRADE.
- ⑧ REMOVE WATER SOURCE COMPUTER ROOM A/C UNIT COMPLETE. CAP CONDENSER WATER PIPING RUNOUTS AT FLOOR.
- ⑨ REMOVE PUMP.
- ⑩ REMOVE EXPANSION TANK, AIR SEPARATOR, AND CHEMICAL POT FEEDER.
- ⑪ REMOVE INLINE EXHAUST FAN AND ALL ASSOCIATED DUCT.
- ⑫ REMOVE EXHAUST HOOD COMPLETE.
- ⑬ REMOVE CONDENSER WATER PIPING.



1 FIRST FLOOR DEMOLITION PLAN
 MD1 SCALE: 3/32" = 1'-0"



AGENCY OR INSTITUTION
Department of Disabilities and Special Needs

PROFESSIONAL SEAL

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 Email: info@swygert-associates.com

A & E STATE NO.

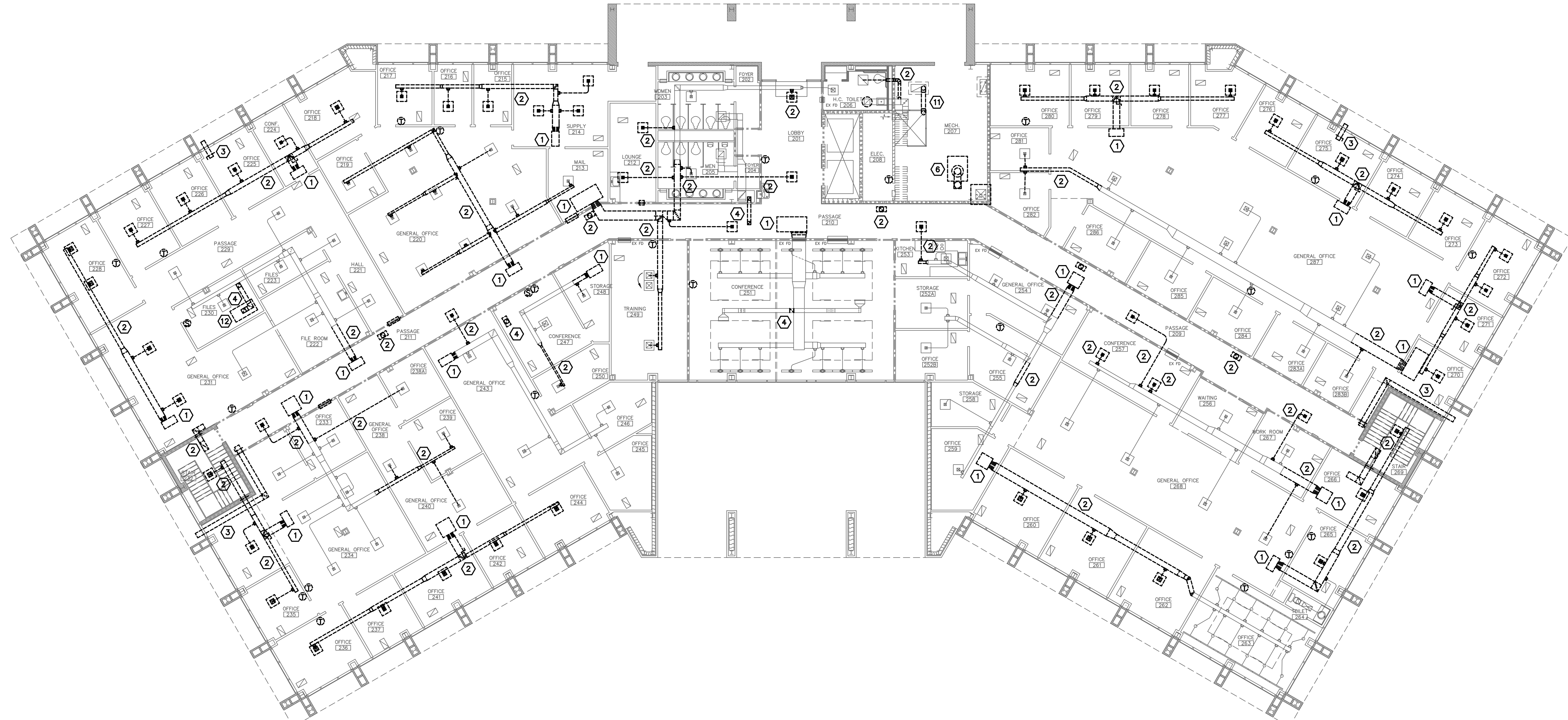
SHEET TITLE
FIRST FLOOR DEMOLITION PLAN

PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

STATE PROJECT NO. **J16-9863-FW-A**
 DRAWING NO. **MD1**
 SHEET **of 13**
 DATE **5/5/2014**

DEMOLITION NOTES

- PHASING: COORDINATE PHASING OF DEMOLITION IN ORDER TO MAINTAIN THE EXISTING WATER SOURCE HEAT PUMP SYSTEM IN OPERATION UNTIL THE START OF PHASE TWO.
- ① REMOVE WATER SOURCE HEAT PUMP COMPLETE INCLUDING WALL THERMOSTAT, DRAIN LINE, AND CONDENSER WATER PIPING.
 - ② REMOVE SUPPLY DUCT AND DIFFUSERS AS SHOWN. PATCH EXISTING TRUNK DUCTS AND INSULATION TO MATCH EXISTING WHERE REQUIRED.
 - ③ REMOVE OUTSIDE AIR DUCT.
 - ④ REMOVE EXHAUST DUCT AND GRILLES AS SHOWN.
 - ⑤ REMOVE HEAT EXCHANGER AND ASSOCIATED PIPING IN MECHANICAL ROOM. CAP CONDENSER WATER PIPING AT EXTERIOR WALL.
 - ⑥ REMOVE BOILER.
 - ⑦ REMOVE COOLING TOWER, PUMPS, AND ASSOCIATED PIPING COMPLETE. CAP ABANDONED CONDENSER WATER PIPING BELOW GRADE.
 - ⑧ REMOVE WATER SOURCE COMPUTER ROOM A/C UNIT COMPLETE. CAP CONDENSER WATER PIPING RUNOUTS AT FLOOR.
 - ⑨ REMOVE PUMP.
 - ⑩ REMOVE EXPANSION TANK, AIR SEPARATOR, AND CHEMICAL POT FEEDER.
 - ⑪ REMOVE INLINE EXHAUST FAN AND ALL ASSOCIATED DUCT.
 - ⑫ REMOVE EXHAUST HOOD COMPLETE.
 - ⑬ REMOVE CONDENSER WATER PIPING.

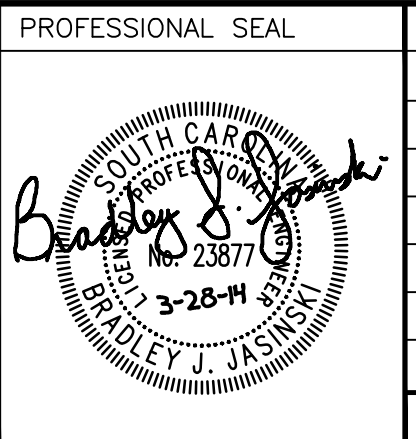


1 SECOND FLOOR DEMOLITION PLAN
 MD2 SCALE: 3/32" = 1'-0"



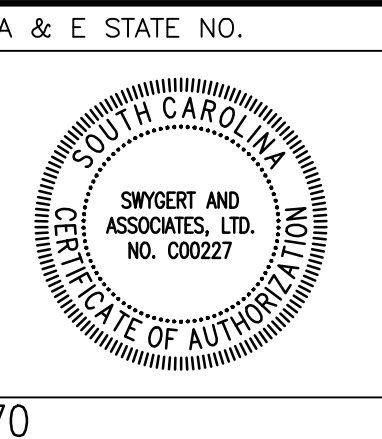
The State of South Carolina

AGENCY OR INSTITUTION
 Department of Disabilities and Special Needs



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 Swygert & Associates
 CONSULTING ENGINEERS
 DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300
 Post Office Box 11686 Columbia, S.C. 29211 Facsimile: (803) 791-0830
 mol@swygert-associates.com



A & E STATE NO.
 SHEET TITLE
SECOND FLOOR DEMOLITION PLAN

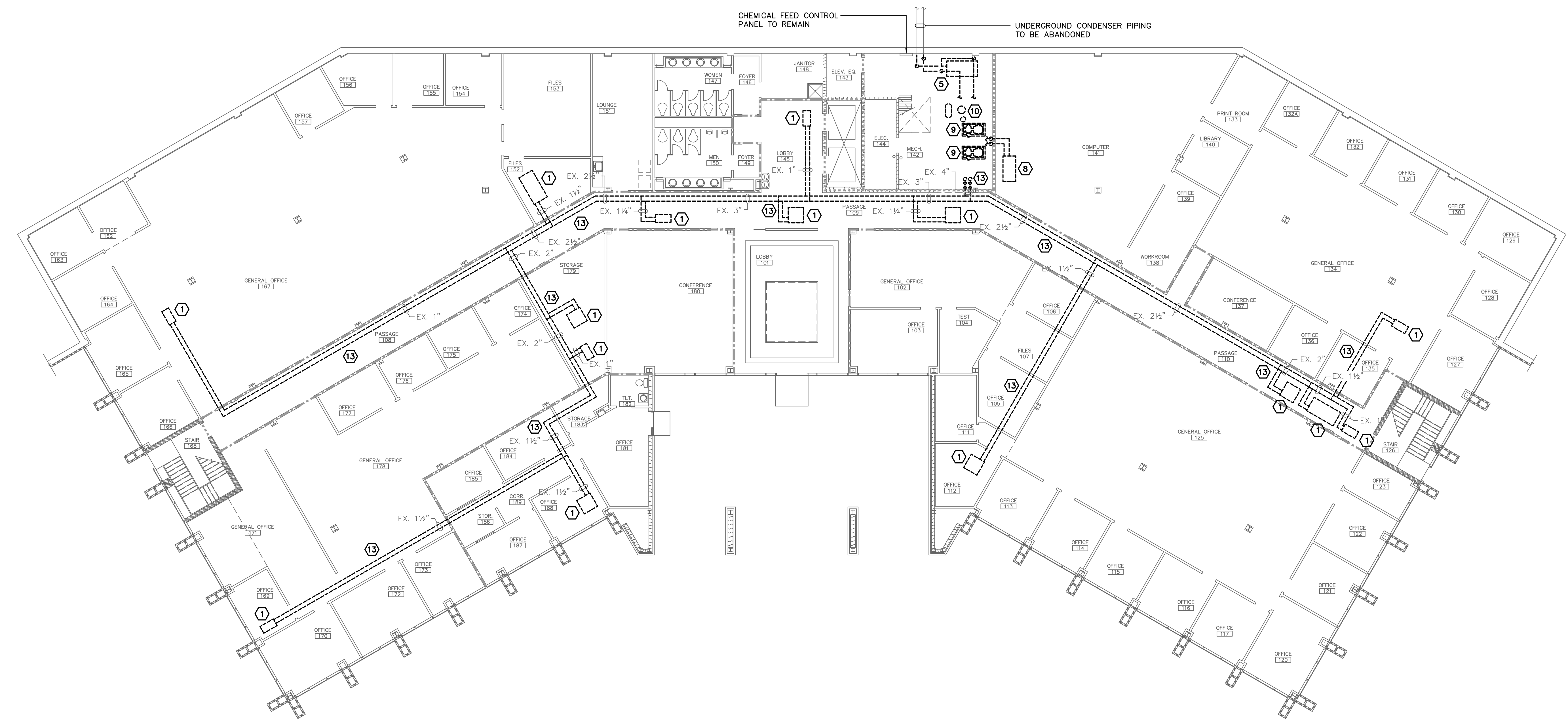
PROJECT TITLE
 SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. DATE 5/5/2014	SHEET MD2 of 13
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DEMOLITION NOTES

- PHASING: COORDINATE PHASING OF DEMOLITION IN ORDER TO MAINTAIN THE EXISTING WATER SOURCE HEAT PUMP SYSTEM IN OPERATION UNTIL THE START OF PHASE TWO.
- ① REMOVE WATER SOURCE HEAT PUMP COMPLETE INCLUDING WALL THERMOSTAT, DRAIN LINE, AND CONDENSER WATER PIPING.
 - ② REMOVE SUPPLY DUCT AND DIFFUSERS AS SHOWN. PATCH EXISTING TRUNK DUCTS AND INSULATION TO MATCH EXISTING WHERE REQUIRED.
 - ③ REMOVE OUTSIDE AIR DUCT.
 - ④ REMOVE EXHAUST DUCT AND GRILLES AS SHOWN.
 - ⑤ REMOVE HEAT EXCHANGER AND ASSOCIATED PIPING IN MECHANICAL ROOM. CAP CONDENSER WATER PIPING AT EXTERIOR WALL.
 - ⑥ REMOVE BOILER.
 - ⑦ REMOVE COOLING TOWER, PUMPS, AND ASSOCIATED PIPING COMPLETE. CAP ABANDONED CONDENSER WATER PIPING BELOW GRADE.
 - ⑧ REMOVE WATER SOURCE COMPUTER ROOM A/C UNIT COMPLETE. CAP CONDENSER WATER PIPING RUNOUTS AT FLOOR.
 - ⑨ REMOVE PUMP.
 - ⑩ REMOVE EXPANSION TANK, AIR SEPARATOR, AND CHEMICAL POT FEEDER.
 - ⑪ REMOVE INLINE EXHAUST FAN AND ALL ASSOCIATED DUCT.
 - ⑫ REMOVE EXHAUST HOOD COMPLETE.
 - ⑬ REMOVE CONDENSER WATER PIPING.



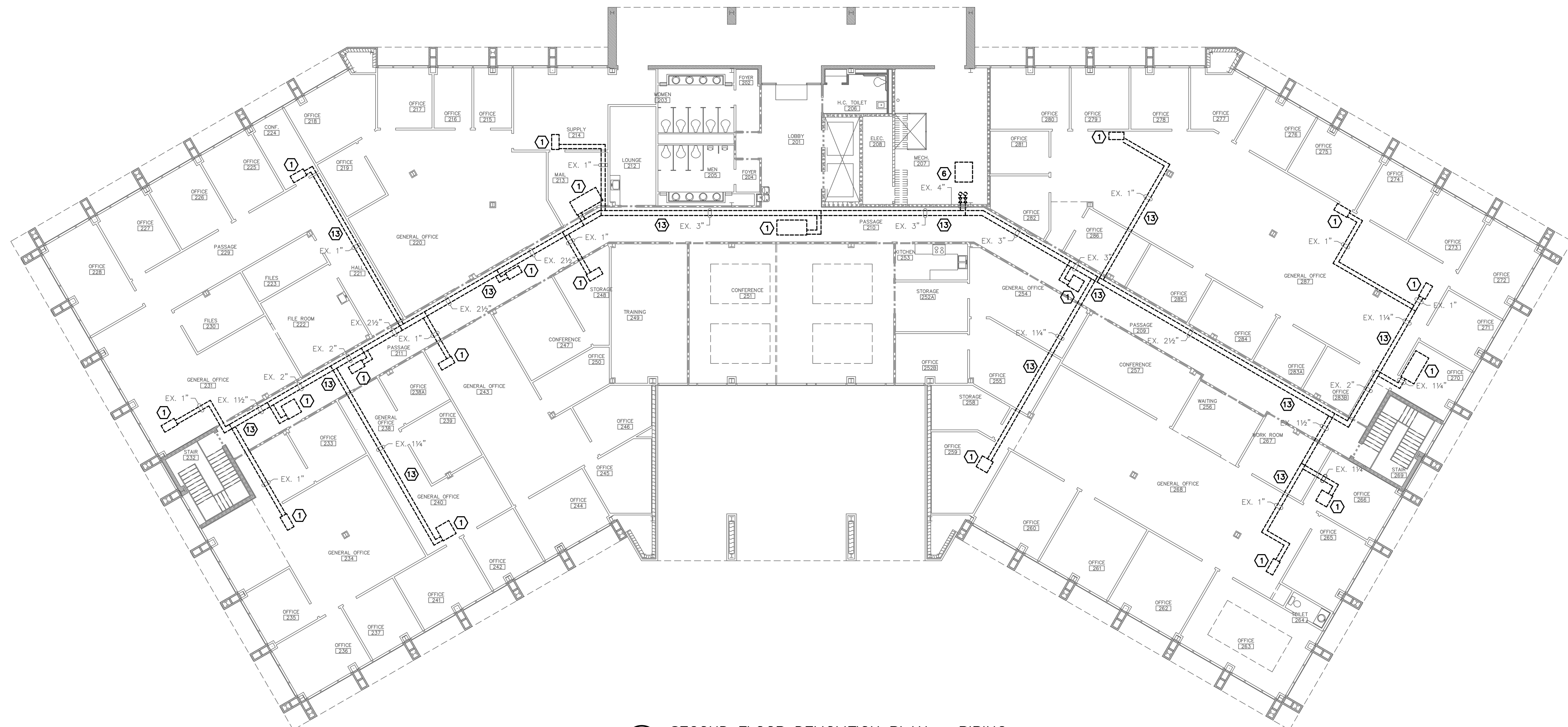
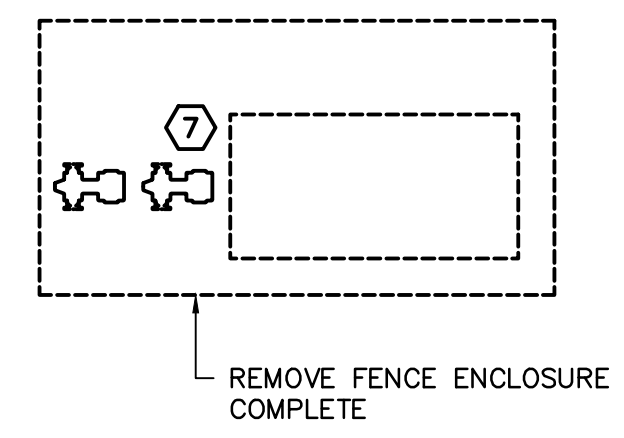
1 FIRST FLOOR DEMOLITION PLAN – PIPING
 MD3 SCALE: 3/32" = 1'-0"

 The State of South Carolina	AGENCY OR INSTITUTION Department of Disabilities and Special Needs	PROFESSIONAL SEAL 		A & E FIRM Swygart & Associates CONSULTING ENGINEERS <small>DBA Swygart & Assoc., Ltd. Telephone: (803) 791-9300 Post Office Box 11686 Columbia, S.C. 29211 Facsimile: (803) 791-9830 mol@swygart-associates.com</small>	A & E STATE NO. 	SHEET TITLE FIRST FLOOR DEMOLITION PLAN PIPING	PROJECT TITLE SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA		
	DIVISION	REVISION	DATE	BY	APP.	A & E PROJECT NO. 12770	DRAWN BY: BJJ CHECKED BY: WCL FINAL APP.: BJJ	STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. DATE 5/5/2014

DEMOLITION NOTES

PHASING: COORDINATE PHASING OF DEMOLITION IN ORDER TO MAINTAIN THE EXISTING WATER SOURCE HEAT PUMP SYSTEM IN OPERATION UNTIL THE START OF PHASE TWO.

- ① REMOVE WATER SOURCE HEAT PUMP COMPLETE INCLUDING WALL THERMOSTAT, DRAIN LINE, AND CONDENSER WATER PIPING.
- ② REMOVE SUPPLY DUCT AND DIFFUSERS AS SHOWN. PATCH EXISTING TRUNK DUCTS AND INSULATION TO MATCH EXISTING WHERE REQUIRED.
- ③ REMOVE OUTSIDE AIR DUCT.
- ④ REMOVE EXHAUST DUCT AND GRILLES AS SHOWN.
- ⑤ REMOVE HEAT EXCHANGER AND ASSOCIATED PIPING IN MECHANICAL ROOM. CAP CONDENSER WATER PIPING AT EXTERIOR WALL.
- ⑥ REMOVE BOILER.
- ⑦ REMOVE COOLING TOWER, PUMPS, AND ASSOCIATED PIPING COMPLETE. CAP ABANDONED CONDENSER WATER PIPING BELOW GRADE.
- ⑧ REMOVE WATER SOURCE COMPUTER ROOM A/C UNIT COMPLETE. CAP CONDENSER WATER PIPING RUNOUTS AT FLOOR.
- ⑨ REMOVE PUMP.
- ⑩ REMOVE EXPANSION TANK, AIR SEPARATOR, AND CHEMICAL POT FEEDER.
- ⑪ REMOVE INLINE EXHAUST FAN AND ALL ASSOCIATED DUCT.
- ⑫ REMOVE EXHAUST HOOD COMPLETE.
- ⑬ REMOVE CONDENSER WATER PIPING.



1 SECOND FLOOR DEMOLITION PLAN – PIPING
 SCALE: 3/32" = 1'-0"

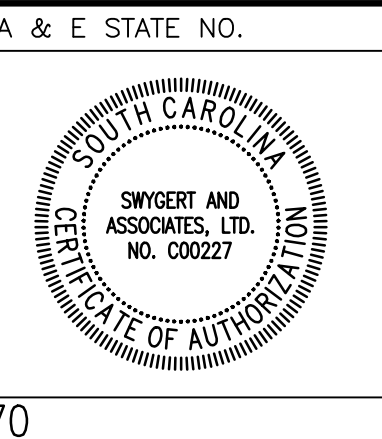


AGENCY OR INSTITUTION
Department of Disabilities and Special Needs

PROFESSIONAL SEAL

 REVISION DATE BY APP.

A & E FIRM
Swygart & Associates
 CONSULTING ENGINEERS
DBA Swygart & Assoc., Ltd. Telephone: (803) 791-9300
 Post Office Box 11686 Columbia, S.C. 29211 Facsimile: (803) 791-9830
 mol@swygart-associates.com



A & E STATE NO. SHEET TITLE
SECOND FLOOR DEMOLITION PLAN PIPING

PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

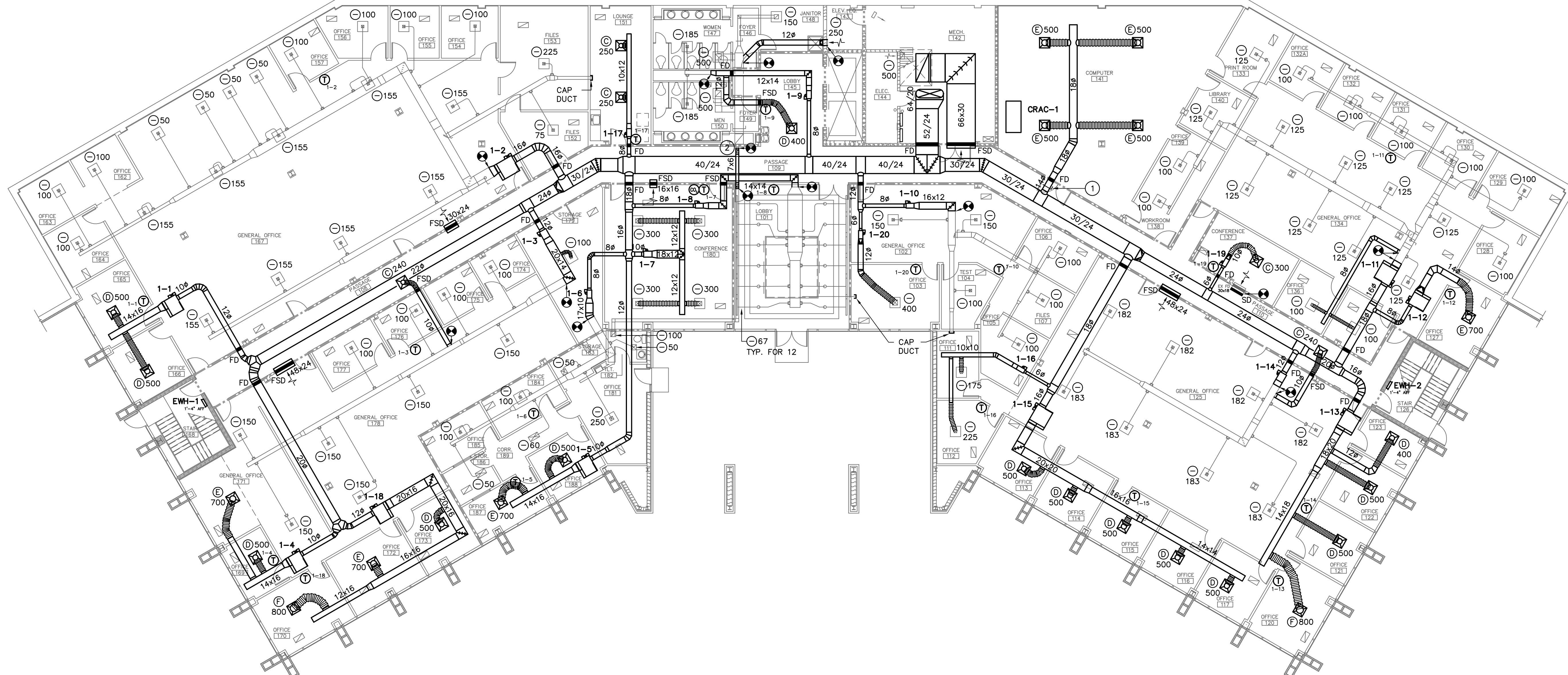
STATE PROJECT NO. DRAWING NO. SHEET
J16-9863-FW-A **MD4 of 13**

DATE: 5/5/2014

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NOTES TO SHEET


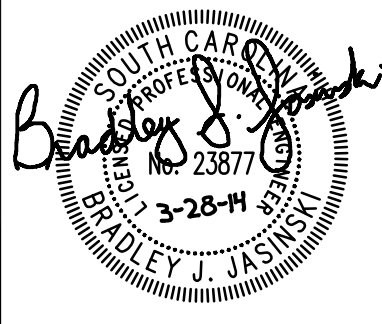

- 1 PROVIDE LOW LEAKAGE MANUALLY OPERATED BLAST GATE IN MEDIUM PRESSURE DUCT. GATE SHALL BE NORMALLY CLOSED.
- 2 EXHAUST DUCT OFFSETS UP TO ROUTE THROUGH BAR JOISTS.



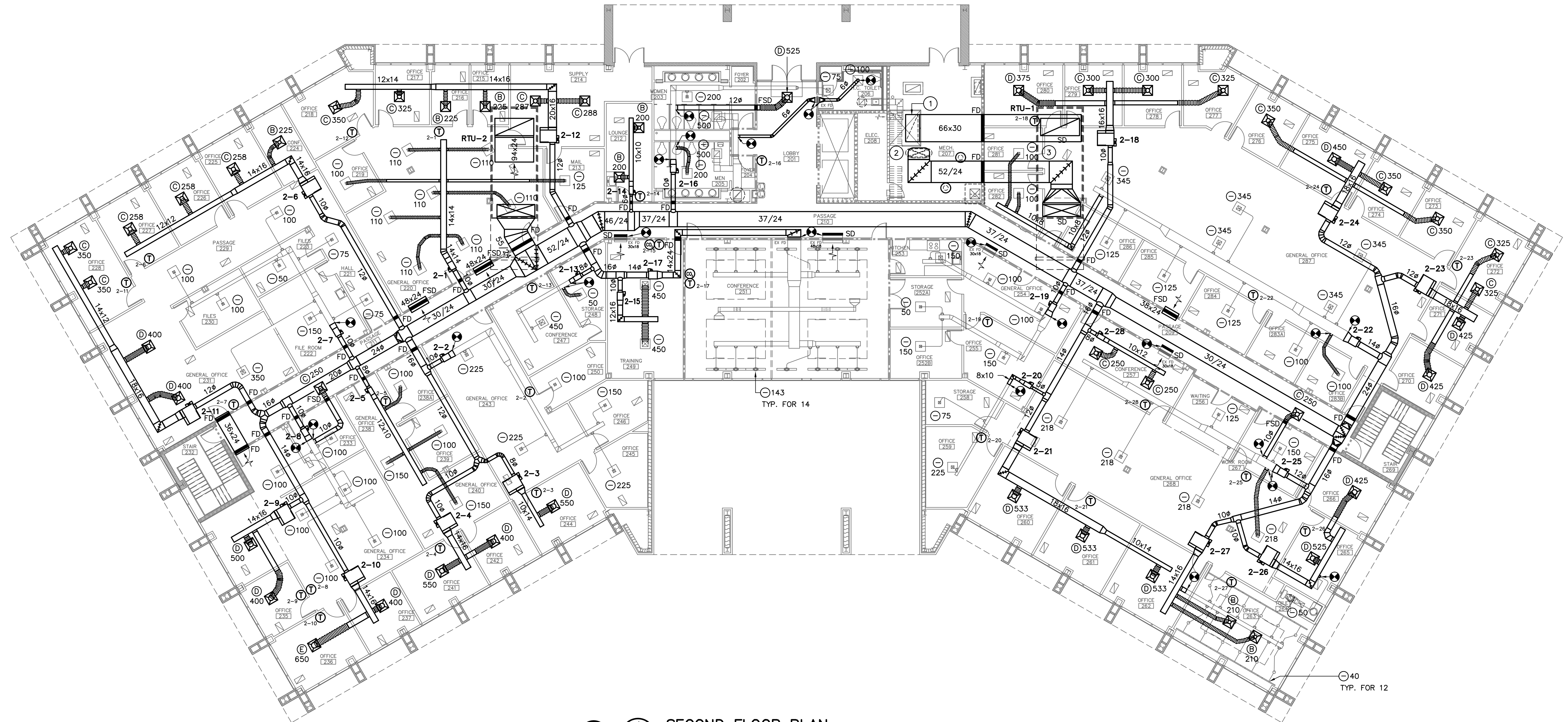
1 FIRST FLOOR PLAN
 SCALE: 3/32" = 1'-0"

WALL LEGEND

- 3 5/8" METAL STUD (1 HR RATED)
- 8" MASONRY (1 HR RATED)

 <p>The State of South Carolina</p>	AGENCY OR INSTITUTION Department of Disabilities and Special Needs	PROFESSIONAL SEAL 	A & E FIRM Swygert & Associates CONSULTING ENGINEERS <small>DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300 Post Office Box 11686 Columbia, S.C. 29211 Facsimile: (803) 791-9830 Email: swygert@swygert-associates.com</small>	A & E STATE NO. 	SHEET TITLE FIRST FLOOR PLAN	PROJECT TITLE SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA
	DIVISION	REVISION	DATE	BY	APP.	A & E PROJECT NO. 12770

- NOTES TO SHEET**
- 66x30 RETURN DUCT DROPS DOWN THROUGH EXISTING FLOOR OPENING BESIDE EXISTING LADDER. LADDER MUST REMAIN ACCESSIBLE.
 - FLAT OVAL SUPPLY DUCT TRANSITIONS TO 64/20 IN VERTICAL TO PASS THROUGH FLOOR BETWEEN EXISTING JOISTS.
 - PROVIDE SMOKE DAMPERS IN VERTICAL SUPPLY AND RETURN DUCT DROPS FOR RTU-1.



1 SECOND FLOOR PLAN
 SCALE: 3/32" = 1'-0"

WALL LEGEND

	3 5/8" METAL STUD (1 HR RATED)
	8" MASONRY (1 HR RATED)



AGENCY OR INSTITUTION
Department of Disabilities and Special Needs

PROFESSIONAL SEAL

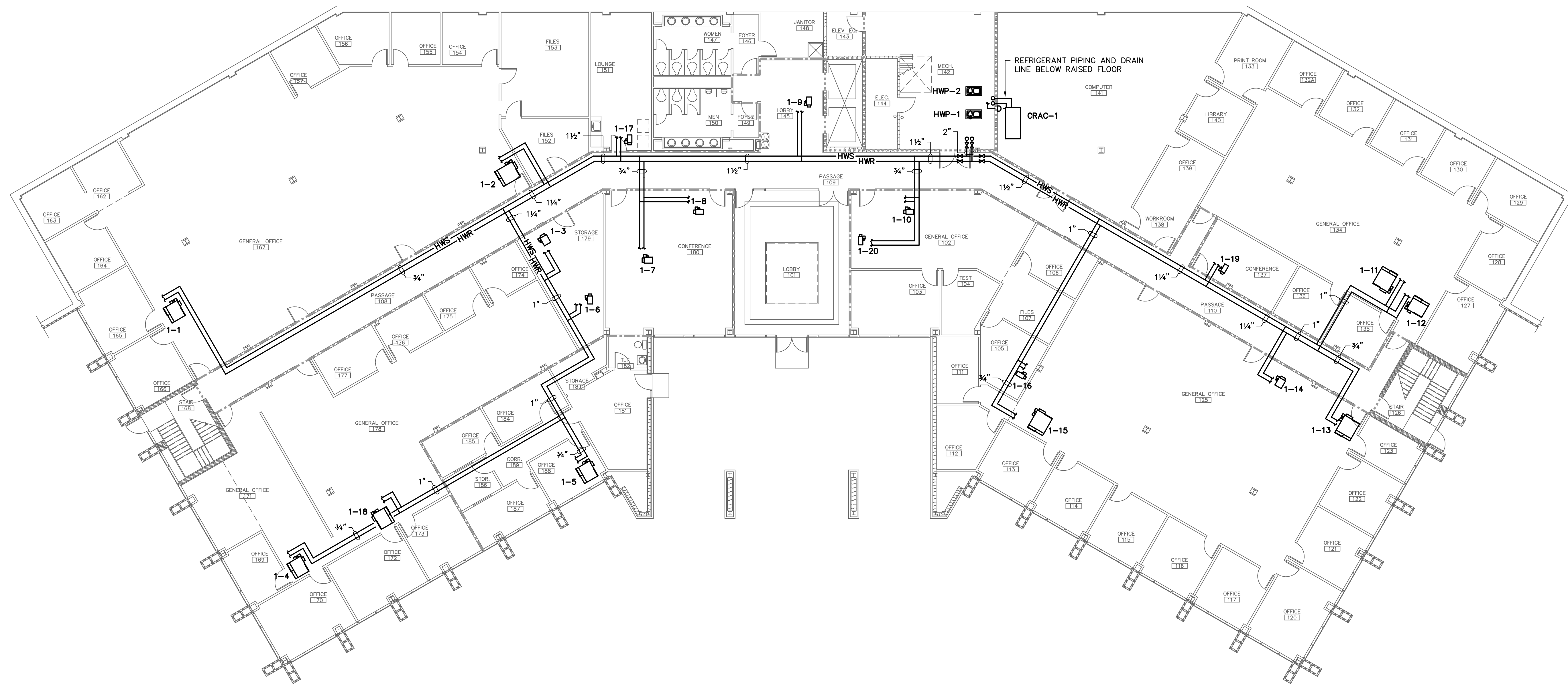
 BRADLEY J. JASING
 No. 23877
 STATE OF SOUTH CAROLINA

A & E FIRM
Swygart & Associates
 CONSULTING ENGINEERS
 DBA Swygart & Assoc., Ltd. Telephone: (803) 791-9300
 Post Office Box 11686 Columbia, S.C. 29211 Facsimile: (803) 791-9830
 No. 030227
 STATE OF SOUTH CAROLINA

A & E STATE NO. [Blank]
 SHEET TITLE
SECOND FLOOR PLAN
 DRAWN BY: BJJ CHECKED BY: WCL FINAL APP.: BJJ

PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. DATE 5/5/2014	SHEET M2 of 13
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1 FIRST FLOOR PIPING PLAN
 SCALE: 3/32" = 1'-0"

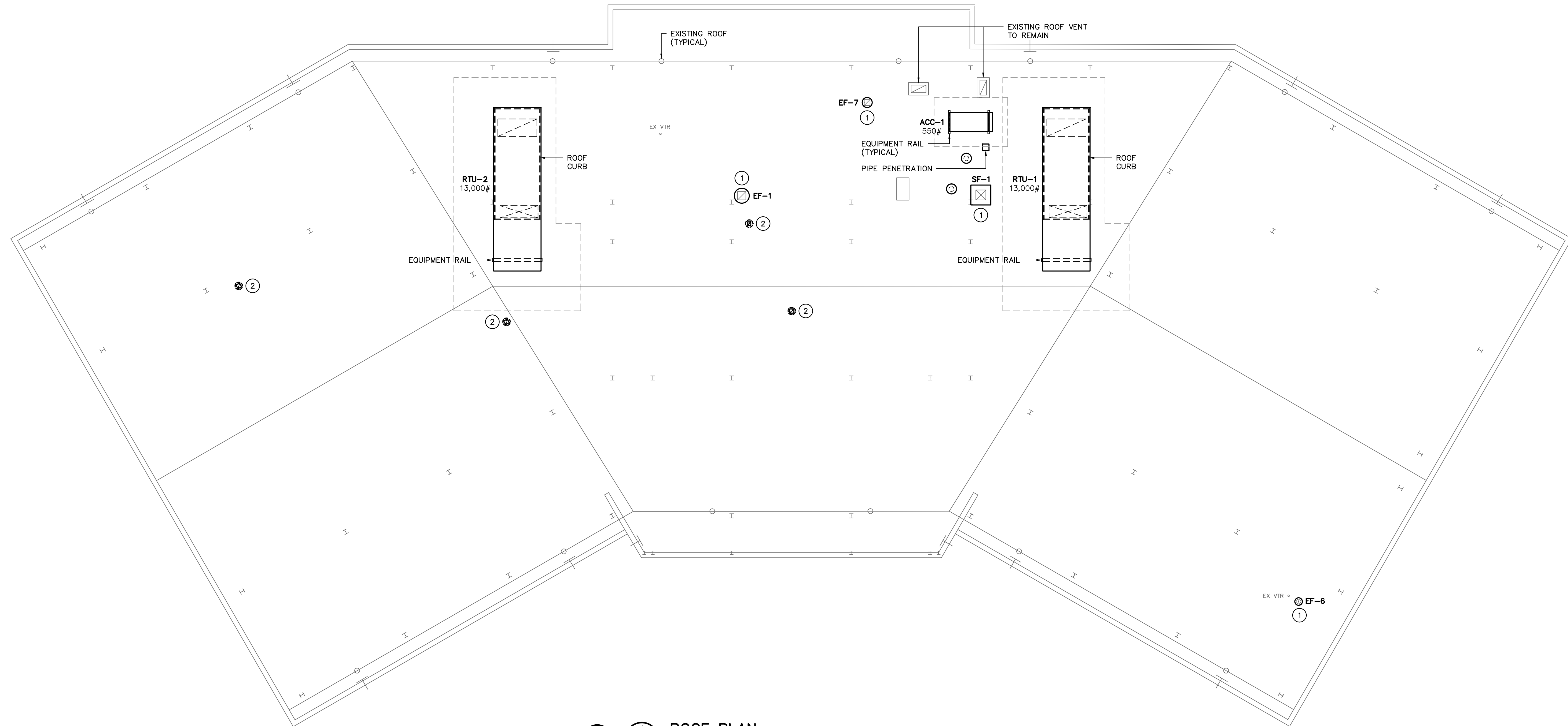
WALL LEGEND	
	3 5/8" METAL STUD (1 HR RATED)
	8" MASONRY (1 HR RATED)

<p style="font-size: 1.2em; font-weight: bold; margin: 0;">The State of South Carolina</p>	<p style="font-size: 0.8em; margin: 0;">AGENCY OR INSTITUTION</p> <p style="font-size: 1.2em; font-weight: bold; margin: 0;">Department of Disabilities and Special Needs</p>	<p style="font-size: 0.8em; margin: 0;">PROFESSIONAL SEAL</p>	<p style="font-size: 0.8em; margin: 0;">A & E FIRM</p> <p style="font-weight: bold; margin: 0;">Swygart & Associates CONSULTING ENGINEERS</p> <p style="font-size: 0.7em; margin: 0;">DBA Swygart & Assoc., Ltd. Telephone: (803) 791-9300 Post Office Box 11686 Columbia, S.C. 29211 Facsimile: (803) 791-9830 mol@swygart-associates.com</p>	<p style="font-size: 0.8em; margin: 0;">A & E STATE NO.</p>	<p style="font-size: 0.8em; margin: 0;">SHEET TITLE</p> <p style="font-size: 1.2em; font-weight: bold; margin: 0;">FIRST FLOOR PIPING PLAN</p>	<p style="font-size: 0.8em; margin: 0;">PROJECT TITLE</p> <p style="font-weight: bold; margin: 0;">SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA</p>					
	DIVISION	STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. DATE 5/5/2014	REVISION	DATE	BY	APP.	A & E PROJECT NO. 12770	DRAWN BY: BJJ	CHECKED BY: WCL	FINAL APP.: BJJ

NOTES TO SHEET

① NEW ROOF FAN IN PLACE OF EXISTING. PROVIDE CURB ADAPTER.

② ROOF FAN TO BE REMOVED.



1 ROOF PLAN
 SCALE: 3/32" = 1'-0"



AGENCY OR INSTITUTION

Department of Disabilities and Special Needs

DIVISION

PROFESSIONAL SEAL

Benjamin S. Swygert
 No. 23877
 3-28-14
 BRADLEY J. JASANY

REVISION

DATE

BY

APP.

A & E FIRM

Swygert & Associates
 CONSULTING ENGINEERS

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A & E STATE NO.

SOUTH CAROLINA
 SWYBERT AND ASSOCIATES, LTD.
 NO. 03227
 PROFESSIONAL ENGINEER
 STATE OF SOUTH CAROLINA

A & E PROJECT NO. 12770

SHEET TITLE

ROOF PLAN

DRAWN BY: BJJ

CHECKED BY: WCL

FINAL APP.: BJJ

PROJECT TITLE

SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

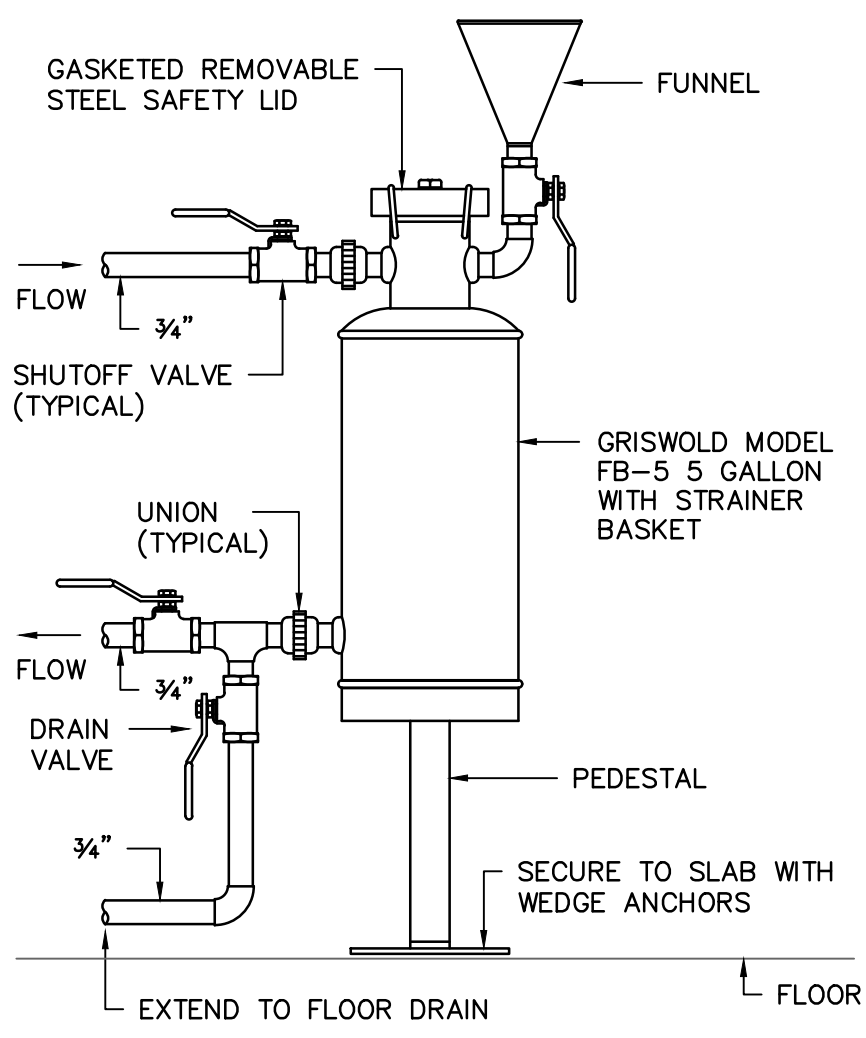
STATE PROJECT NO. J16-9863-FW-A

DRAWING NO.

DATE 5/5/2014

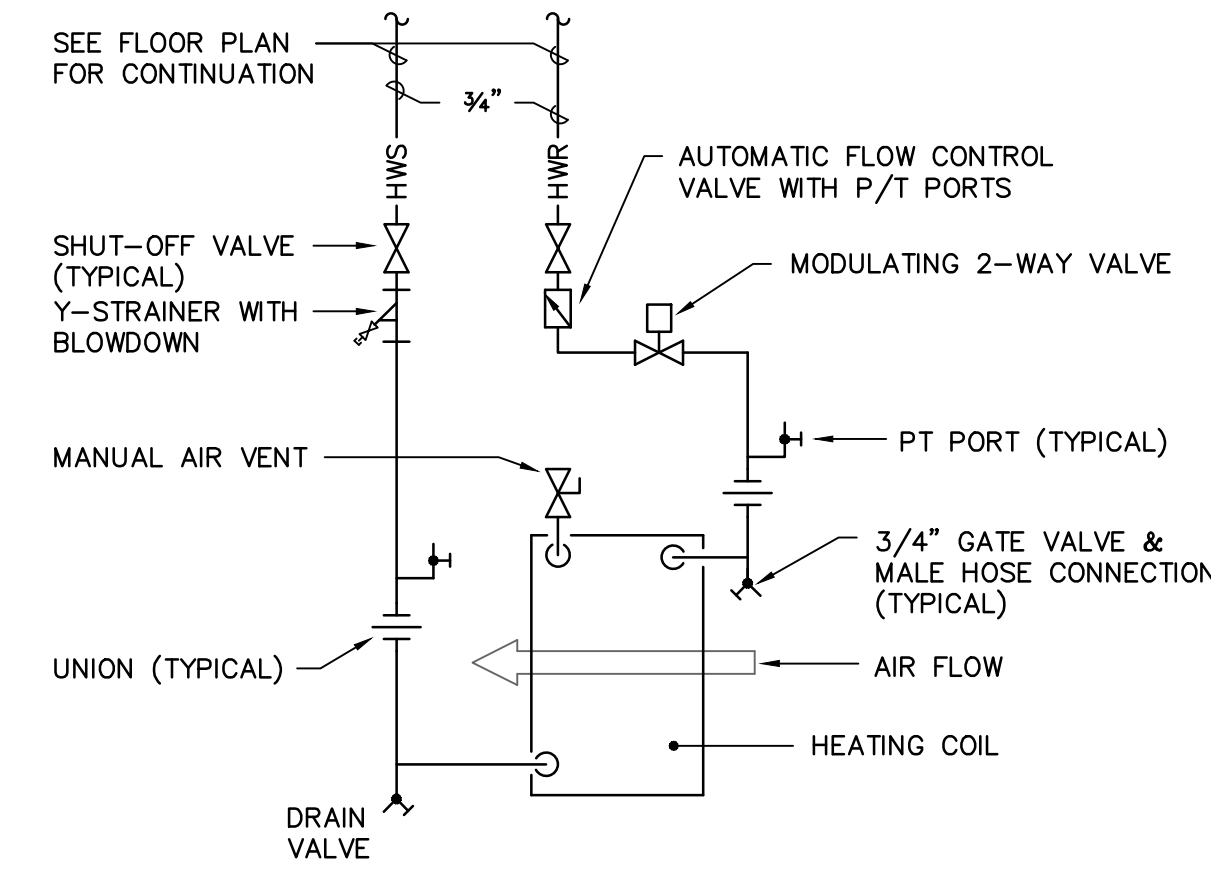
SHEET

M5 of 13



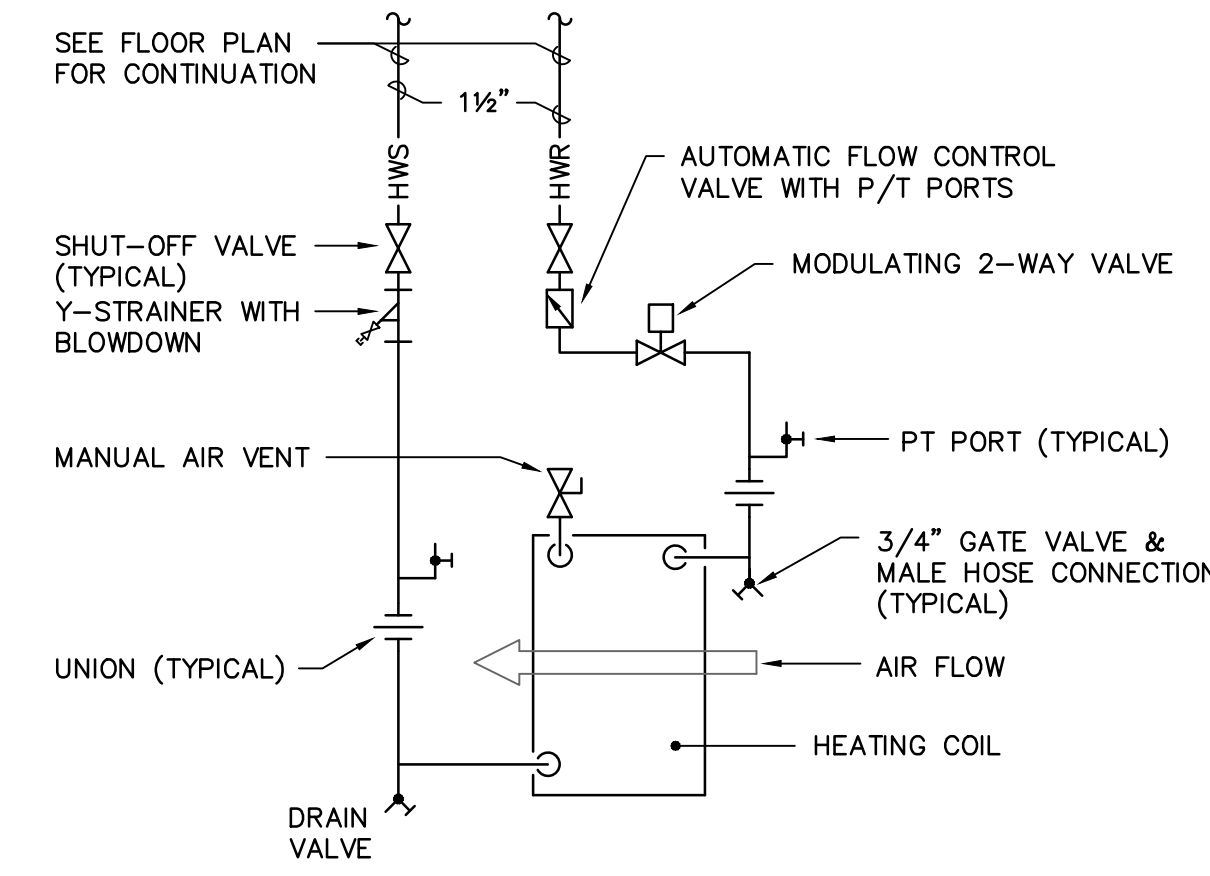
CHEMICAL FEEDER DETAIL

NO SCALE



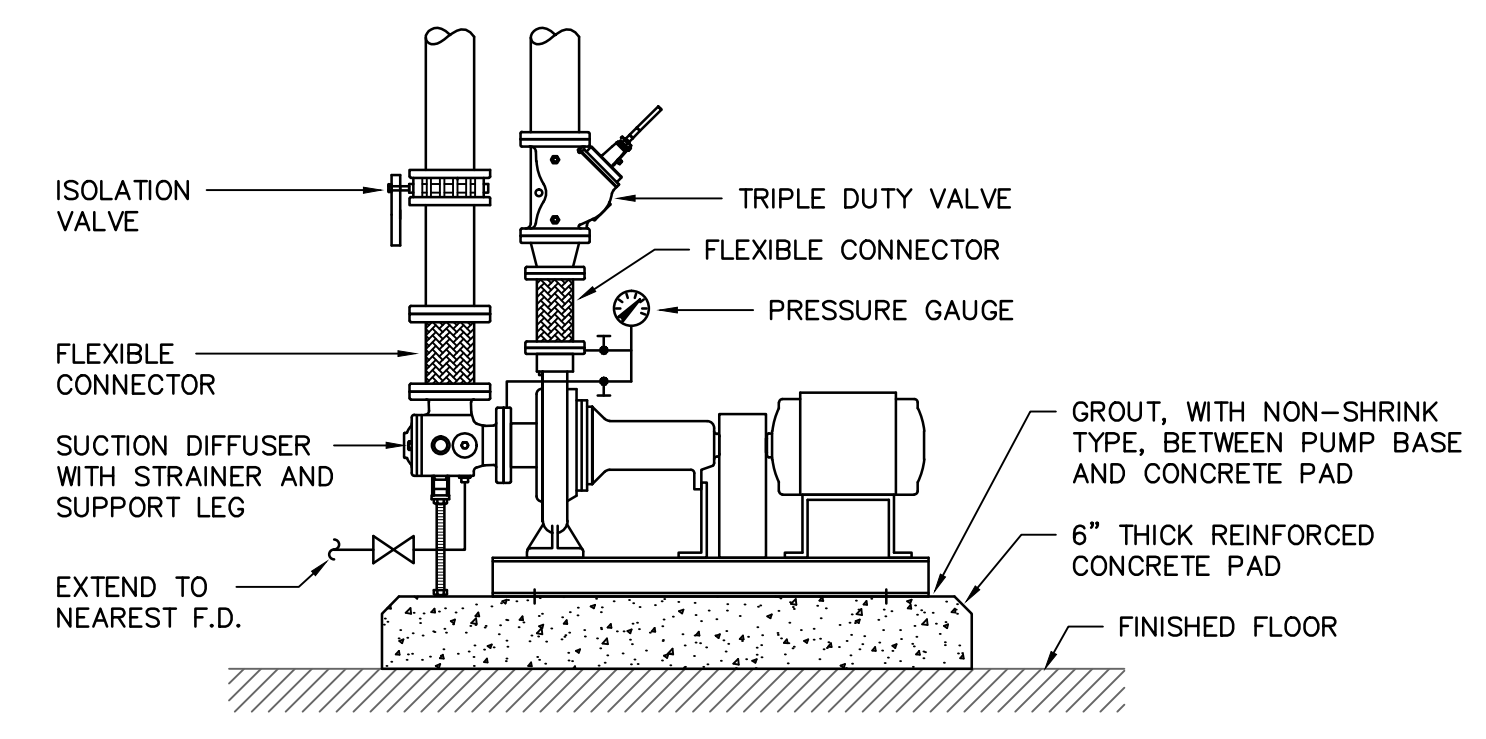
VAV HEATING COIL PIPING DETAIL

NO SCALE



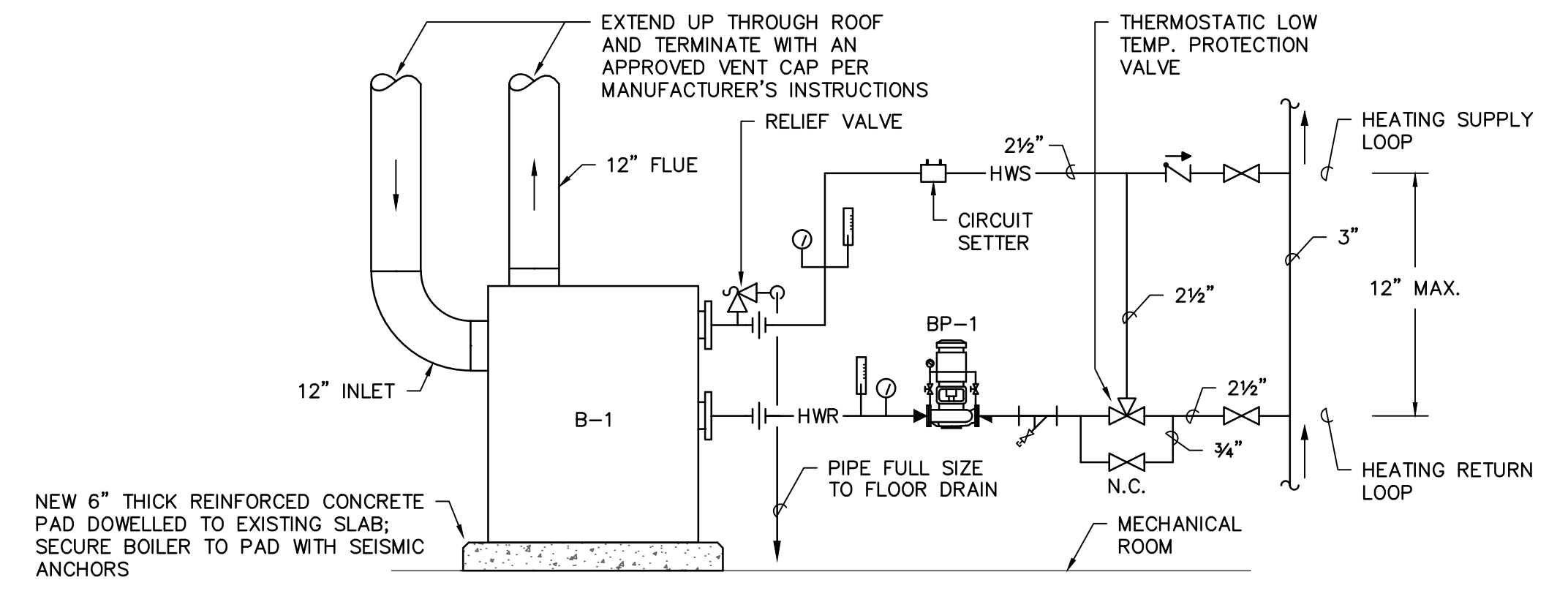
RTU HEATING COIL PIPING DETAIL

NO SCALE



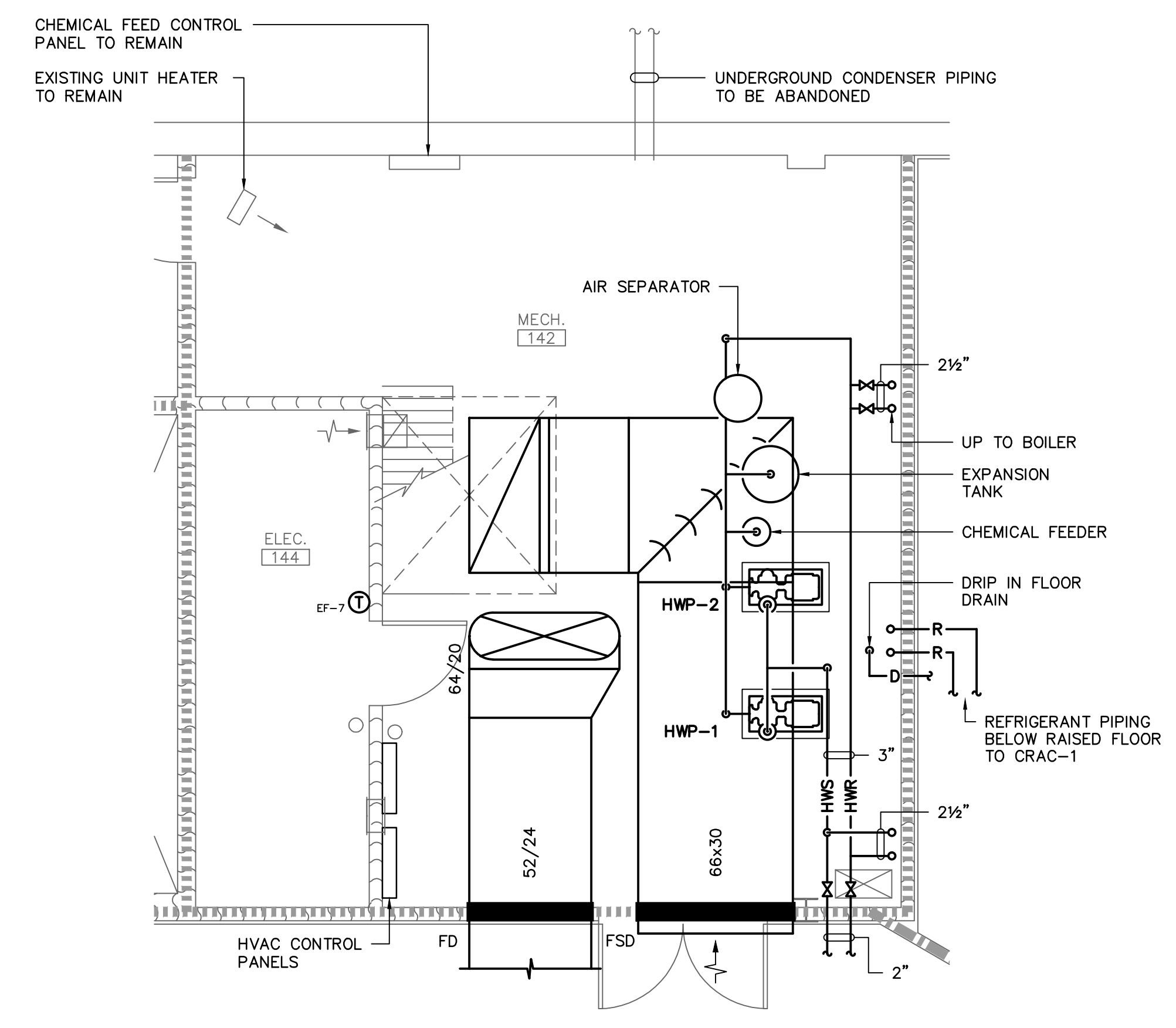
BASE MOUNTED PUMP DETAIL

NO SCALE



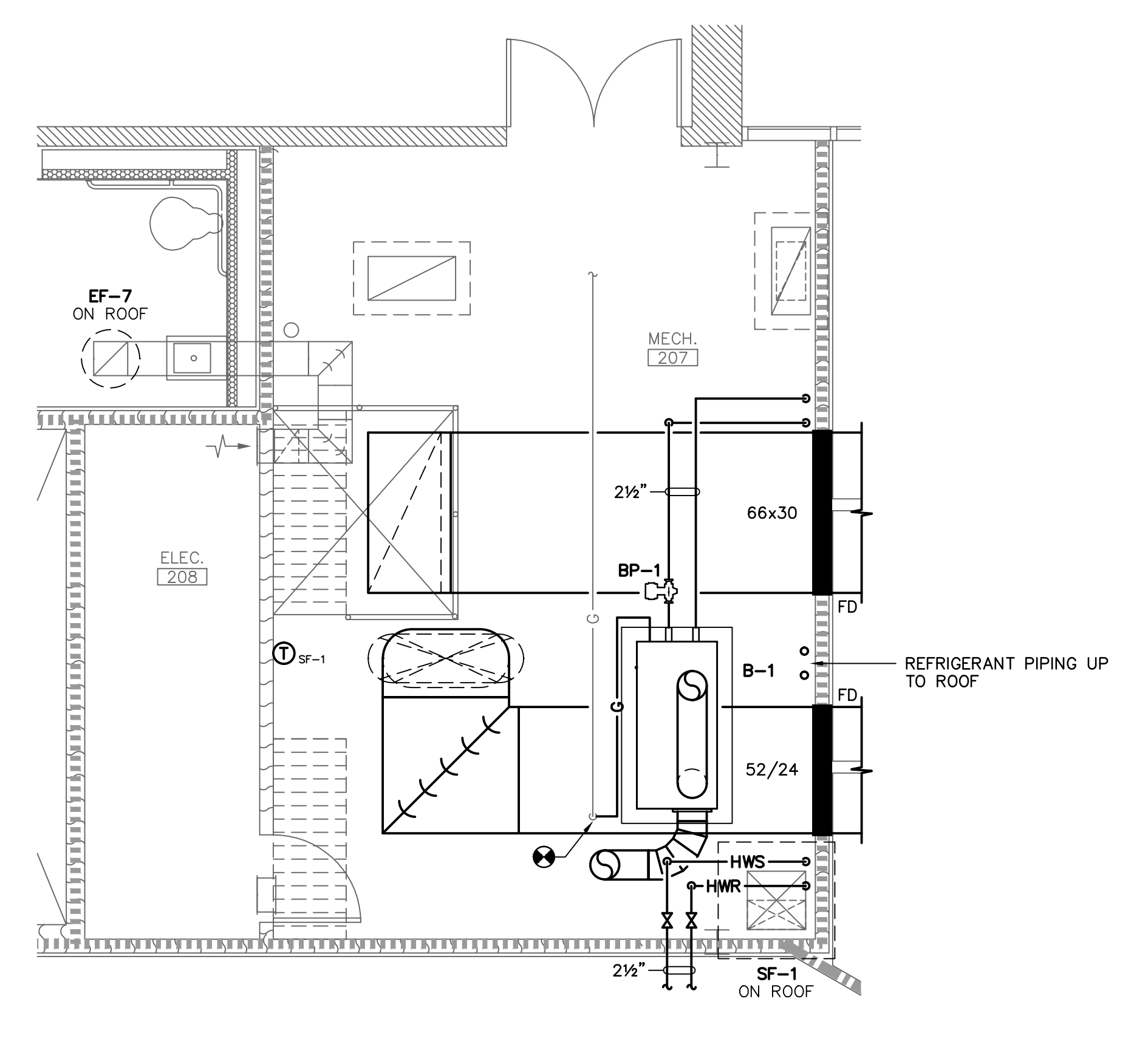
HOT WATER BOILER DETAIL

NO SCALE



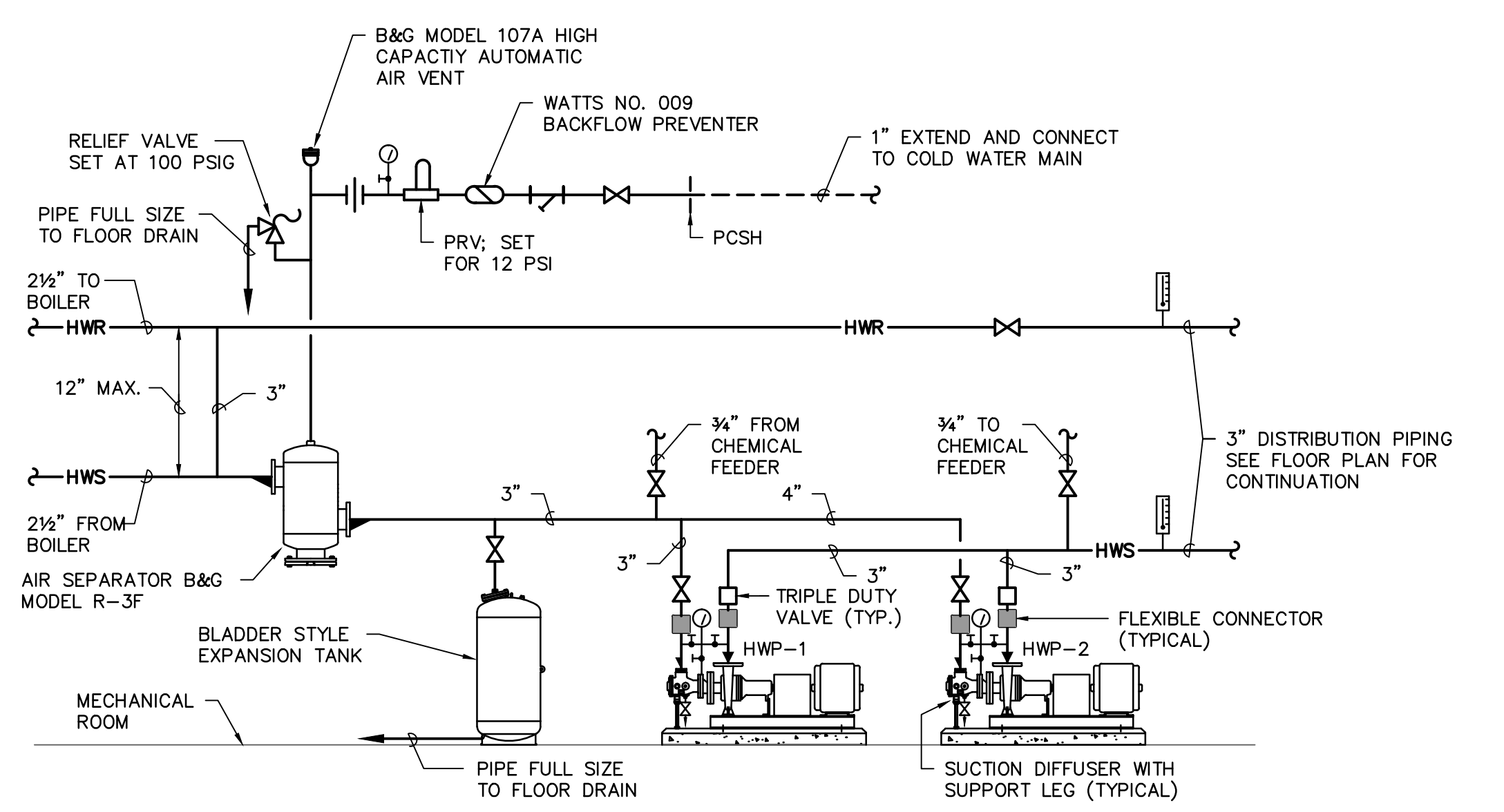
1 1ST FLOOR MECHANICAL ROOM

SCALE: 1/4" = 1'-0"



2 2ND FLOOR MECHANICAL ROOM

SCALE: 1/4" = 1'-0"

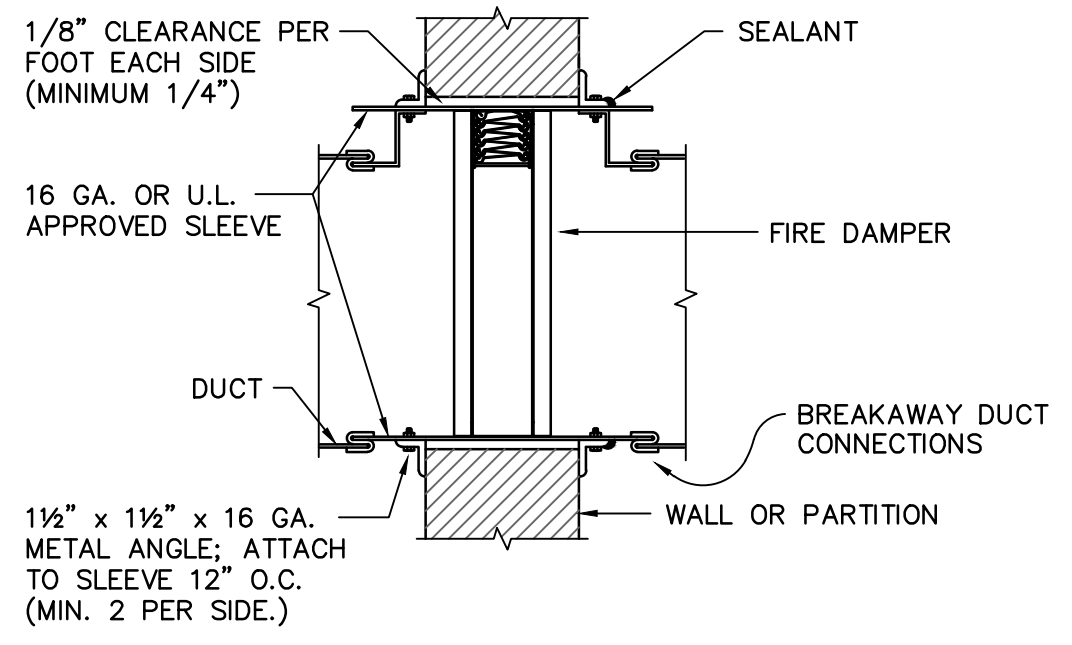


HOT WATER PIPING SCHEMATIC

NO SCALE

	AGENCY OR INSTITUTION Department of Disabilities and Special Needs	PROFESSIONAL SEAL 	A & E FIRM Swygert & Associates CONSULTING ENGINEERS <small>DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300 Post Office Box 11686 Columbia, S.C. 29211 Facsimile: (803) 791-0830 mol@swygert-associates.com</small>	A & E STATE NO. 	SHEET TITLE ENLARGED MECHANICAL ROOM PLANS AND DETAILS	PROJECT TITLE SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA
	DIVISION	REVISION	DATE	BY	APP.	A & E PROJECT NO. 12770

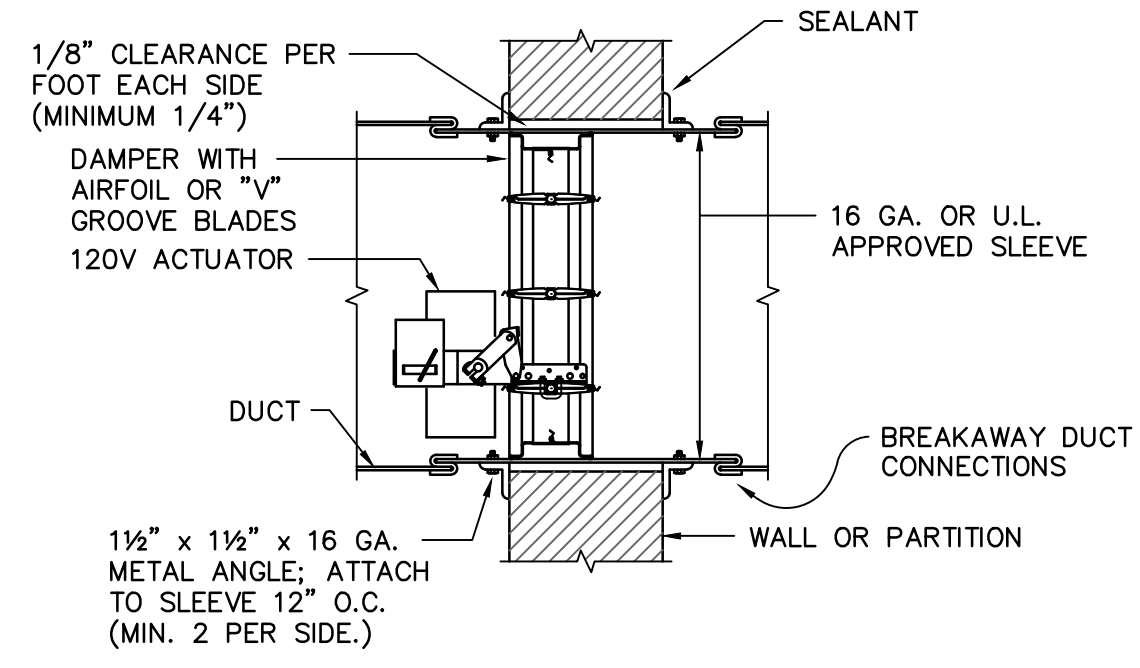
- NOTES:**
1. PROVIDE FIRE DAMPERS FOR ALL WALLS INDICATED. SEE FLOOR PLANS FOR WALL TYPES.
 2. PROVIDE DUCT ACCESS DOORS.
 3. PROVIDE ALL CEILING, FLOOR, OR WALL ACCESS DOORS NECESSARY FOR ACCESS TO FIRE DAMPERS.
 4. INSTALLATION SHALL COMPLY WITH SMACNA, NFPA 90A, 2012 IBC, UL555, AND LOCAL AUTHORITIES.
 5. FOR EXTERNALLY WRAPPED DUCT, BLANKET INSULATION SHALL BE INSTALLED OVER ANGLES AND SEALED TO WALL.
 6. SLEEVE SHALL BE MANUFACTURED AS AN INTEGRAL PART OF FIRE DAMPER.
 7. IN ALL INSTANCES MANUFACTURER'S UL LISTED INSTALLATION INSTRUCTIONS SHALL BE USED FOR DAMPER INSTALLATION.



FIRE DAMPER DETAIL

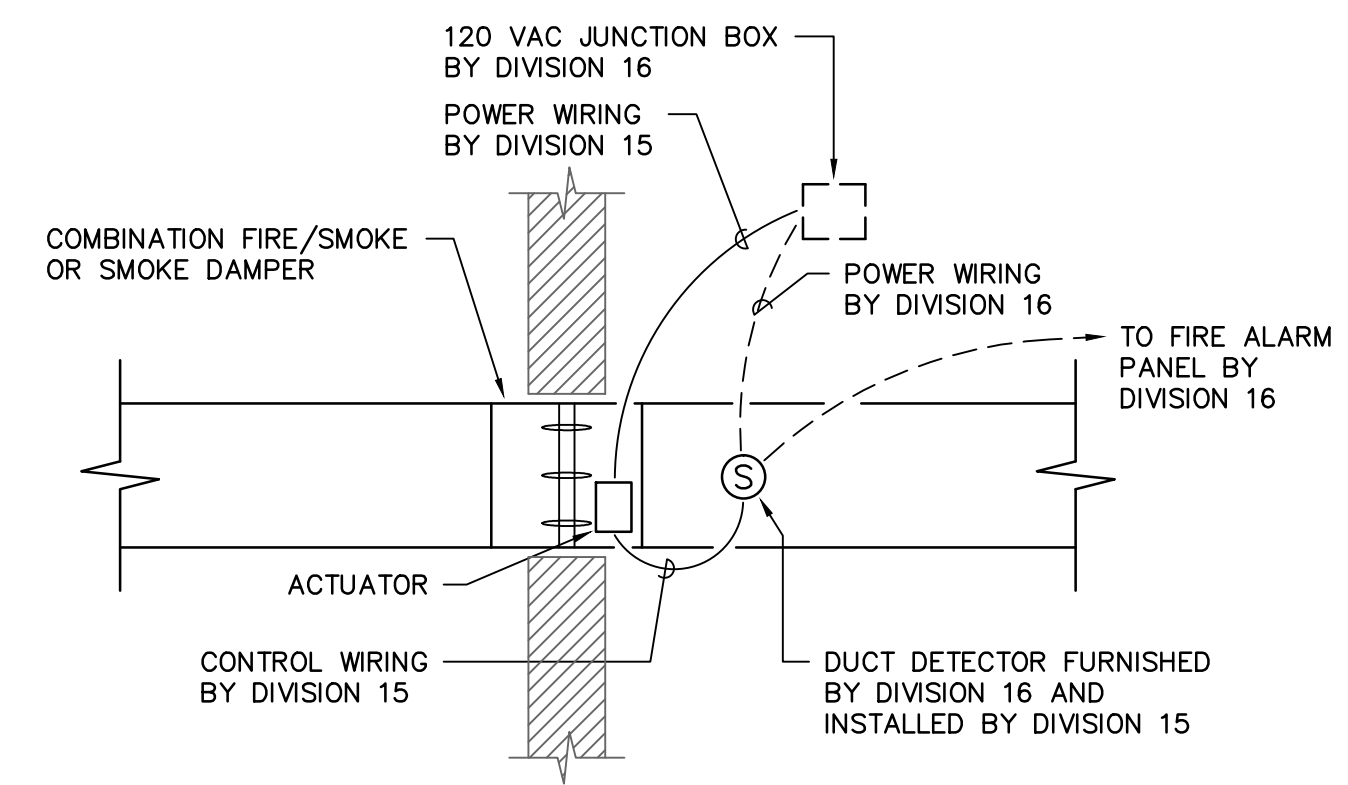
NO SCALE

- NOTES:**
1. PROVIDE COMBINATION FIRE/SMOKE DAMPERS FOR ALL WALLS INDICATED. SEE FLOOR PLANS FOR WALL TYPES.
 2. PROVIDE DUCT ACCESS DOORS.
 3. PROVIDE ALL CEILING, FLOOR, OR WALL ACCESS DOORS NECESSARY FOR ACCESS TO FIRE DAMPERS.
 4. INSTALLATION SHALL COMPLY WITH SMACNA, NFPA 90A, 2012 IBC, UL555, AND LOCAL AUTHORITIES.
 5. FOR EXTERNALLY WRAPPED DUCT, BLANKET INSULATION SHALL BE INSTALLED OVER ANGLES AND SEALED TO WALL.
 6. SLEEVE SHALL BE MANUFACTURED AS AN INTEGRAL PART OF FIRE DAMPER.
 7. IN ALL INSTANCES MANUFACTURER'S UL LISTED INSTALLATION INSTRUCTIONS SHALL BE USED FOR DAMPER INSTALLATION.



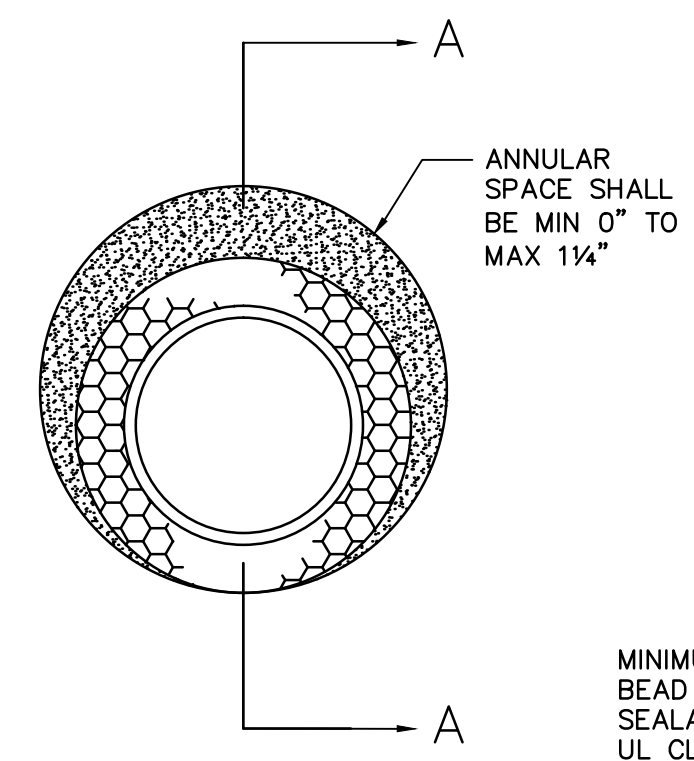
COMBINATION FIRE/SMOKE DAMPER DETAIL

NO SCALE



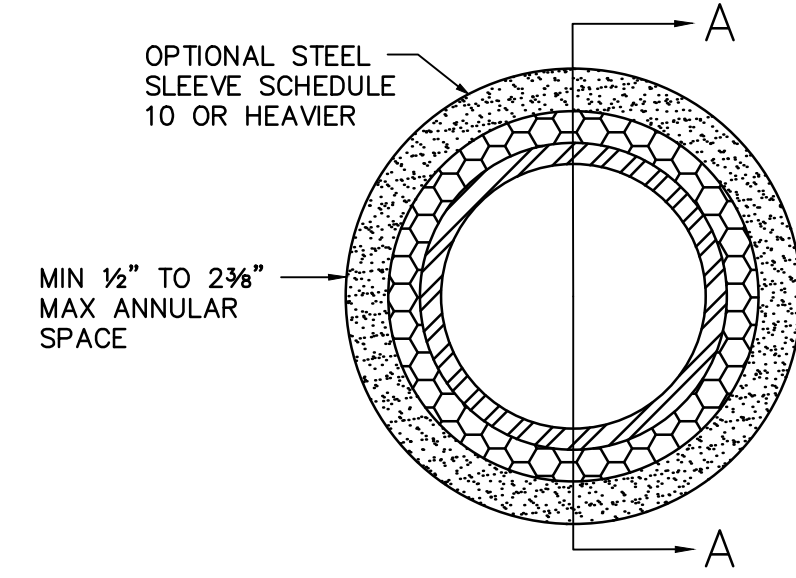
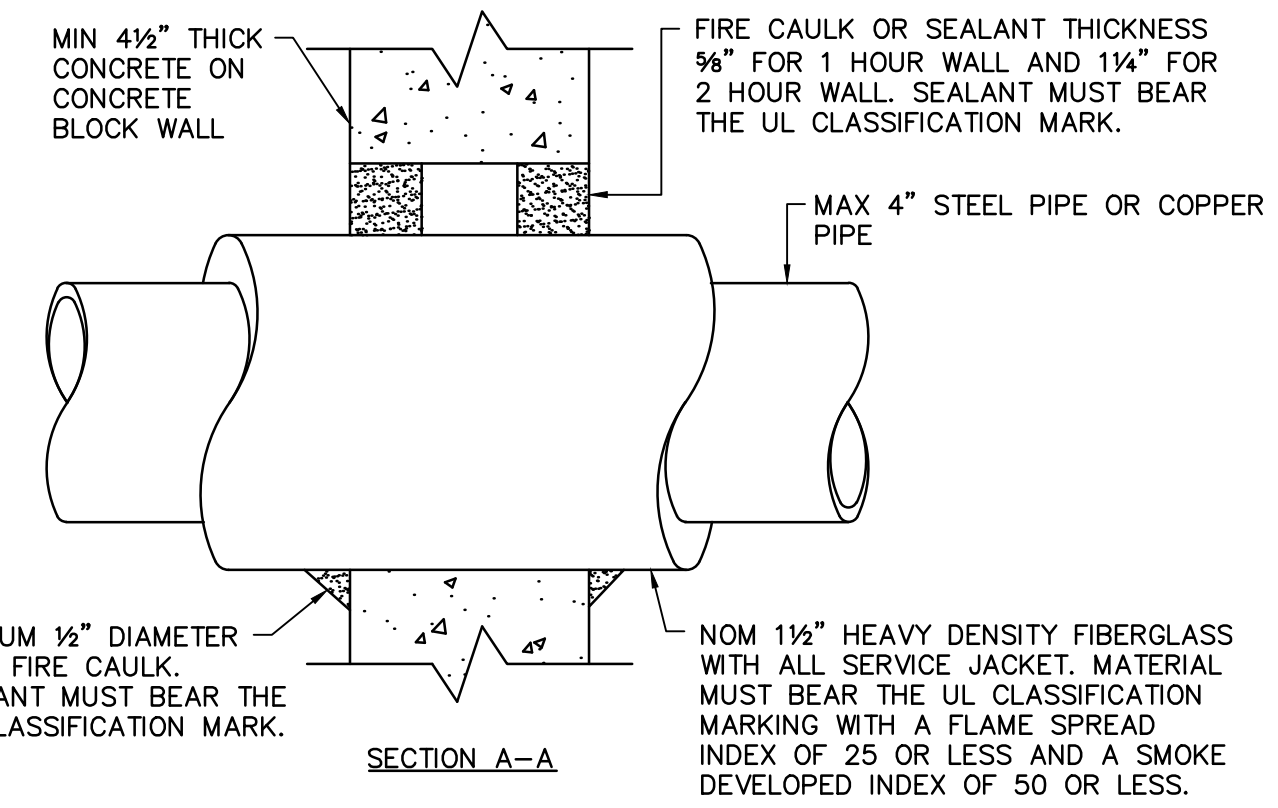
COMBINATION FIRE/SMOKE DAMPER WIRING DETAIL

NO SCALE



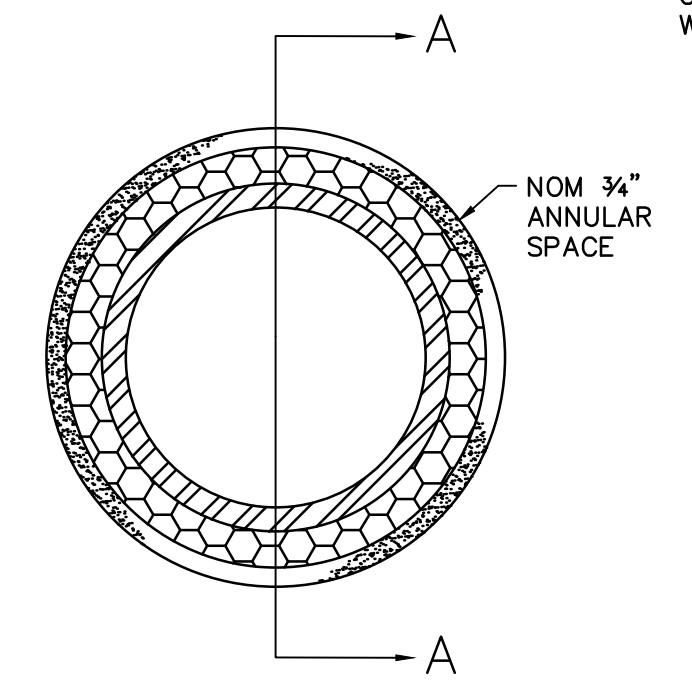
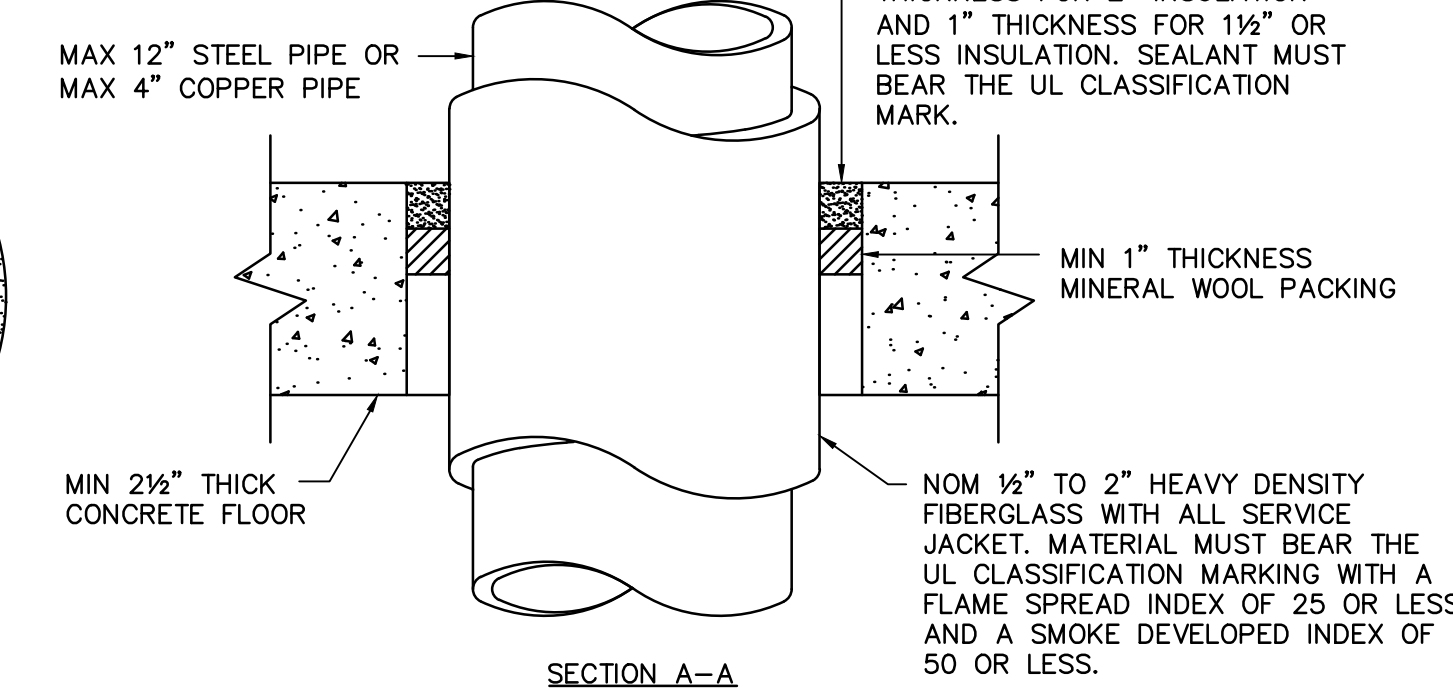
U.L. SYSTEM W-J-5013 DETAIL

NO SCALE



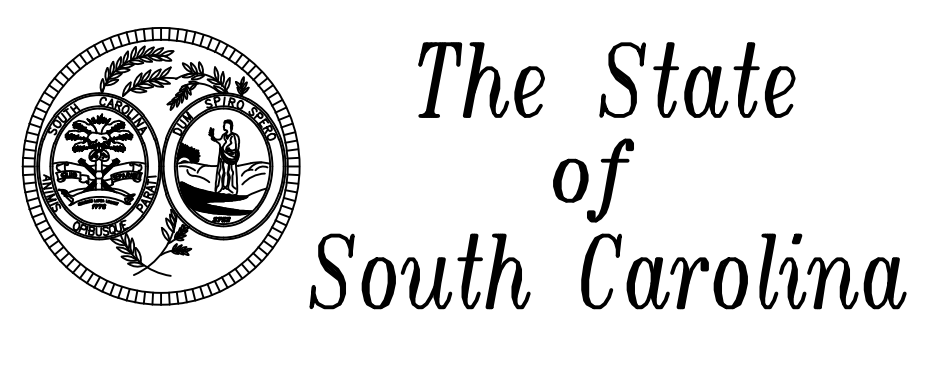
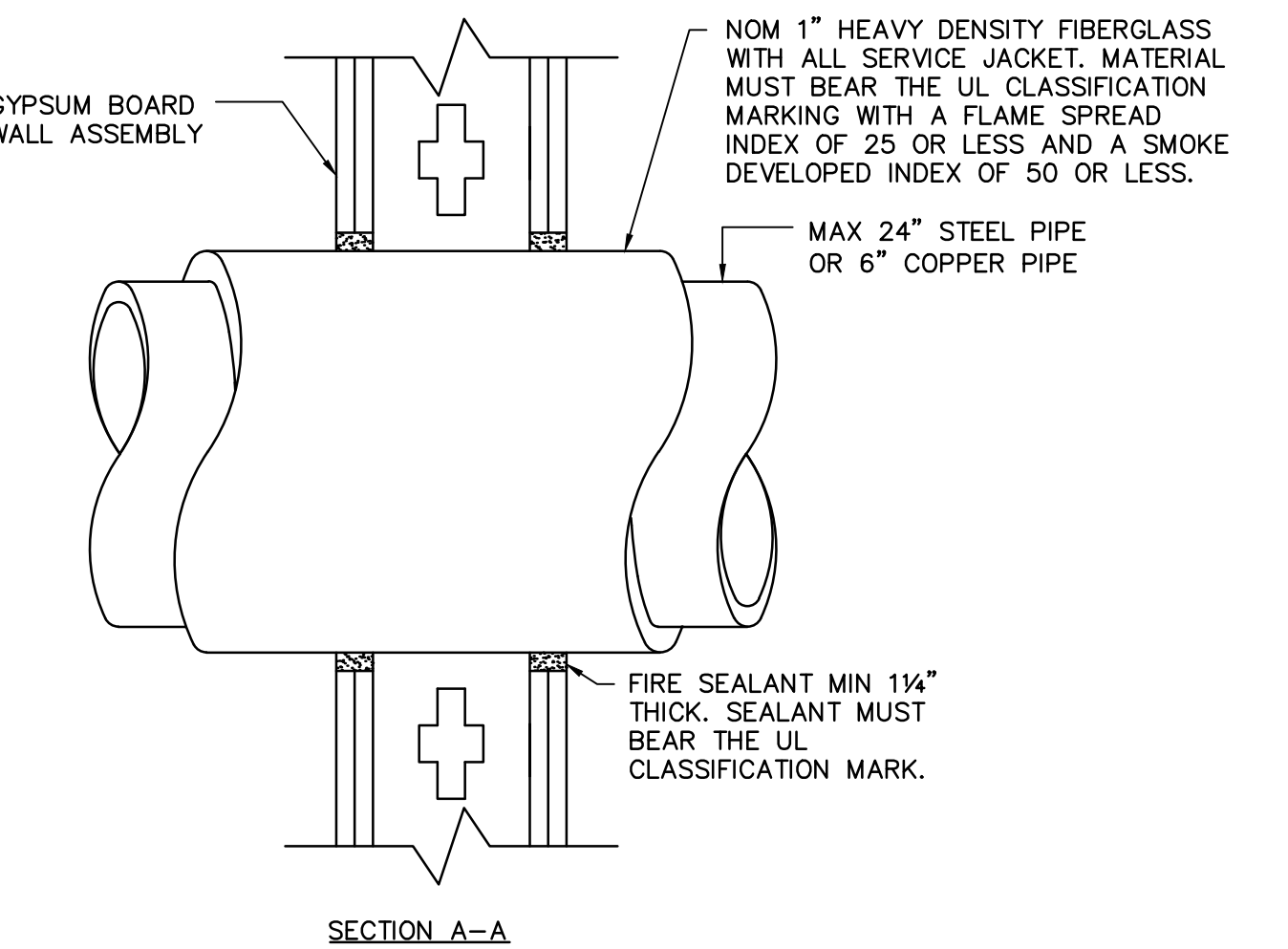
U.L. SYSTEM C-AJ-5001 DETAIL

NO SCALE

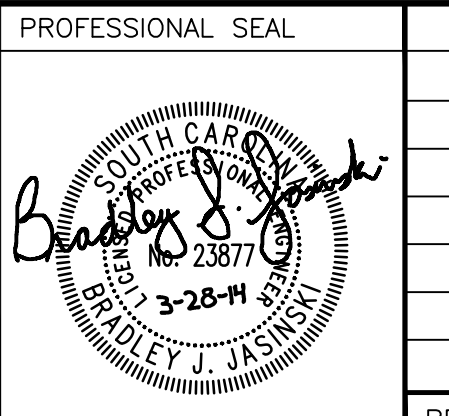


U.L. SYSTEM W-L-5032 DETAIL

NO SCALE

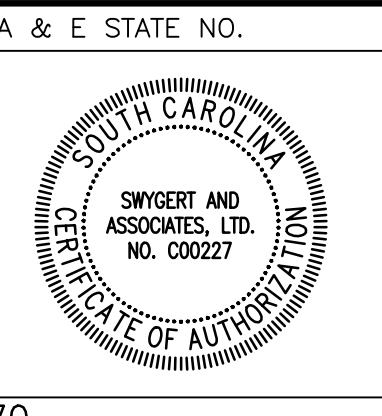


AGENCY OR INSTITUTION
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REVISION					
DATE					
BY					
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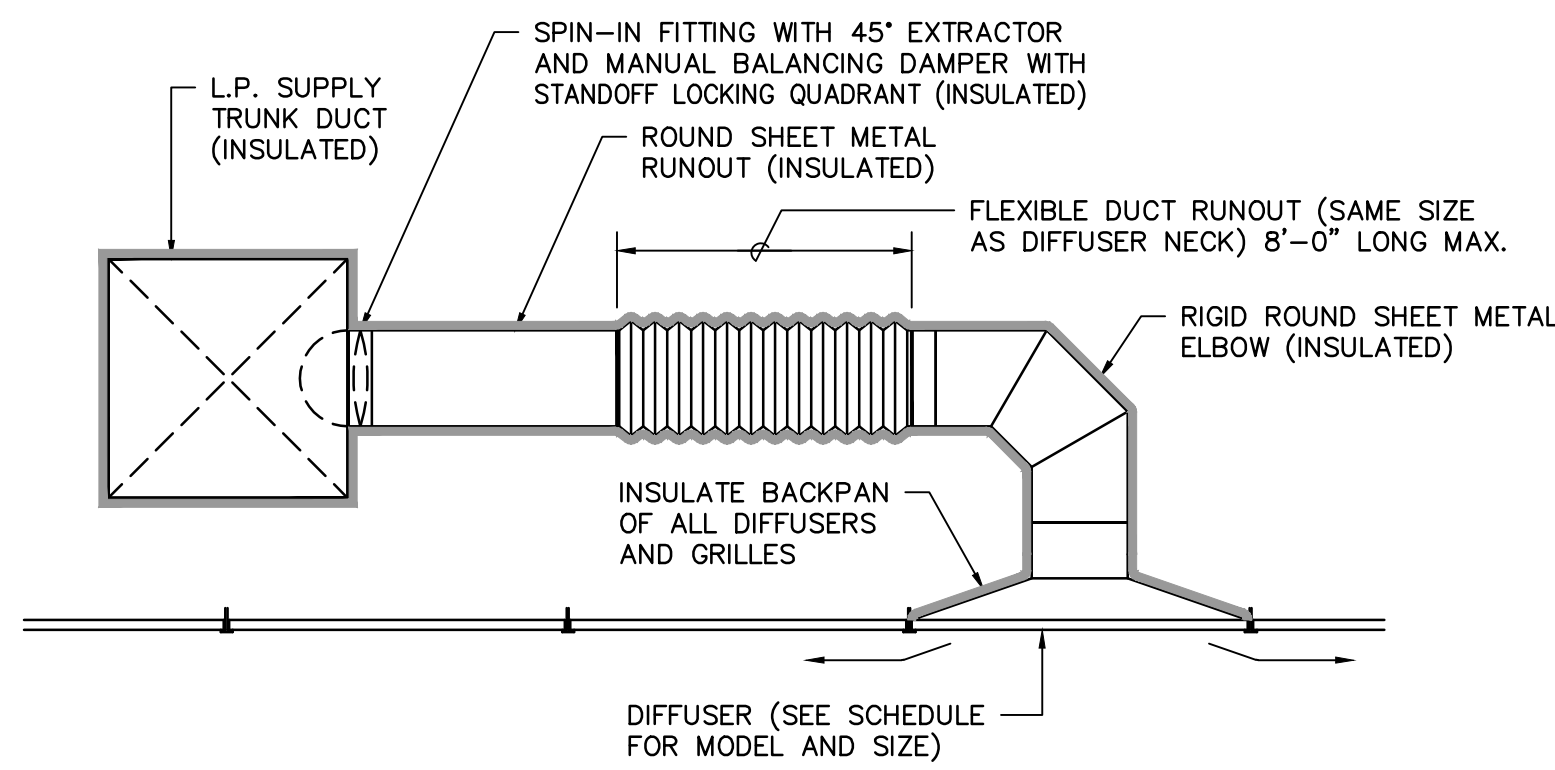
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 CONSULTING ENGINEERS
DBA Swygart & Assoc., Ltd. Telephone: (803) 791-9300
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A & E STATE NO.
 SHEET TITLE
DETAILS

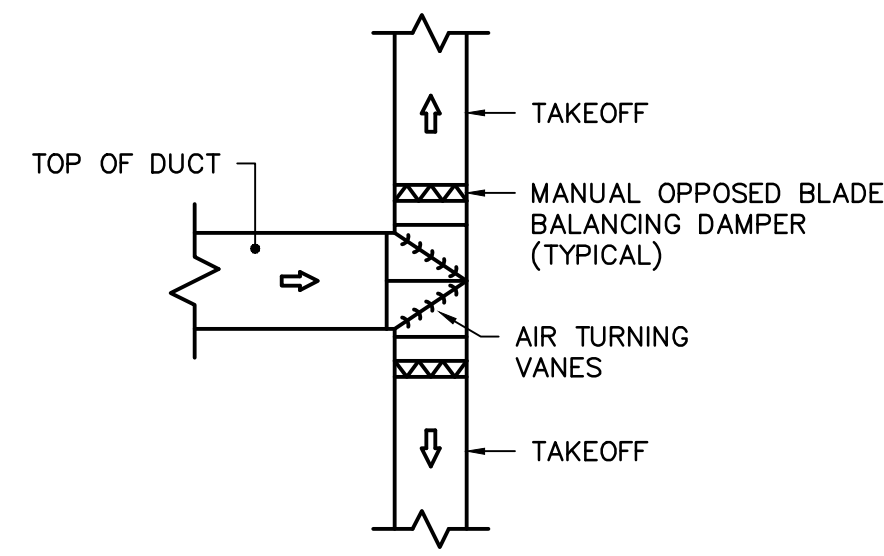
PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. DATE 5/5/2014	SHEET M7 of 13
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CEILING DIFFUSER DETAIL

NO SCALE



SPLITTER DETAIL

NO SCALE

EXHAUST FAN SCHEDULE							
TAG	GREENHECK MODEL NO.	TYPE	CFM	ESP	MOTOR H.P./W	SONES (MAX.)	REMARKS
EF-1	GB-180-10	ROOF	2,600	1.0	1	12	1,2,5,6
EF-6	G-065-VG	ROOF	100	0.375	1/6	5	1,3,5,6
EF-7	G-090-VG	ROOF	1,000	0.5	1/4	12	1,3,5,7
SF-1	RBS-2H20-7	ROOF	3,000	0.5	3/4	29	4,5,7

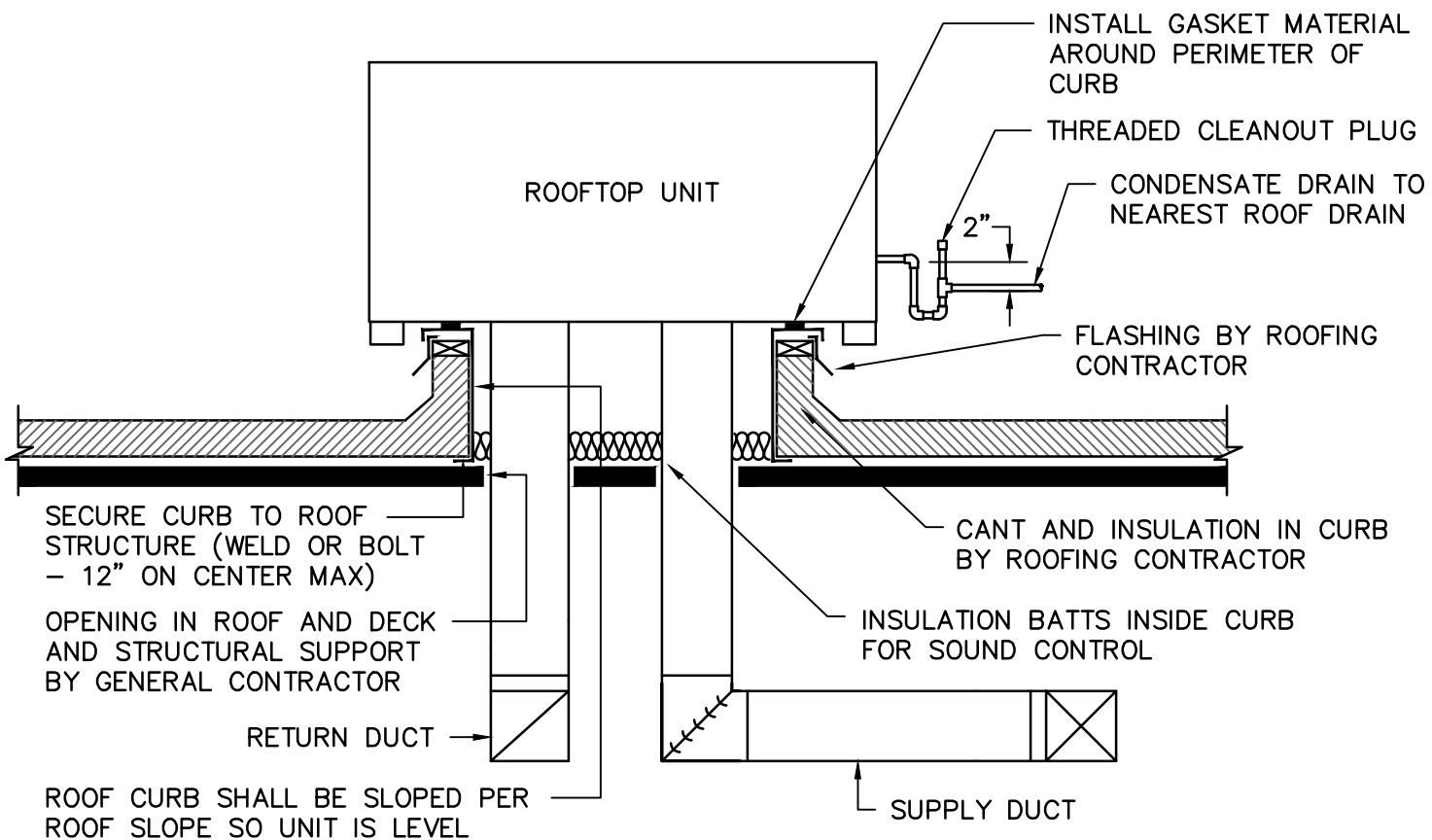
- CENTRIFUGAL ROOF FAN COMPLETE BACKDRAFT DAMPER, BIRDSCREEN, AND DISCONNECT SWITCH.
- PROVIDE WITH AUTOMATIC BELT TENSIONER.
- PROVIDE WITH VARI-GREEN EC MOTOR WITH MOUNTED POTENTIOMETER DIAL.
- PROPELLER HOODED ROOF SUPPLY FAN COMPLETE WITH BIRDSCREEN, DISCONNECT SWITCH, AND MOTORIZED DAMPER WITH ACTUATOR AND TRANSFORMER.
- PROVIDE WITH SEISMIC/WIND RATED CURB ADAPTER FOR INSTALLATION ON EXISTING ROOF CURB. FIELD VERIFY EXISTING CURB DIMENSIONS PRIOR TO ORDERING.
- INTERLOCK TO OPERATE WHEN BUILDING IS OCCUPIED THROUGH EMS.
- PROVIDE COOLING THERMOSTAT, WIRED BY ELECTRICAL CONTRACTOR.

COMPUTER ROOM AC SCHEDULE									
TAG	LIEBERT MODEL CRAC	LIEBERT MODEL ACC	COOLING CAP. MBH @ 72/60/100 TOTAL/SENSIBLE	ELECTRIC REHEAT KW	AIRFLOW CFM	ESP IN.W.G	INDOOR FAN H.P.	HUMID. LBS./HR.	REMARKS
CRAC-1/ACC-1	DS028AD	MCM080	100.4/85.0	10	4,400	0.2	2	11	1,2,3,4,5,6,7,8

- PROVIDE DOWNFLOW SUPPLY AIR, 4" MERV 8 FILTERS, NEMA PREMIUM EFFICIENCY INDOOR BLOWER MOTOR, AUTOMATIC BELT-TENSIONING SYSTEM, 3 STAGE TYPE 304 STAINLESS STEEL ELECTRIC REHEAT, STAINLESS STEEL DRAIN PAN, FACTORY INSTALLED DUAL FLOAT CONDENSATE PUMP WITH UNIT ALARM INDICATION AND UNIT SHUTDOWN UPON HIGH WATER LEVEL, NON-LOCKING DISCONNECT SWITCH ON INDOOR UNIT, 18" FLOORSTAND WITH TURNING VANES, AND INFRARED HUMIDIFIER WITH AUTOMATIC FLUSH CYCLE.
- PROVIDE DUAL REFRIGERANT CIRCUITS WITH LIQUID LINE FILTER DRYERS, REFRIGERANT SIGHT GLASSES, EXPANSION VALVES, AND LIQUID LINE SOLENOID VALVES.
- PROVIDE TWO (2) INDEPENDENT DIGITAL SCROLL COMPRESSORS.
- PROVIDE SMOKE SENSOR WITH UNIT ALARM, SHUTDOWN AND SUPERVISION CONTACTS.
- PROVIDE WITH ZONE LEAK DETECTION SENSOR WIRED TO SHUT DOWN UNIT IN CASE OF CONDENSATE OVERFLOW.
- PROVIDE WITH LIEBERT ICOM MICROPROCESSOR CONTROL WITH LARGE GRAPHIC DISPLAY.
- PROVIDE WITH INTELLISLOT WEB CARD FOR SNMP AND WEB-MANAGEMENT COMMUNICATION CAPABILITIES.
- PROVIDE CONDENSER WITH MICROCHANNEL COILS, VARIABLE SPEED EC FAN MOTORS, OPERATION TO -20°F, SURGE PROTECTION DEVICE, FUSE BLOCK, AND DISCONNECT SWITCH.

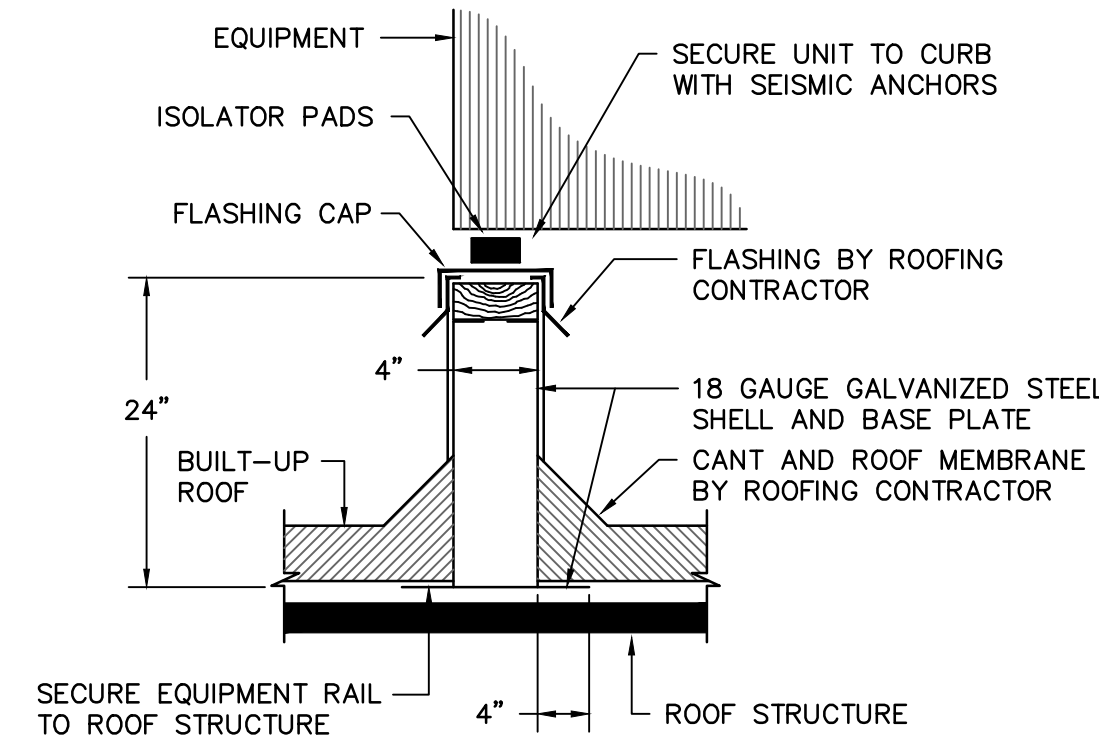
AIR DISTRIBUTION SCHEDULE									
TAG	DESCRIPTION	MANUFACTURER	MODEL	FRAME	CFM	NECK SIZE	FACE SIZE	MAX NC	REMARKS
(A)	PERFORATED SUPPLY	PRICE	APDC	LAY-IN	0-125	6"φ	24"x24"	30	1,2,3
(B)	PERFORATED SUPPLY	PRICE	APDC	LAY-IN	126-225	8"φ	24"x24"	30	1,2,3
(C)	PERFORATED SUPPLY	PRICE	APDC	LAY-IN	226-350	10"φ	24"x24"	30	1,2,3
(D)	PERFORATED SUPPLY	PRICE	APDC	LAY-IN	351-550	12"φ	24"x24"	30	1,2,3
(E)	PERFORATED SUPPLY	PRICE	APDC	LAY-IN	551-700	14"φ	24"x24"	30	1,2,3
(F)	PERFORATED SUPPLY	PRICE	APDC	LAY-IN	701-850	16"φ	24"x24"	30	1,2,3

- PROVIDE WITH STANDARD WHITE FINISH.
- PROVIDE ALUMINUM OR ALUMINIZED STEEL CONSTRUCTION.
- PROVIDE WITH INDIVIDUALLY ADJUSTABLE CURVED BLADES.



ROOFTOP UNIT DETAIL

NO SCALE

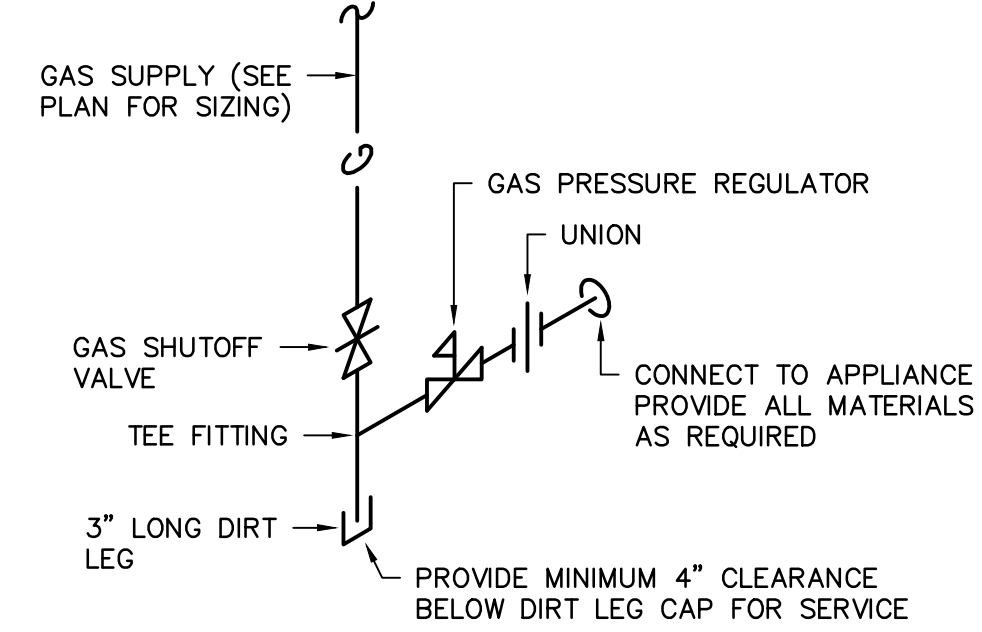


ROOF SUPPORT DETAIL

NO SCALE

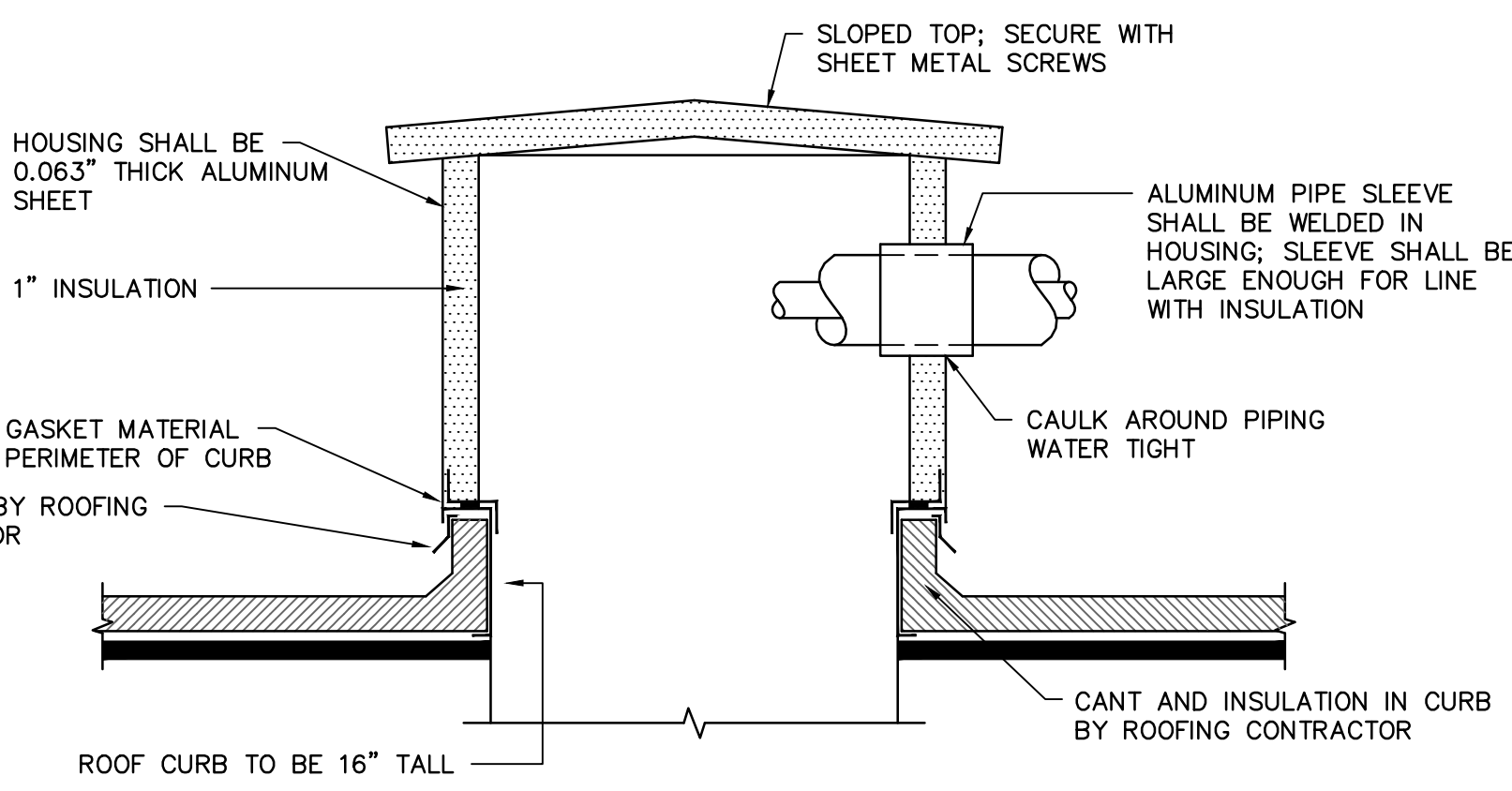
NOTE: PROVIDE STRUTS AND CLAMPS FOR PIPE SUPPORT.

NOTE: LENGTH AS REQUIRED TO EXTEND 4" BEYOND EQUIPMENT OR DUCT IN EACH DIRECTION.



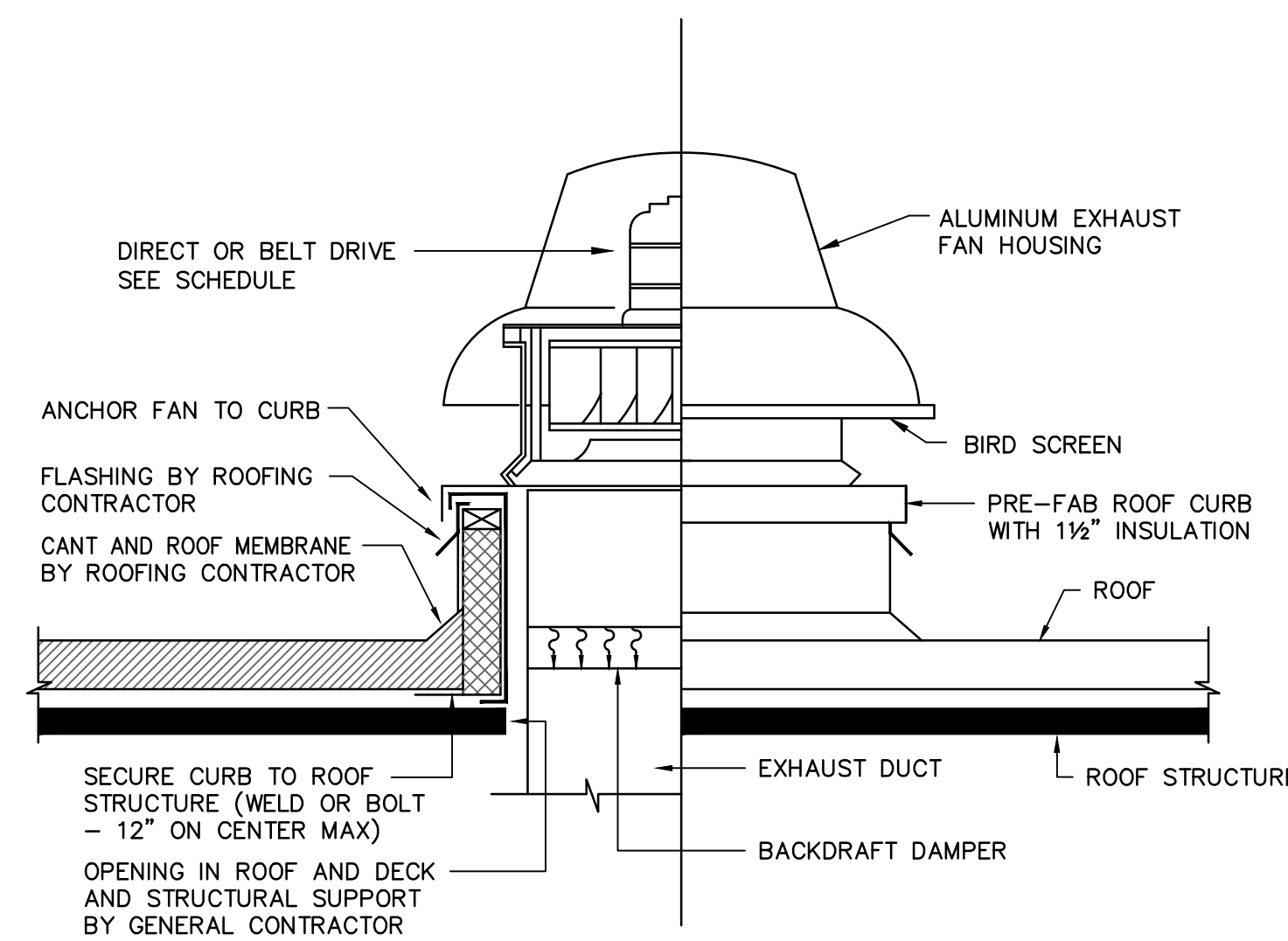
GAS CONNECTION DETAIL

NO SCALE



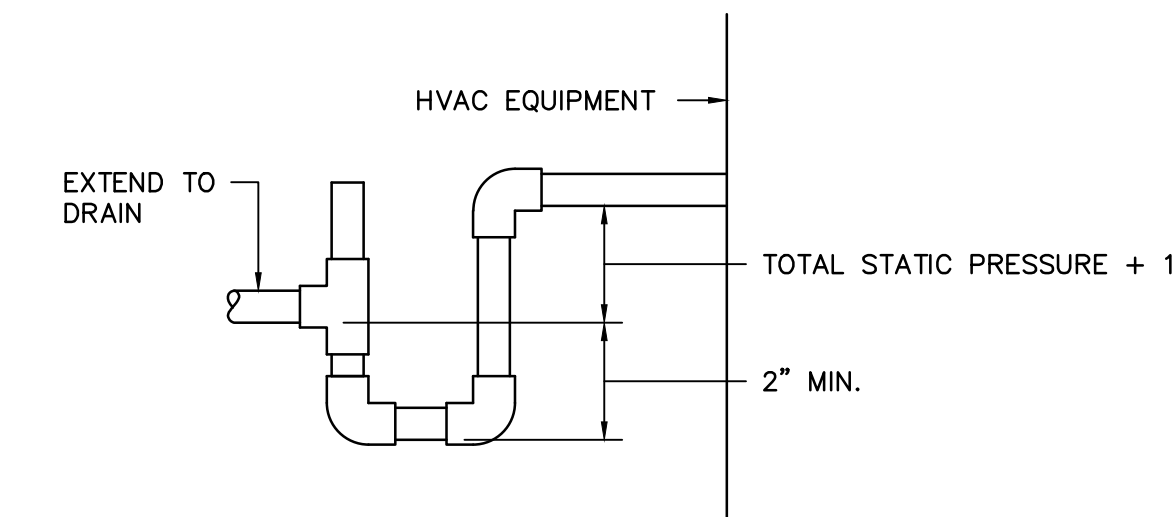
PIPE PENETRATION DETAIL

NO SCALE



ROOFTOP EXHAUST FAN

NO SCALE



CONDENSATE DRAIN DETAIL

NO SCALE

ISOLATION AND SEISMIC SCHEDULE				
RISK CATEGORY = II		SEISMIC DESIGN CATEGORY = D		
EQUIPMENT TAG	COMPONENT I _p	ISOLATION SPECIFICATION	SEISMIC REST. SPECIFICATION	ISOLATION DEFLECTION
RTU-1, 2	1.0	SPEC Z	SPEC Z	2"
BOILERS	1.0	SPEC W	NOTE 1	.15"
PUMPS (ON GRADE) < 7.5 HP	1.0	SPEC K	NOTE 1	.15"
AIR SEPARATORS & EXP. TANKS	1.0	NONE	NOTE 1	N/A
ROOF EXH. FANS	1.0	NONE	NOTE 2	N/A
FAN POWERED VAV	1.0	SPEC D, K	SPEC SC	.5"
VAV (NON-FAN) < 20 LBS	1.0	NONE	NONE	N/A
VAV (NON-FAN) > 20 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 4	N/A

- ANCHOR BOLTS FOR NON-ISOLATED AND INTERNALLY ISOLATED EQUIPMENT SHALL BE SIZED BY THE SEISMIC RESTRAINT SUPPLIER. IF REQUIRED SPEC SC CABLE KITS SHALL BE PROVIDED.
- ROOF CURBS AND ADAPTERS PROVIDED BY OTHERS MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER FOR THE REQUIRED SEISMIC AND WIND LOADS.
- 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.

ELECTRIC WALL HEATER SCHEDULE				
TAG	MARKEL MODEL	KW @ 208V	STYLE	REMARKS
EW-1	HF3326	3.0	SURFACE	1
EW-2	HF3326	3.0	SURFACE	1

- PROVIDE BUILT IN THERMOSTAT SET AT 65°F, FUSED DISCONNECT, SURFACE MOUNTING FRAME, AND 16 GA. HEAVY DUTY GRILLE.

	AGENCY OR INSTITUTION Department of Disabilities and Special Needs	PROFESSIONAL SEAL 	A & E FIRM Swygert & Associates CONSULTING ENGINEERS <small>DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300 Post Office Box 11686 Columbia, S.C. 29211 Facsimile: (803) 791-0830 Email: swygert@swygert-associates.com</small>	A & E STATE NO. 	SHEET TITLE SCHEDULES AND DETAILS	PROJECT TITLE SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA
	DIVISION	REVISION	DATE	BY	APP.	A & E PROJECT NO. 12770 DRAWN BY: BJJ CHECKED BY: WCL FINAL APP.: BJJ

GENERAL NOTES

- 1. VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
2. DO NOT SCALE DRAWINGS. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
3. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
...
35. THE HVAC SYSTEMS SHALL NOT BE OPERATED DURING HEAVY CONSTRUCTION OPERATIONS INCLUDING MASONRY, GYPSUM BOARD SANDING, HEAVY CLEANUP ACTIVITIES, OR OTHER ACTIVITIES THAT CREATE AIRBORNE PARTICLES OR DEBRIS. ALL SYSTEMS SHALL BE CLEAN OF CONSTRUCTION DEBRIS, DUST AND DIRT AT FINAL COMPLETION. DUCT CLEANING AND UNIT/COIL CLEANING SHALL BE PERFORMED IF REQUIRED.

FAN POWERED VARIABLE VOLUME BOX SCHEDULE

Table with columns: TAG, TRANE MODEL, AIR INLET (NOM. DIA.), CFM (VALVE MAX/MIN, FAN), HEATING COIL (CFM, MBH, GPM), MAX. UNIT P.D. INCHES W.C., MAX. NC LEVEL, REMARKS. Includes rows for various fan models like VPWF with their respective specifications.

- 1. PARALLEL FAN POWERED WITH DISCONNECT SWITCH, ECM FAN MOTOR, AND 1" FOIL FACED INSULATION.
2. HEATING COIL BASED ON 180°F ENTERING WATER AND 30°F DROP AND MOUNTED ON UNIT DISCHARGE.
3. CONTROLS SHALL BE PROVIDED BY THE CONTROL CONTRACTOR AND FACTORY MOUNTED.

VARIABLE VOLUME BOX SCHEDULE

Table with columns: TAG, TRANE MODEL, AIR INLET (NOM. DIA.), CFM (MAX/MIN, HEATING), HEATING COIL (MBH, GPM), MAX. UNIT P.D. INCHES W.C., MAX. NC LEVEL, REMARKS. Includes rows for various VCWF models with their respective specifications.

- 1. SINGLE DUCT WITH 1" FOIL FACED INSULATION.
2. HEATING COIL SELECTION BASED ON 180°F EWT WITH 30°F DROP.
3. CONTROLS SHALL BE PROVIDED BY THE CONTROL CONTRACTOR AND FACTORY MOUNTED.

DESIGN CONDITIONS

Table with columns: SEASON, OUTSIDE, INSIDE. Values for Summer: 97°F FDB / 78°F FWB, 75°F FDB / 50% RH. Values for Winter: 22°F FDB, 70°F FDB.

LEGEND

Table with columns: SYMBOL, DESCRIPTION. Lists various HVAC symbols and their corresponding descriptions, such as HWS for HOT WATER SUPPLY LINE, HWR for HOT WATER RETURN LINE, R for REFRIGERANT LINES, etc.

ROOFTOP VARIABLE AIR VOLUME UNIT SCHEDULE

Table with columns: TAG, TRANE MODEL NO., SUPPLY FAN (AIRFLOW CFM, ESP IN. WG, FAN H.P.), RETURN FAN (AIRFLOW CFM, ESP IN. WG, FAN H.P.), OUTDOOR AIR-CFM, DX COOLING CAPACITY @ 95°F (EA DB/WB, LA DB/WB), HEATING COIL (AIRFLOW CFM, EADB, LADB, GPM, WTR. P.D. FT. WTR.), EER, REMARKS. Includes rows for RTU-1 and RTU-2.

- 1. PROVIDE INTERNAL VIBRATION ISOLATION, ENTHALPY ECONOMIZER, EXHAUST FAN WITH STATIC TRAC, VARIABLE FREQUENCY DRIVE ON SUPPLY FAN, LOW AMBIENT COOLING TO 0°F, FACTORY MOUNTED NON-FUSED DISCONNECT, AND 15A GFI CONVENIENCE OUTLET.
2. PROVIDE MICROPROCESSOR CONTROLS TO OPERATE THE UNIT WHEN INSTRUCTED BY THE EMS.
3. PROVIDE STAINLESS STEEL CONDENSATE DRAIN PAN.
...
8. PROVIDE WITH FULL PERIMETER SEISMIC/WIND RATED VIBRATION CURB PER THE ISOLATION AND SEISMIC SCHEDULE.

COPPER FIN TUBE BOILER SCHEDULE

Table with columns: TAG, LOCHINVAR MODEL, INPUT MBH, OUTPUT MBH, THERMAL EFFICIENCY, FUEL TYPE, REMARKS. Includes row for B-1 with specifications for a CHN1442 boiler.

- 1. PROVIDE WITH 50# ASME PRESSURE RELIEF VALVE. BOILER SHALL BE RATED AT ASME 160# WATER PRESSURE AND 7" W.C. NATURAL GAS PRESSURE.
2. PROVIDE WITH DIGITAL OPERATOR INTERFACE PANEL, HOT SURFACE IGNITION, STAINLESS STEEL BURNERS AND PROPORTIONAL FIRING.
3. BOILER TO OPERATE AT 150°F-180°F.
4. PROVIDE WITH LOW TEMPERATURE PROTECTION VALVE.

PUMP SCHEDULE

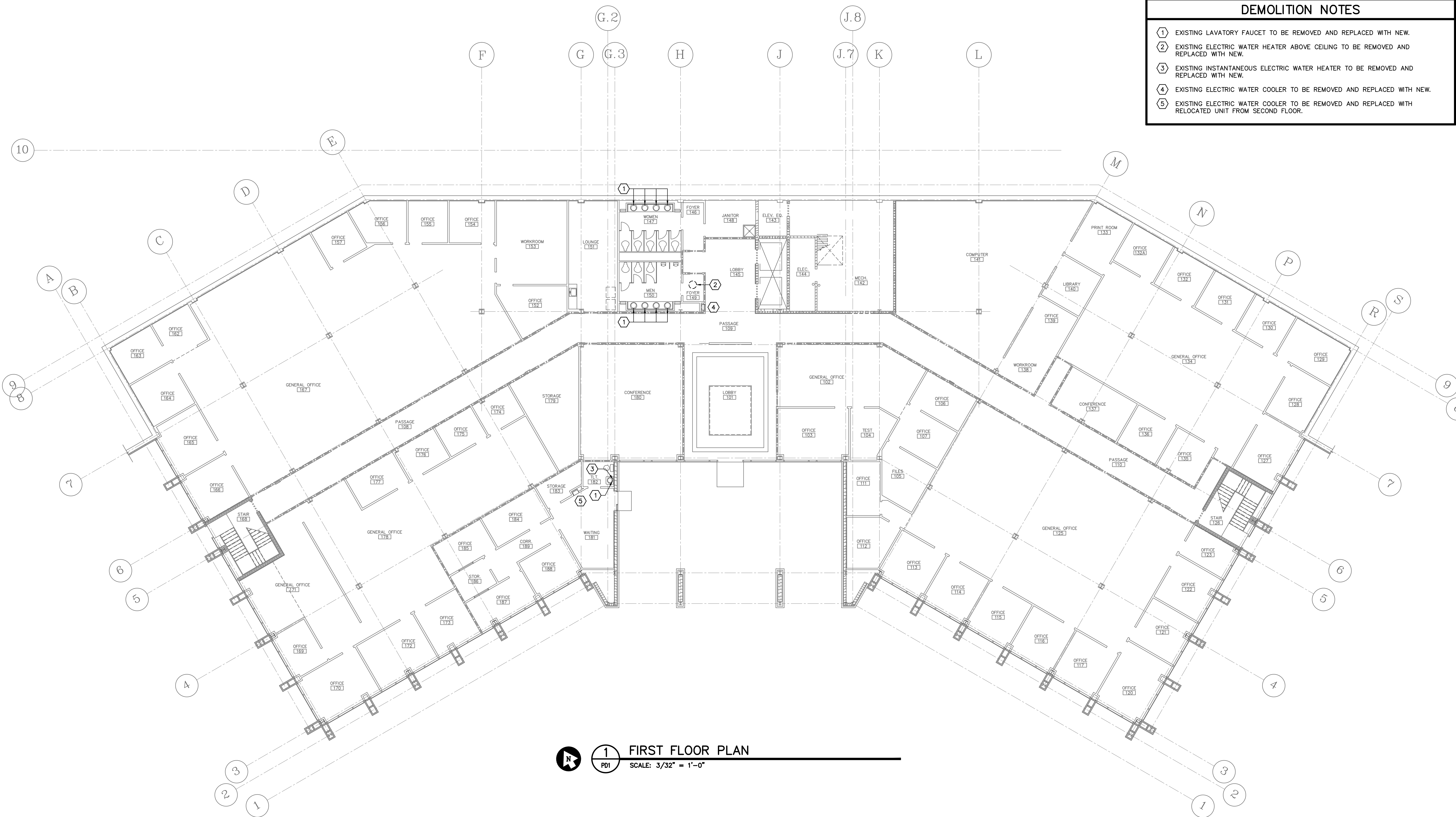
Table with columns: TAG, B&G MODEL NO., TYPE, GPM, HEAD FT-WTR, HP (MIN), MIN. EFF.%, RPM, REMARKS. Includes rows for BP-1, HWP-1, and HWP-2.

- 1. PROVIDE BRONZE FITTED PUMP RATED FOR 175 PSI MAX PRESSURE.
2. PROVIDE WITH TRIPLE DUTY VALVE.
3. PROVIDE WITH SUCTION DIFFUSER.

Project information footer including logos for The State of South Carolina and Department of Disabilities and Special Needs, agency name (Swygert & Associates), project number (12770), sheet title (NOTES, SCHEDULES, AND LEGEND), and project location (SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS).

33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

- DEMOLITION NOTES**
- ① EXISTING LAVATORY FAUCET TO BE REMOVED AND REPLACED WITH NEW.
 - ② EXISTING ELECTRIC WATER HEATER ABOVE CEILING TO BE REMOVED AND REPLACED WITH NEW.
 - ③ EXISTING INSTANTANEOUS ELECTRIC WATER HEATER TO BE REMOVED AND REPLACED WITH NEW.
 - ④ EXISTING ELECTRIC WATER COOLER TO BE REMOVED AND REPLACED WITH NEW.
 - ⑤ EXISTING ELECTRIC WATER COOLER TO BE REMOVED AND REPLACED WITH RELOCATED UNIT FROM SECOND FLOOR.

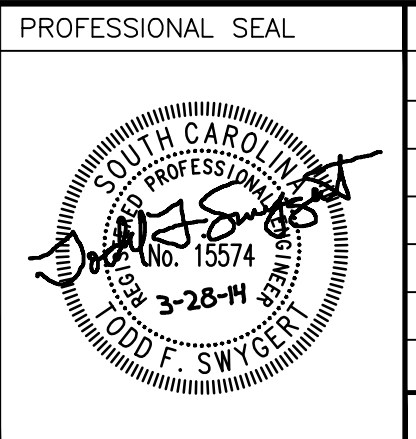


1 FIRST FLOOR PLAN
 SCALE: 3/32" = 1'-0"



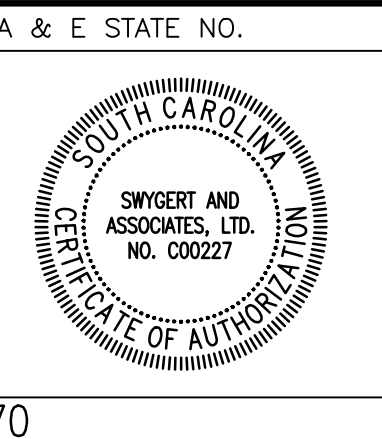
The State of South Carolina

AGENCY OR INSTITUTION
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PROFESSIONAL SEAL					
REVISION	DATE	BY	APP.		

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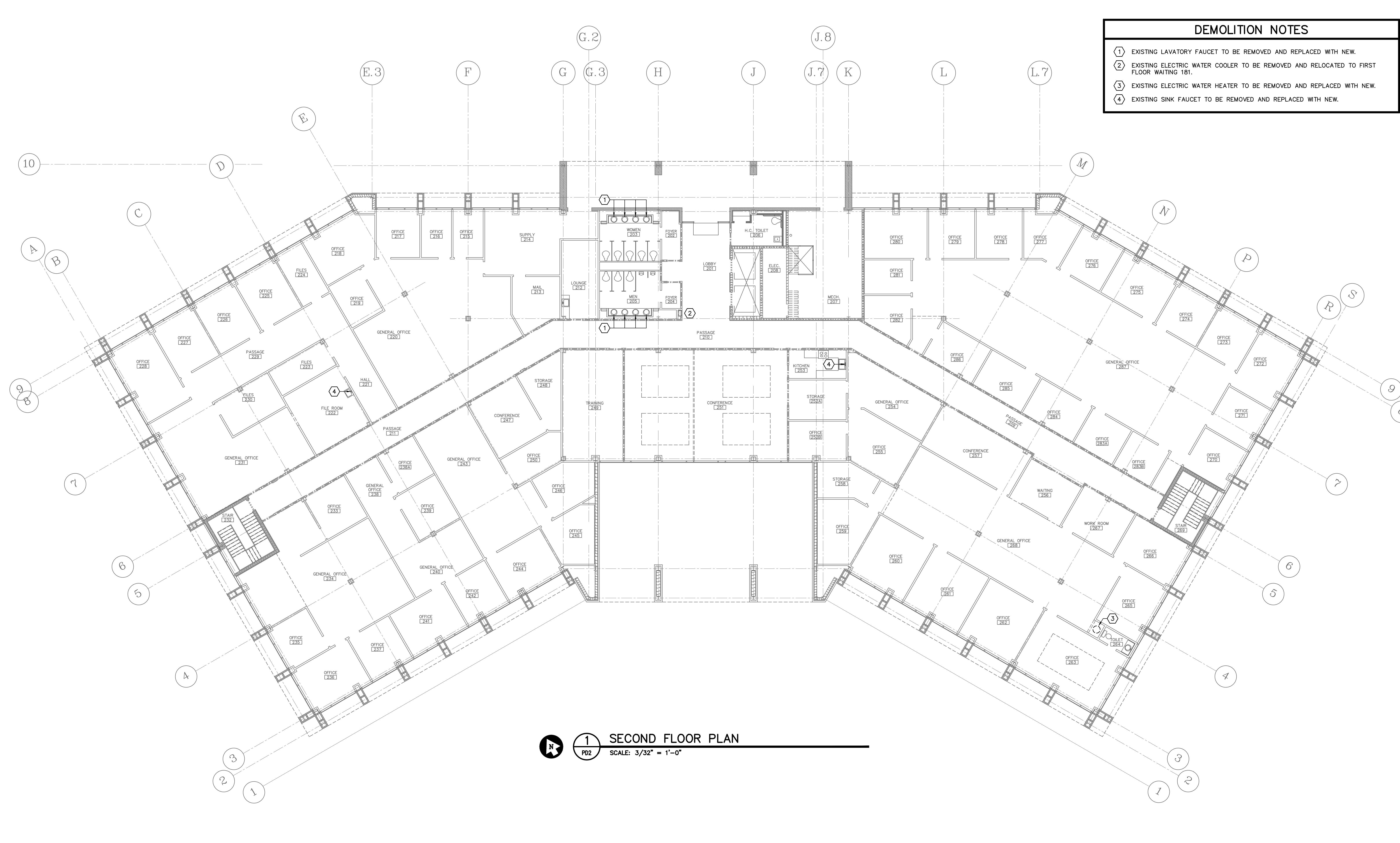
A & E STATE NO.
 SHEET TITLE
FIRST FLOOR DEMOLITION PLAN

PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

STATE PROJECT NO. J16-9863-FW-A	DRAWING NO.	SHEET PD1 of 5
DATE 5/5/2014		

33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

- DEMOLITION NOTES**
- ① EXISTING LAVATORY FAUCET TO BE REMOVED AND REPLACED WITH NEW.
 - ② EXISTING ELECTRIC WATER COOLER TO BE REMOVED AND RELOCATED TO FIRST FLOOR WAITING 181.
 - ③ EXISTING ELECTRIC WATER HEATER TO BE REMOVED AND REPLACED WITH NEW.
 - ④ EXISTING SINK FAUCET TO BE REMOVED AND REPLACED WITH NEW.

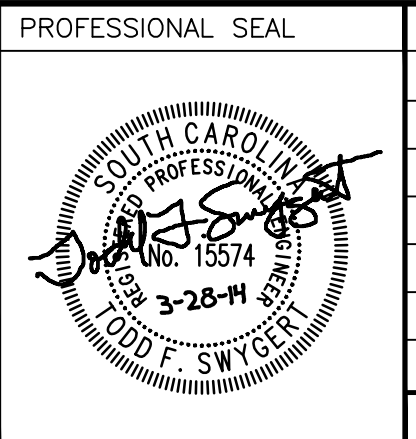


1 SECOND FLOOR PLAN
 PD2 SCALE: 3/32" = 1'-0"



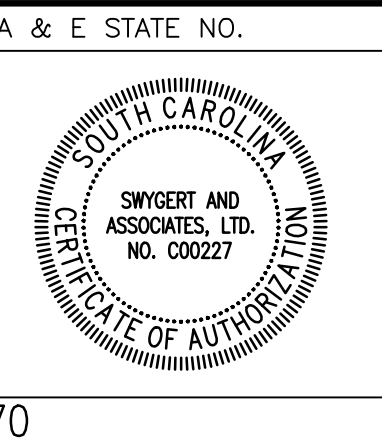
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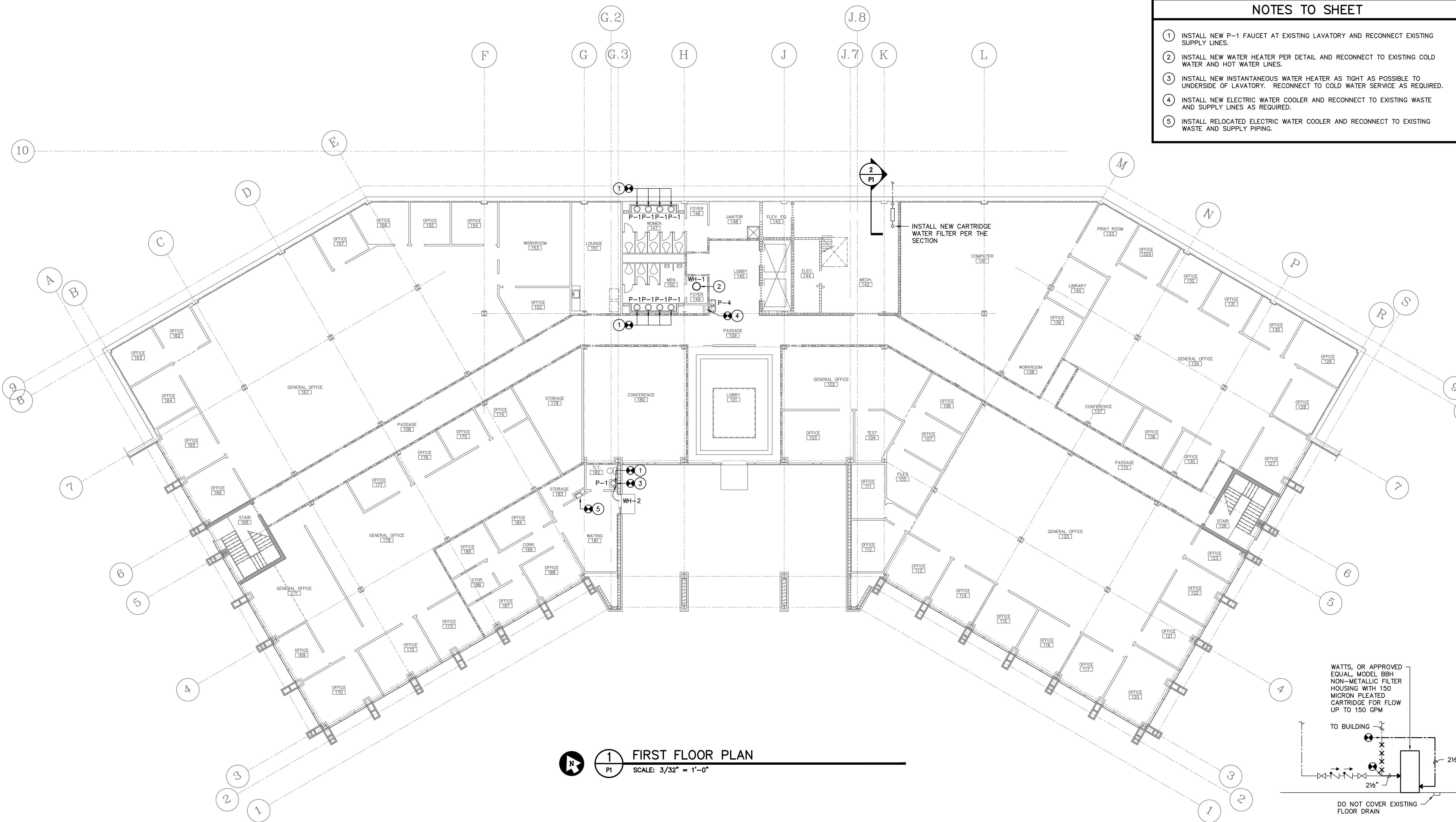


A & E STATE NO.
SECOND FLOOR DEMOLITION PLAN
 DRAWN BY: DEM CHECKED BY: TFS FINAL APP.: TFS

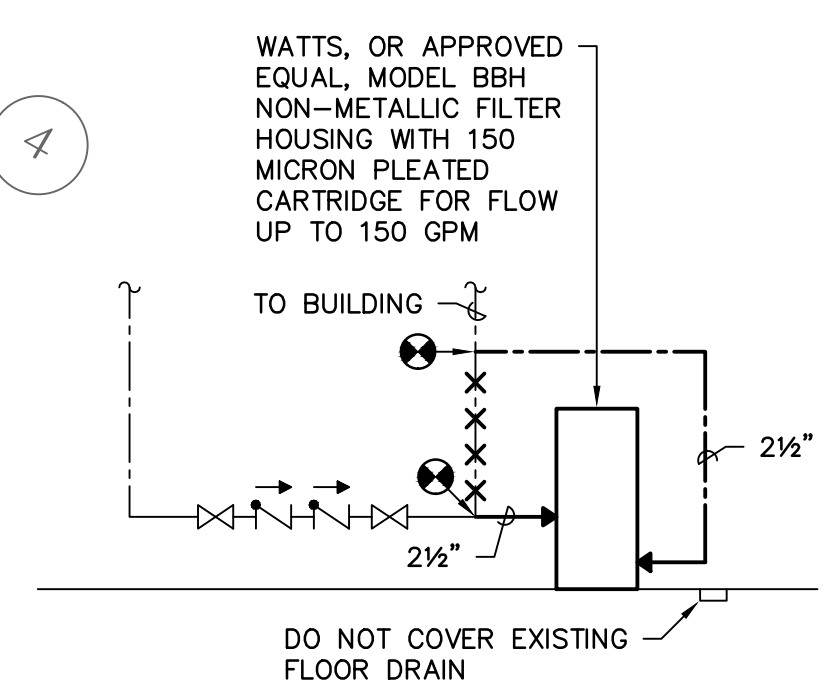
PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

STATE PROJECT NO. **J16-9863-FW-A** DRAWING NO. SHEET **PD2** of **5**
 DATE 5/5/2014

- NOTES TO SHEET**
- 1 INSTALL NEW P-1 FAUCET AT EXISTING LAVATORY AND RECONNECT EXISTING SUPPLY LINES.
 - 2 INSTALL NEW WATER HEATER PER DETAIL AND RECONNECT TO EXISTING COLD WATER AND HOT WATER LINES.
 - 3 INSTALL NEW INSTANTANEOUS WATER HEATER AS TIGHT AS POSSIBLE TO UNDERSIDE OF LAVATORY. RECONNECT TO COLD WATER SERVICE AS REQUIRED.
 - 4 INSTALL NEW ELECTRIC WATER COOLER AND RECONNECT TO EXISTING WASTE AND SUPPLY LINES AS REQUIRED.
 - 5 INSTALL RELOCATED ELECTRIC WATER COOLER AND RECONNECT TO EXISTING WASTE AND SUPPLY PIPING.



1 FIRST FLOOR PLAN
 SCALE: 3/32" = 1'-0"



2 SECTION
 P1 NO SCALE

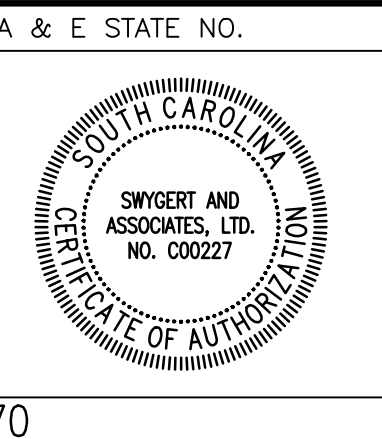


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A & E STATE NO.
 SHEET TITLE
FIRST FLOOR PLAN

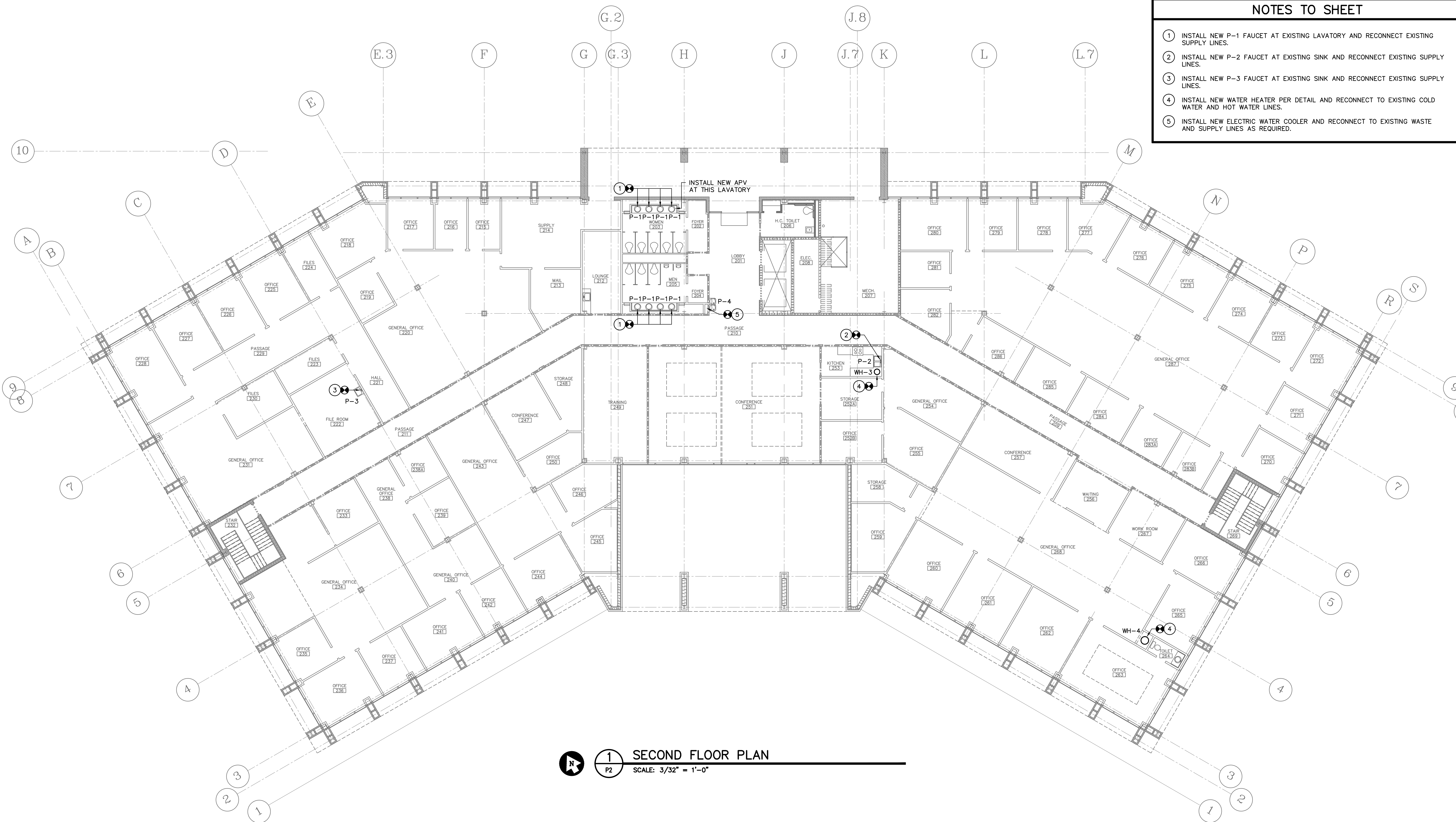
PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

STATE PROJECT NO. **J16-9863-FW-A**
 DRAWING NO. **P1**
 SHEET **of 5**
 DATE **5/5/2014**

A & E PROJECT NO. **12770**
 DRAWN BY: **DEM** CHECKED BY: **TFS** FINAL APP.: **TFS**

33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

- NOTES TO SHEET**
- 1 INSTALL NEW P-1 FAUCET AT EXISTING LAVATORY AND RECONNECT EXISTING SUPPLY LINES.
 - 2 INSTALL NEW P-2 FAUCET AT EXISTING SINK AND RECONNECT EXISTING SUPPLY LINES.
 - 3 INSTALL NEW P-3 FAUCET AT EXISTING SINK AND RECONNECT EXISTING SUPPLY LINES.
 - 4 INSTALL NEW WATER HEATER PER DETAIL AND RECONNECT TO EXISTING COLD WATER AND HOT WATER LINES.
 - 5 INSTALL NEW ELECTRIC WATER COOLER AND RECONNECT TO EXISTING WASTE AND SUPPLY LINES AS REQUIRED.



1 SECOND FLOOR PLAN
 P2 SCALE: 3/32" = 1'-0"

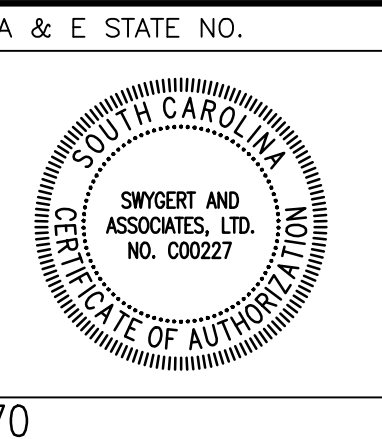


AGENCY OR INSTITUTION
Department of Disabilities and Special Needs

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A & E STATE NO.
 SHEET TITLE
SECOND FLOOR PLAN
 DRAWN BY: DEM CHECKED BY: TFS FINAL APP.: TFS

PROJECT TITLE
SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATION) COLUMBIA, SOUTH CAROLINA

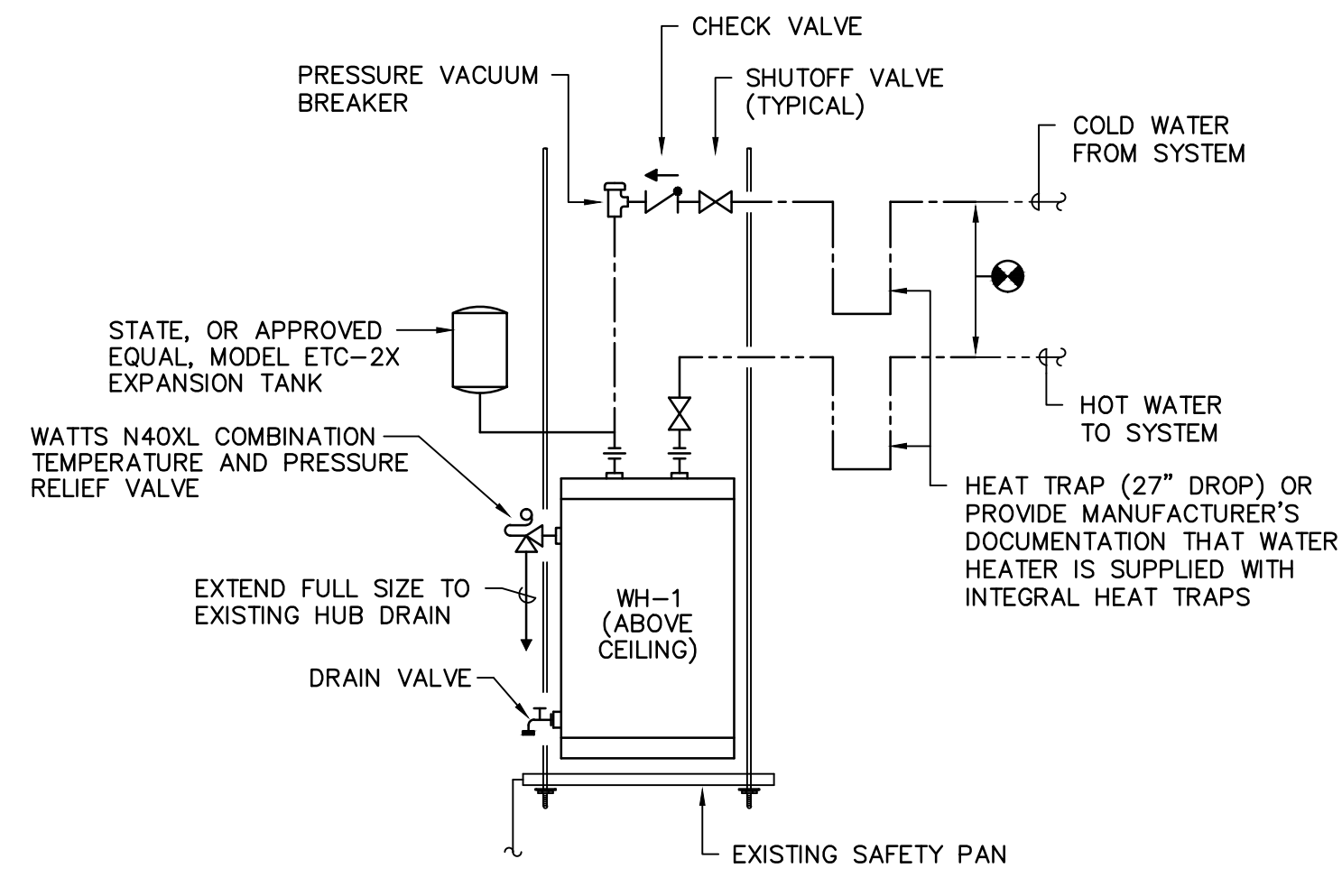
STATE PROJECT NO. **J16-9863-FW-A** DRAWING NO. SHEET **P2** of 5
 DATE 5/5/2014

PLUMBING FIXTURE SCHEDULE								
P. NO.	FIXTURE	MFR.	NAME	MFRS. NO.	SIZE	MIN. SUPPLY		REMARKS
						CW	HW	
P-1	LAVATORY FAUCET	DELTA	---	501LF-HGMHDF	---	3/8"	3/8"	RECONNECT TO EXISTING SUPPLY RISERS.
P-2	SINK FAUCET	DELTA	---	100LF-HDF	---	1/2"	1/2"	RECONNECT TO EXISTING SUPPLY RISERS.
P-3	SINK FAUCET	DELTA	---	27C-4842	---	1/2"	1/2"	RECONNECT TO EXISTING SUPPLY RISERS.
P-4	ELECTRIC WATER COOLER	OASIS	---	PF8ACSL	---	3/8"	---	WITH STAINLESS STEEL FINISH, STAINLESS STEEL APRON FOR UPPER UNIT, AND FILTRATION SYSTEM. RECONNECT TO EXISTING SUPPLY PIPING AND P-TRAP. TRANSITION AS REQUIRED.
WH-1	WATER HEATER	STATE	SELECT	ES6-30-DOLS	30 GALLONS	3/4"	3/4"	WITH 4.5 KW INPUT @ 208 VOLTS. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.
WH-2	INSTANTANEOUS WATER HEATER	EEMAX	---	SP4208	---	3/8"	3/8"	WITH 4.1 KW INPUT @ 208 VOLTS. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.
WH-3	WATER HEATER	STATE	SELECT JUNIOR	ES6-10-SOMS	10 GALLONS	3/4"	3/4"	WITH 1650W INPUT @ 120 VOLTS. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.
WH-4	WATER HEATER	STATE	SELECT JUNIOR	ES6-10-SOMS	10 GALLONS	3/4"	3/4"	WITH 1650W INPUT @ 120 VOLTS. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.

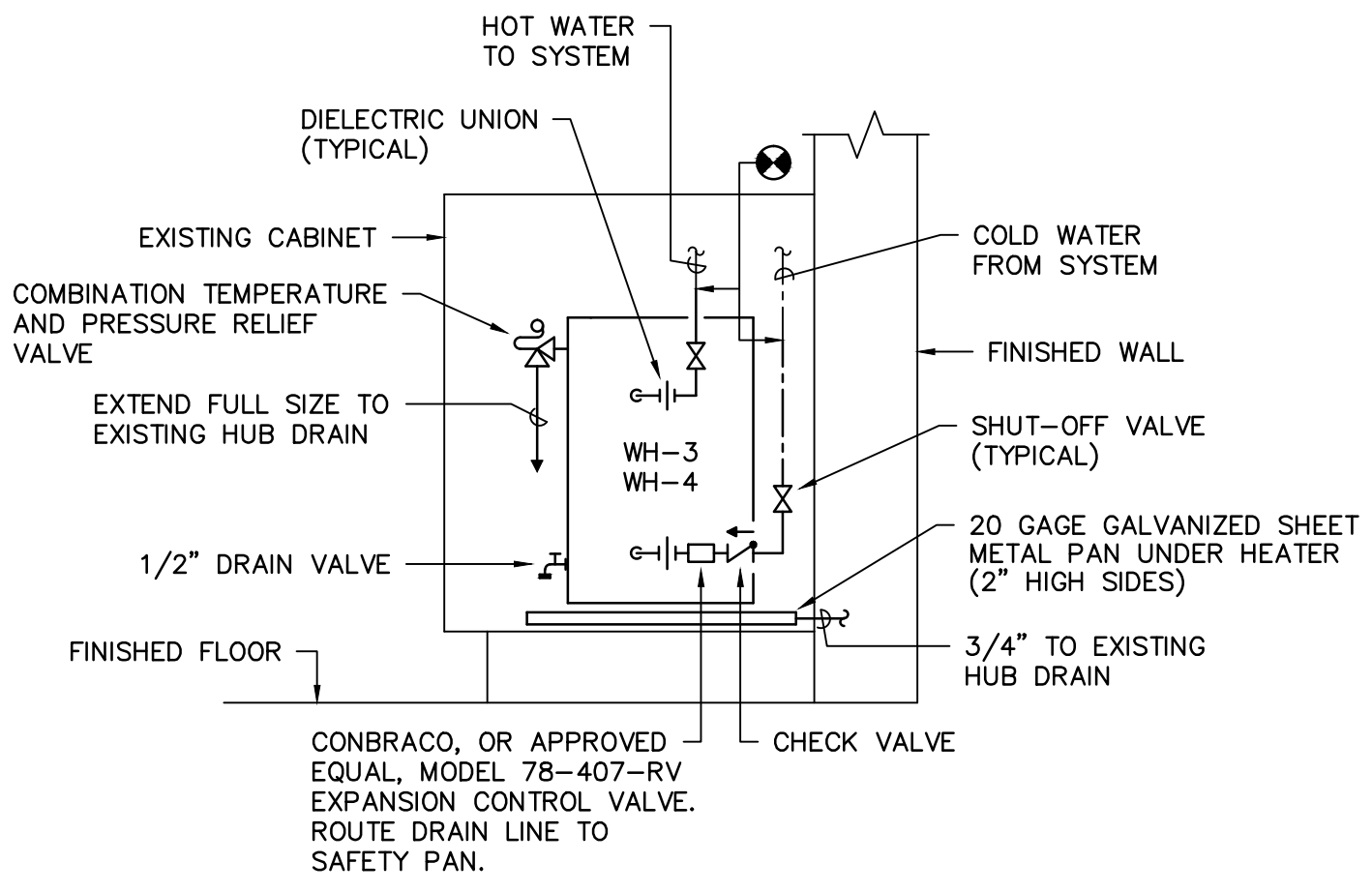
- GENERAL NOTES**
- ALL WORK SHALL BE PERFORMED ACCORDING TO ALL LOCAL, STATE, NATIONAL CODES, AND THE 2012 INTERNATIONAL PLUMBING CODE.
 - DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS, FIXTURE LOCATIONS, ETC.
 - COORDINATE CLOSELY WITH ALL WORK DONE UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE AND CONFLICT.
 - PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT.
 - ALL PIPING INSULATION SHALL BE RUN CONTINUOUSLY.
 - REMOVAL AND REPLACEMENT OF CEILING, AS REQUIRED FOR INSTALLATION OF NEW WORK, SHALL BE DONE BY THIS CONTRACTOR. ANY CEILING GRID OR TILE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT NO COST TO THE OWNER.

LEGEND

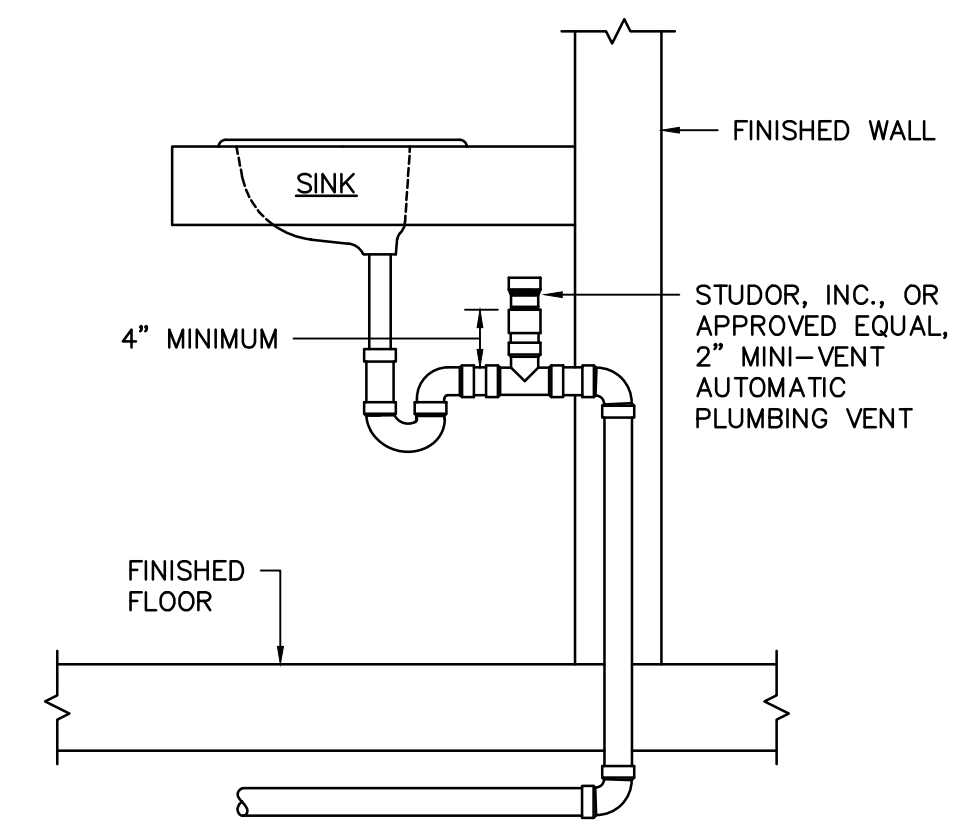
SYMBOL	DESCRIPTION
	EXISTING PIPING TO BE REMOVED
	DOMESTIC COLD WATER LINE
APV	AUTOMATIC PLUMBING VENT
	CONNECTION POINT OF NEW TO EXISTING



WATER HEATER PIPING DETAIL
NO SCALE

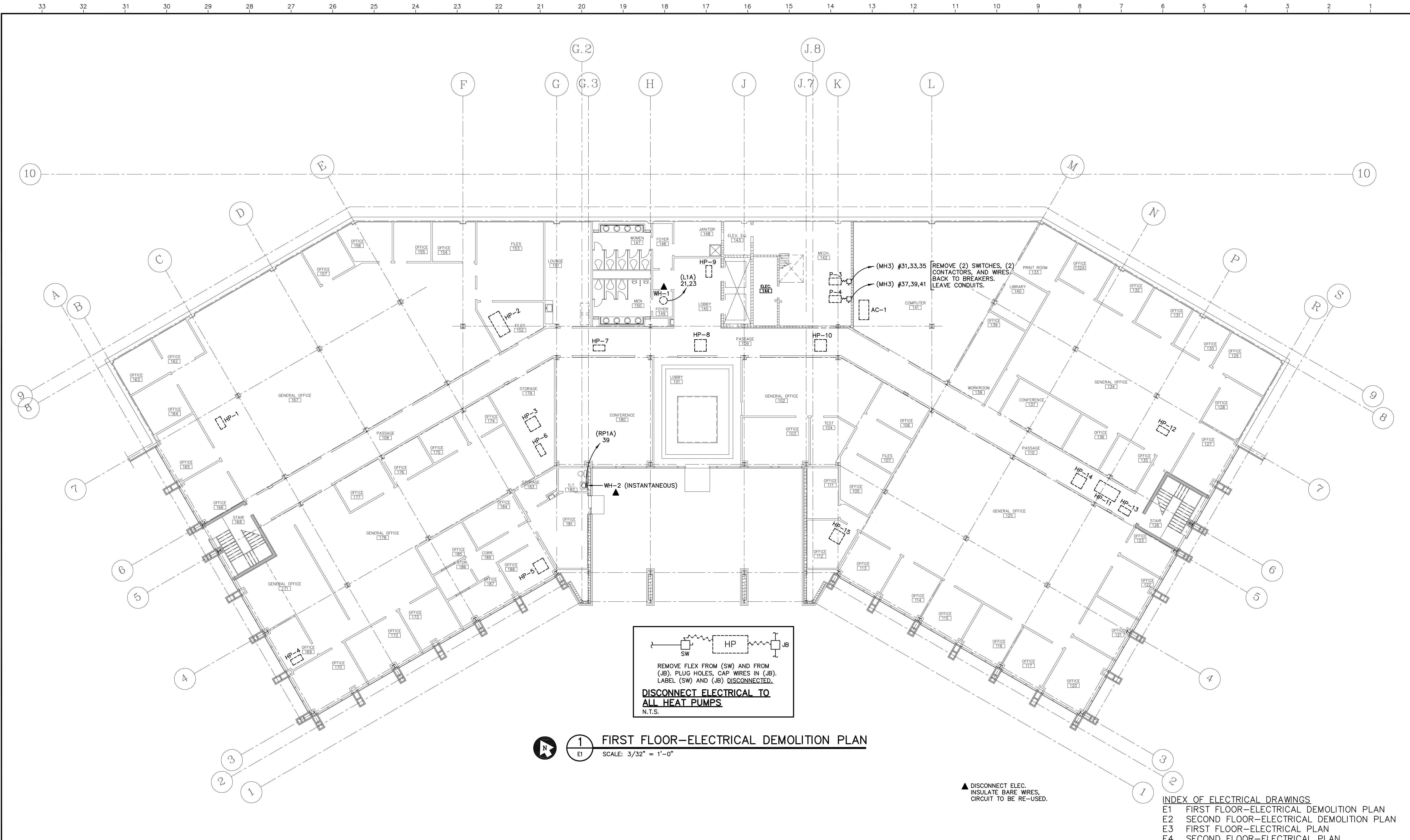


WATER HEATER PIPING DETAIL
NO SCALE



AUTOMATIC PLUMBING VENT
NO SCALE

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	DIVISION	REVISION	DATE	BY	APP.	A & E PROJECT NO. 12770 DRAWN BY: DEM CHECKED BY: TFS FINAL APP.: TFS



1 FIRST FLOOR-ELECTRICAL DEMOLITION PLAN
 E1 SCALE: 3/32" = 1'-0"

▲ DISCONNECT ELEC.
 INSULATE BARE WIRES,
 CIRCUIT TO BE RE-USED.

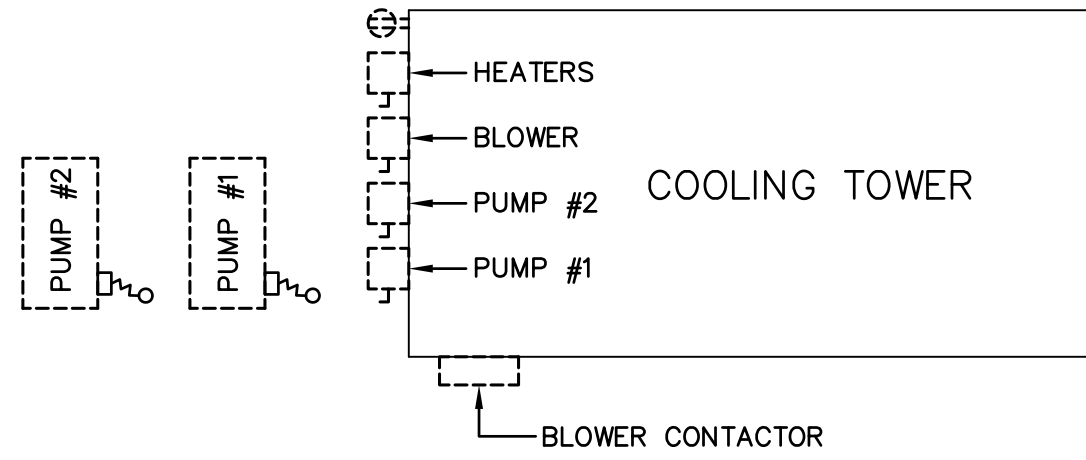
INDEX OF ELECTRICAL DRAWINGS

E1	FIRST FLOOR-ELECTRICAL DEMOLITION PLAN
E2	SECOND FLOOR-ELECTRICAL DEMOLITION PLAN
E3	FIRST FLOOR-ELECTRICAL PLAN
E4	SECOND FLOOR-ELECTRICAL PLAN
E5	ROOF-ELECTRICAL PLAN
E6	ELECTRICAL RISER AND DETAILS

FOR REVIEW ONLY

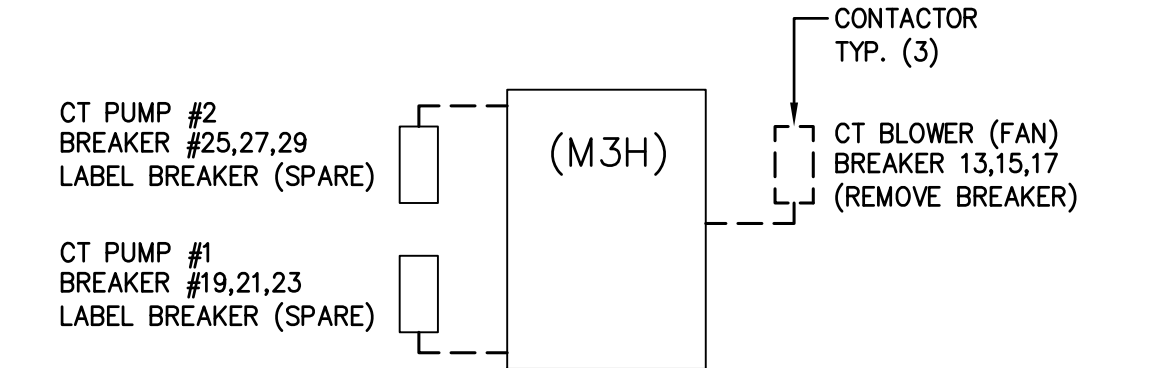
<p>The State of South Carolina</p>	AGENCY OR INSTITUTION Department of Disabilities and Special Needs	PROFESSIONAL SEAL 	A & E FIRM 	SHEET TITLE FIRST FLOOR ELECTRICAL DEMOLITION PLAN	PROJECT TITLE SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATIONS) COLUMBIA, SOUTH CAROLINA
	DIVISION 	REVISION 	DATE 	BY 	APP.
			DRAWN BY: RM CHECKED BY: RS FINAL APP.: RS	STATE PROJECT NO. J16-9863-FW-A	DRAWING NO.
			DATE 5/5/2014	SHEET E1 of 6	

33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



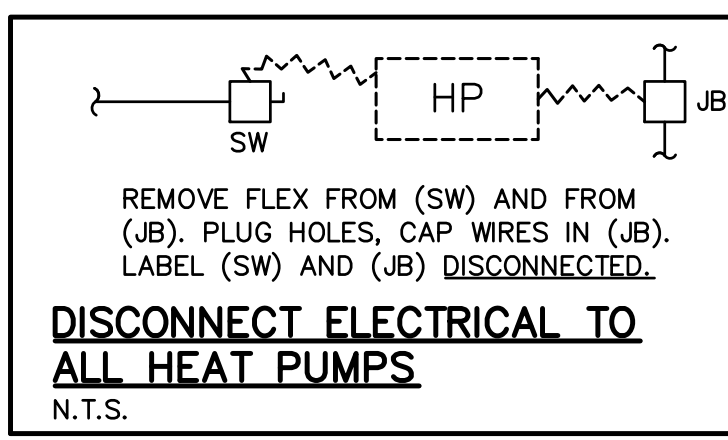
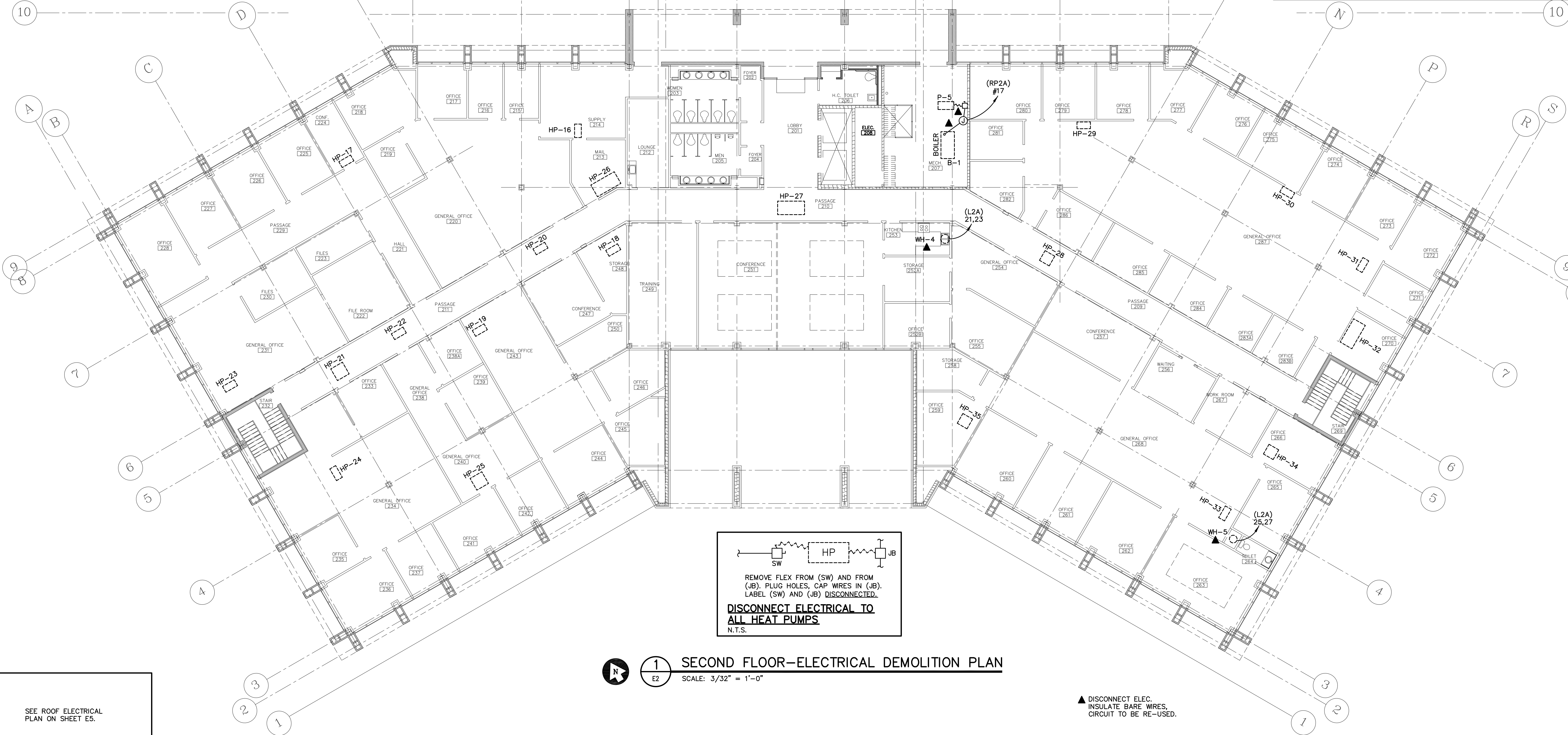
PARTIAL PLAN @ COOLING TOWER
N.T.S.

1. REMOVE ALL ELECTRICAL EQUIPMENT.
2. REMOVE WIRES FROM CONDUITS BACK TO BREAKERS.
3. CAP-OFF ALL UNDERGROUND CONDUITS (6" BELOW GRADE).



ELECTRICAL ROOM SECOND FLOOR
N.T.S.

1. REMOVE (3) CONTACTORS AS SHOWN ABOVE, REMOVE WIRES.
2. REMOVE WIRES AND BREAKER 31,33,35, AND LABEL HWP-1.
3. REMOVE WIRES AND BREAKER 37,39,41, AND LABEL HWP-2.
4. REMOVE COOLING TOWER WIRES FROM BREAKER 20,22,24, AND LABEL BREAKER (TVSS).
5. LEAVE ALL CONDUITS.
6. PLUG ALL HOLES IN PANEL.



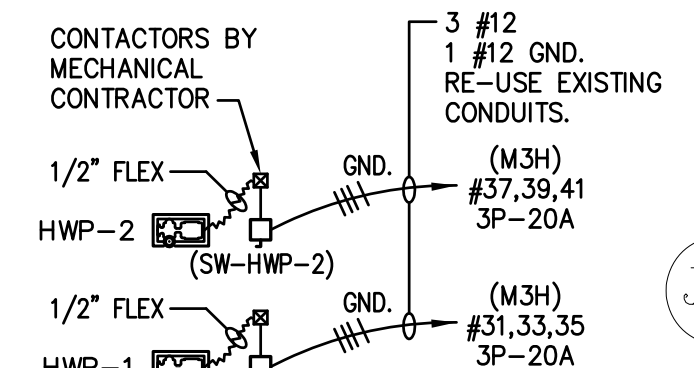
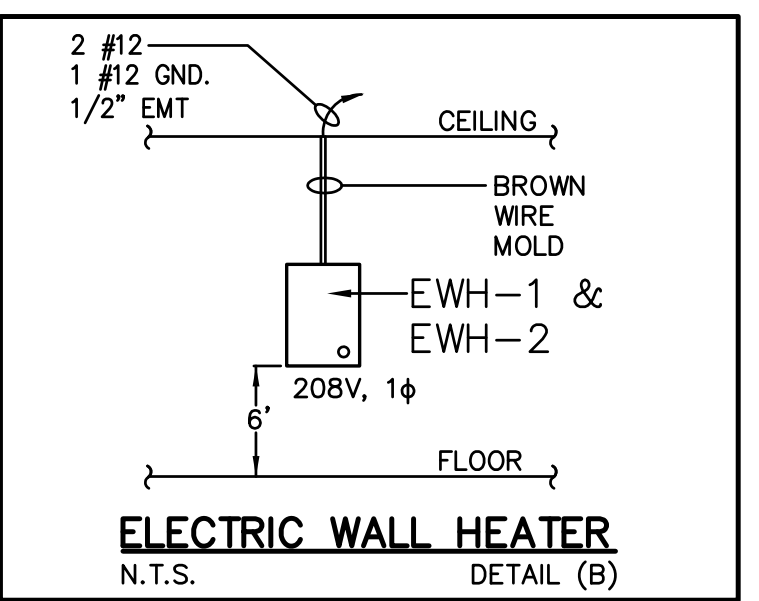
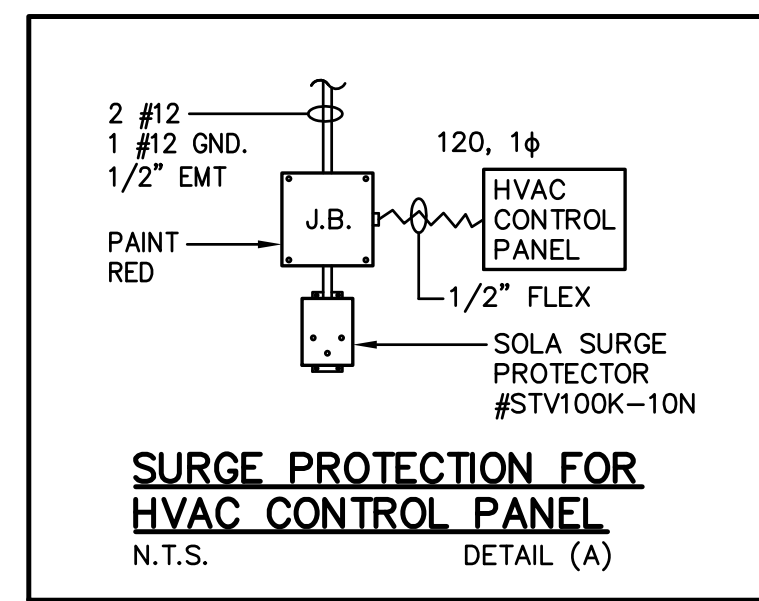
1 SECOND FLOOR-ELECTRICAL DEMOLITION PLAN
SCALE: 3/32" = 1'-0"

▲ DISCONNECT ELEC. INSULATE BARE WIRES. CIRCUIT TO BE RE-USED.

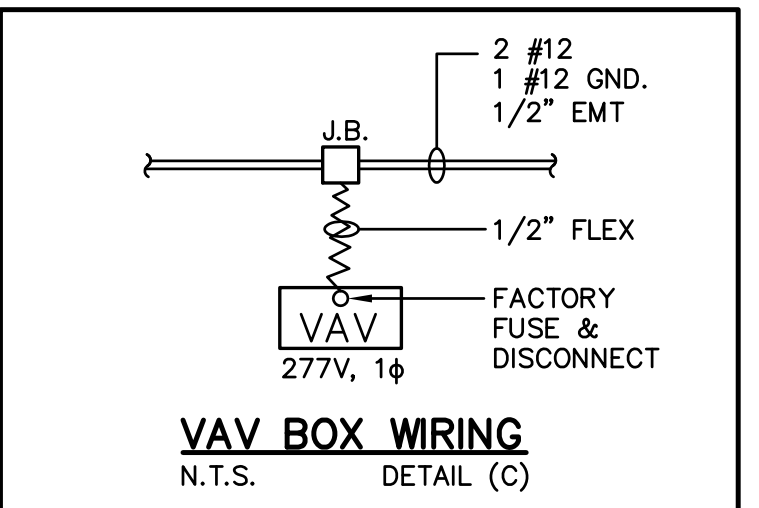
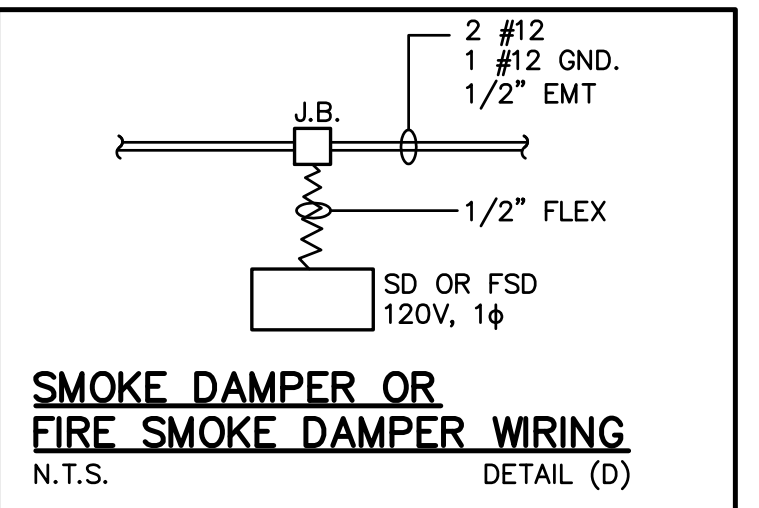
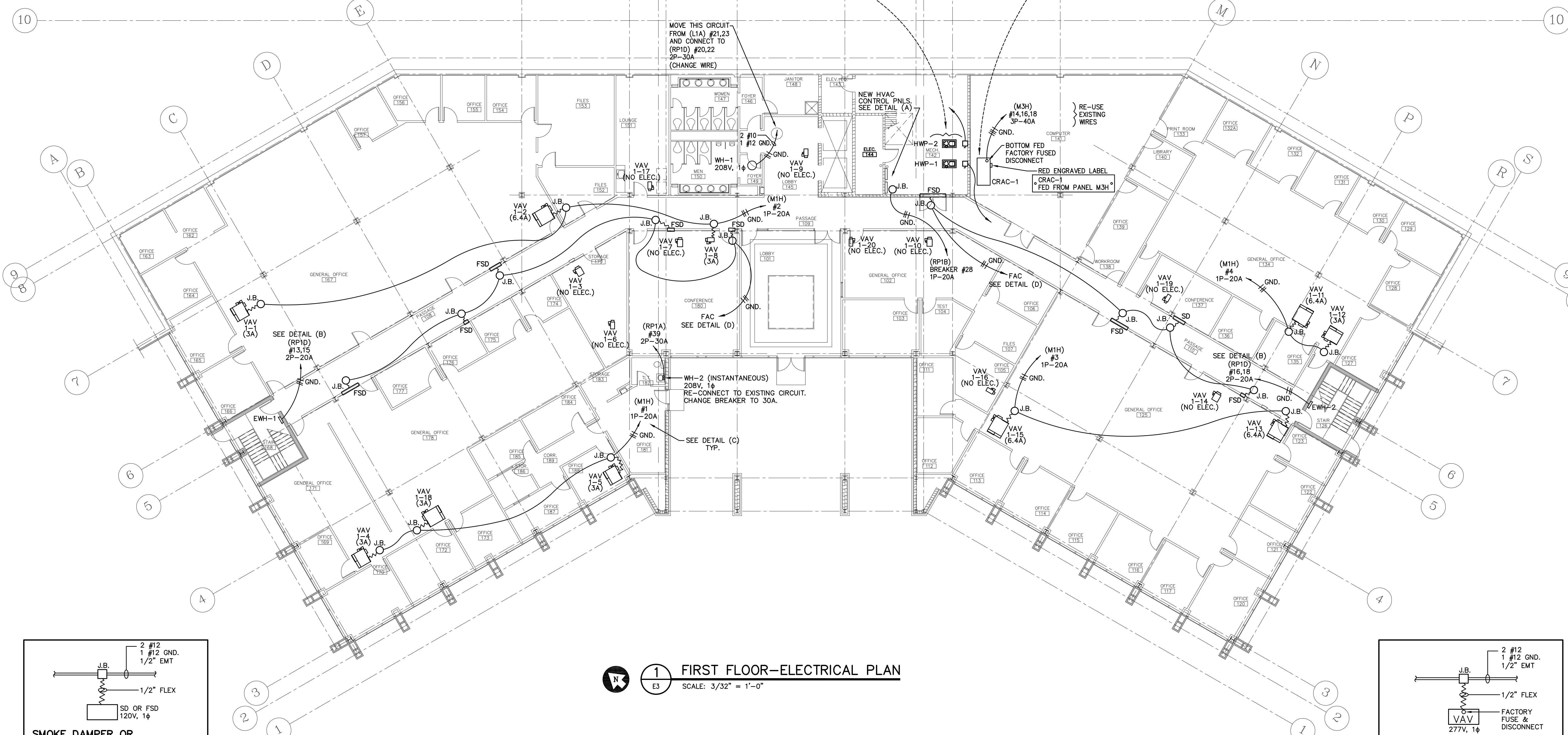
SEE ROOF ELECTRICAL PLAN ON SHEET E5.
EXHAUST FANS ON ROOF
N.T.S.

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	AGENCY OR INSTITUTION Department of Disabilities and Special Needs	PROFESSIONAL SEAL 	A & E FIRM _____	SHEET TITLE SECOND FLOOR, ROOF & COOLING TOWER ELECT. DEMOLITION PLAN	PROJECT TITLE SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATIONS) COLUMBIA, SOUTH CAROLINA
	DIVISION _____	REVISION _____	DATE _____	BY _____	APP. _____
STATE PROJECT NO. J16-9863-FW-A		DRAWING NO. _____		SHEET E2 of 6	
DATE 5/5/2014		DRAWN BY: RM		CHECKED BY: RS	
				FINAL APP.: RS	

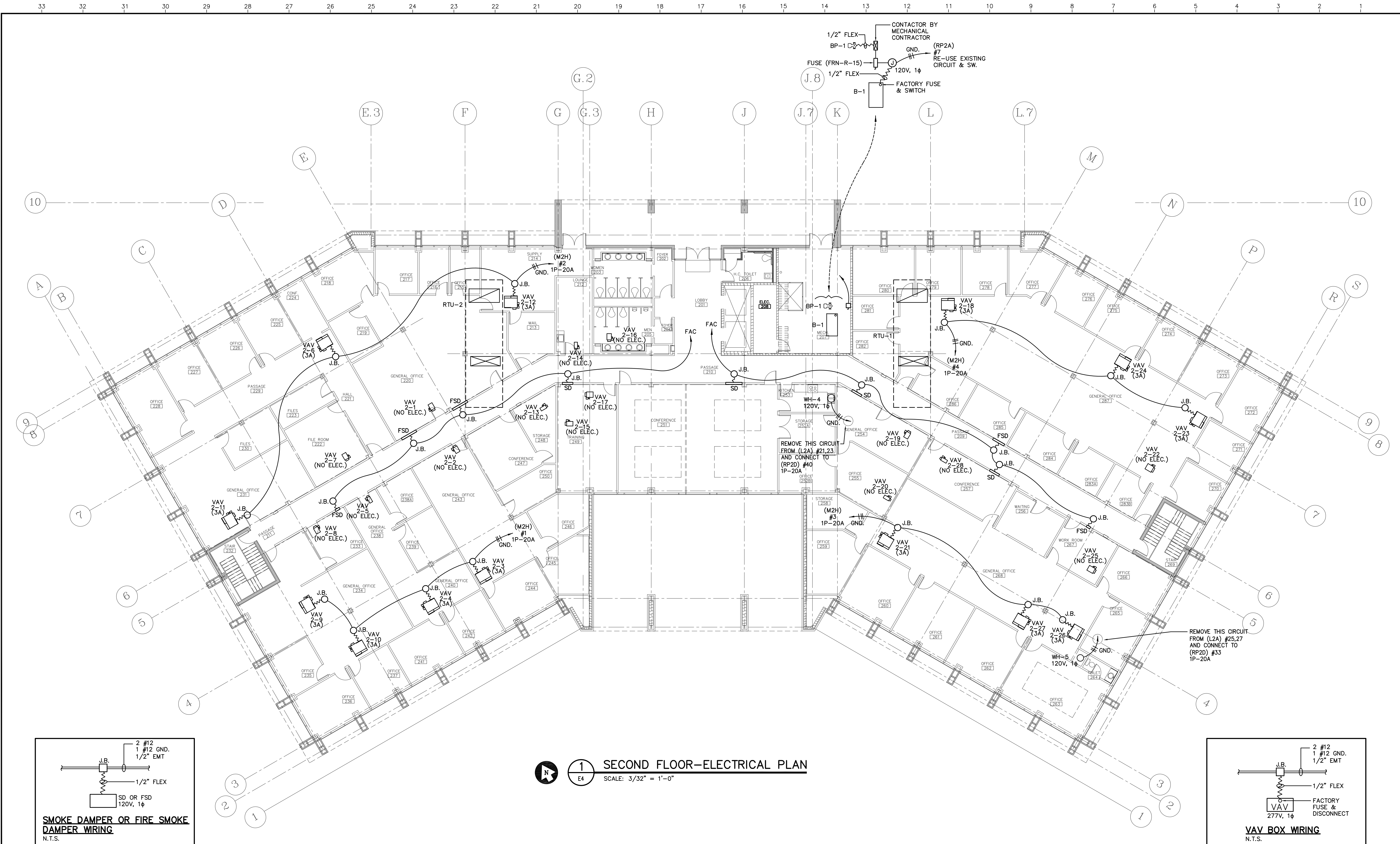


REFERENCE
BUILT-IN FACTORY SMOKE DETECTOR.
*WHEN THIS SMOKE DETECTOR IS ACTIVATED IT WILL DO THE FOLLOWING:
1. SHUT DOWN CRAC-1 & ACC-1.
2. SEND SIGNAL WITH ADDRESS TO FAC TO SOUND GENERAL ALARM.
3. WHEN EVER FAC GOES INTO ALARM, THE FAC WILL NOT SHUT DOWN THIS SYSTEM.



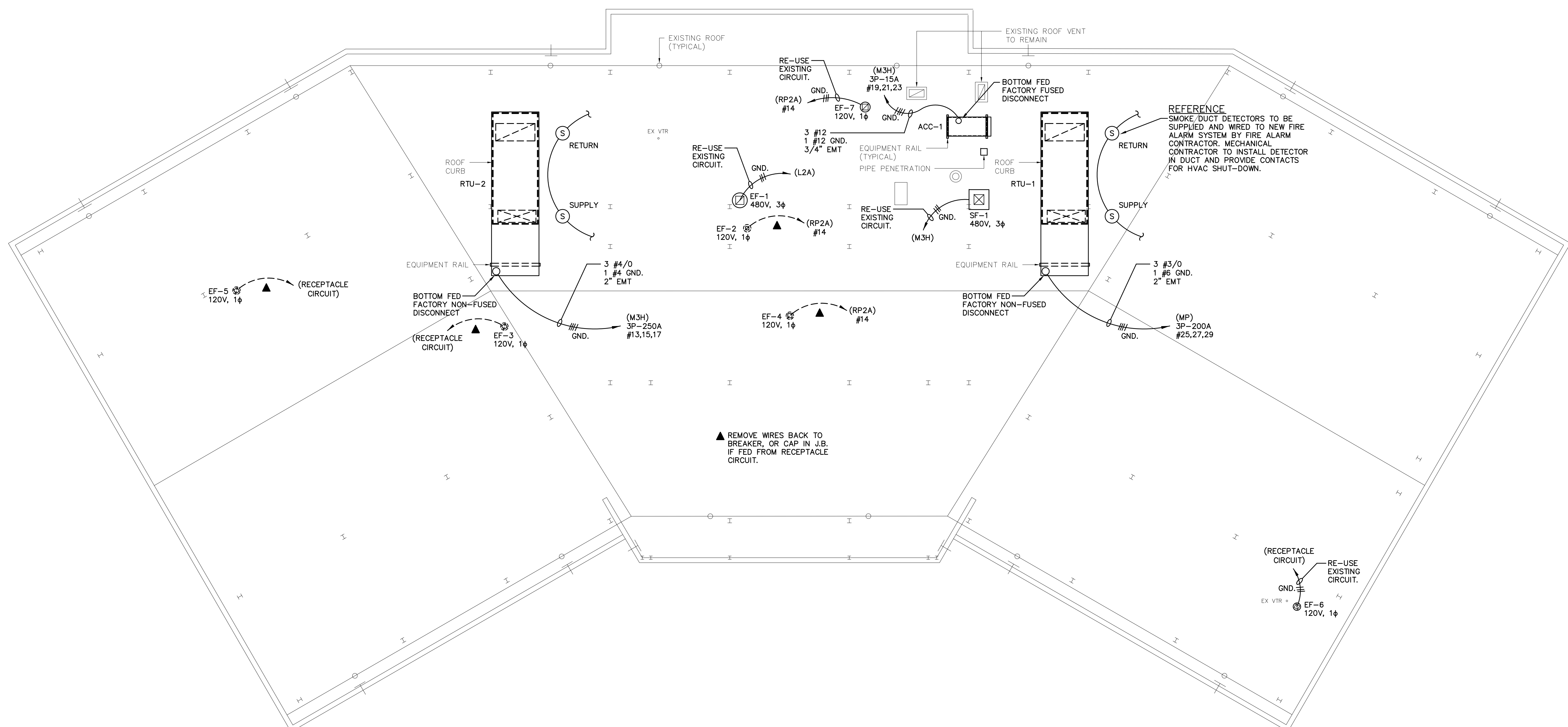
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<p>The State of South Carolina</p>	AGENCY OR INSTITUTION Department of Disabilities and Special Needs	PROFESSIONAL SEAL 	A & E FIRM _____	SHEET TITLE FIRST FLOOR ELECTRICAL PLAN	PROJECT TITLE SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATIONS) COLUMBIA, SOUTH CAROLINA		
	DIVISION _____	REVISION _____	DATE _____	BY _____	APP. _____	STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. _____



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	DIVISION 	REVISION 	DATE 	BY 	APP. 	STATE PROJECT NO. J16-9863-FW-A	DRAWING NO.
A & E PROJECT NO. 			DRAWN BY: RM CHECKED BY: RS FINAL APP.: RS		DATE: 5/5/2014		



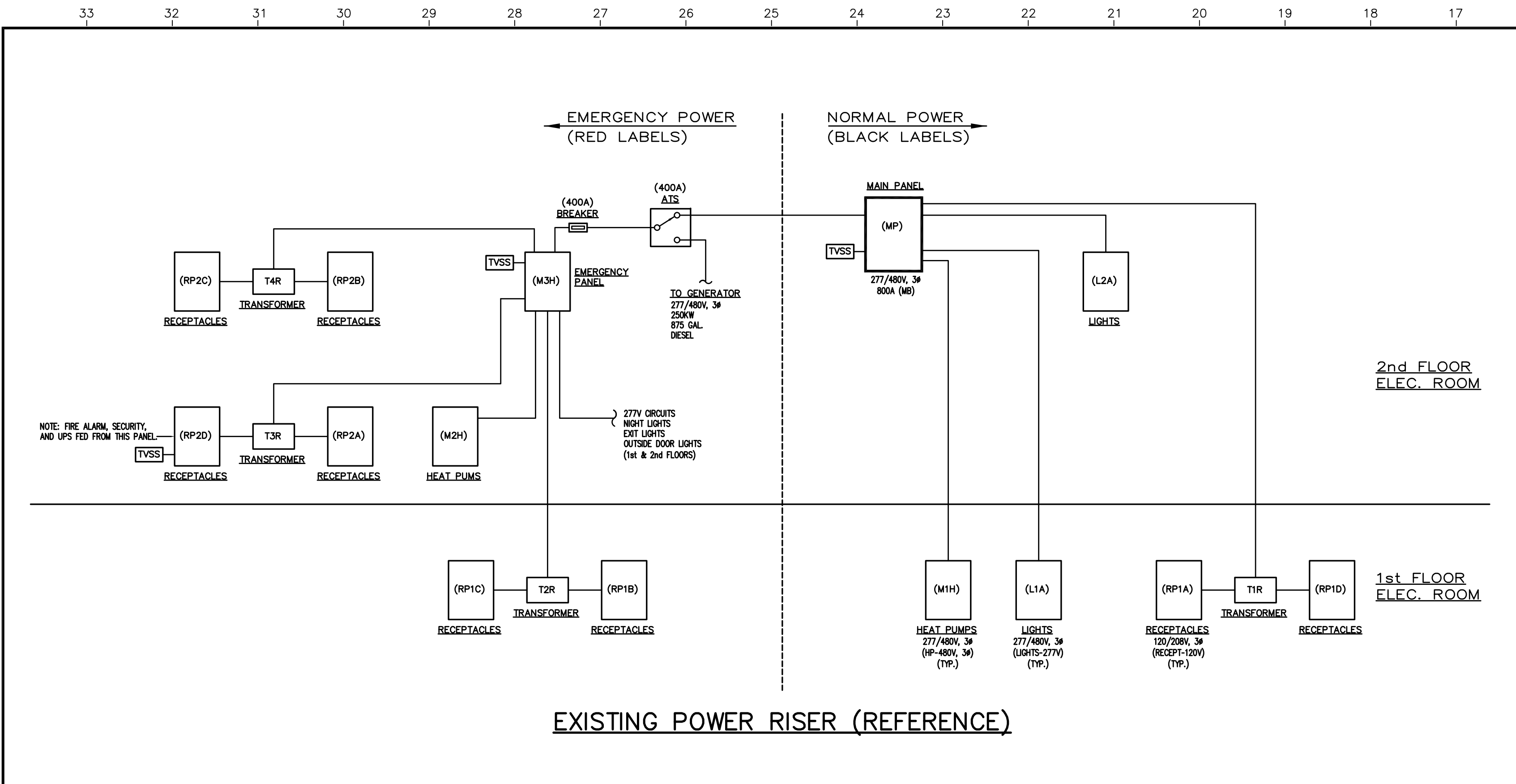
REFERENCE
SMOKE/DUCT DETECTORS TO BE SUPPLIED AND WIRED TO NEW FIRE ALARM SYSTEM BY FIRE ALARM CONTRACTOR. MECHANICAL CONTRACTOR TO INSTALL DETECTOR IN DUCT AND PROVIDE CONTACTS FOR HVAC SHUT-DOWN.

▲ REMOVE WIRES BACK TO BREAKER, OR CAP IN J.B. IF FED FROM RECEPTACLE CIRCUIT.

1 ROOF PLAN-ELECTRICAL PLAN
SCALE: 3/32" = 1'-0"

FOR REVIEW ONLY

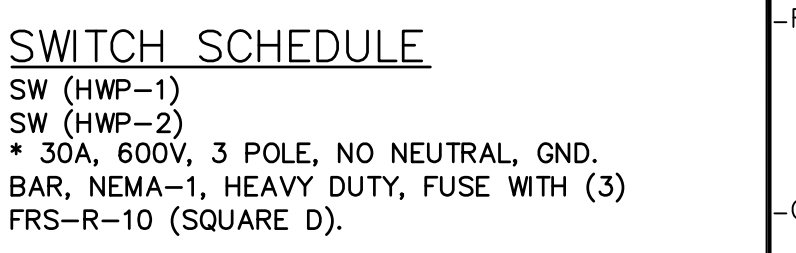
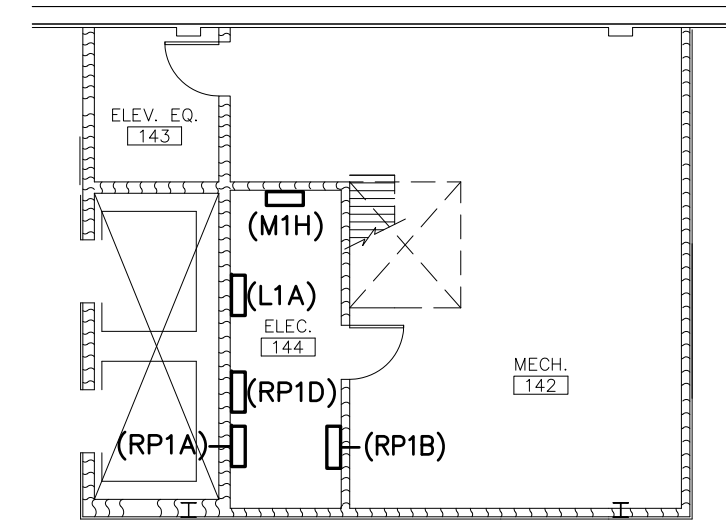
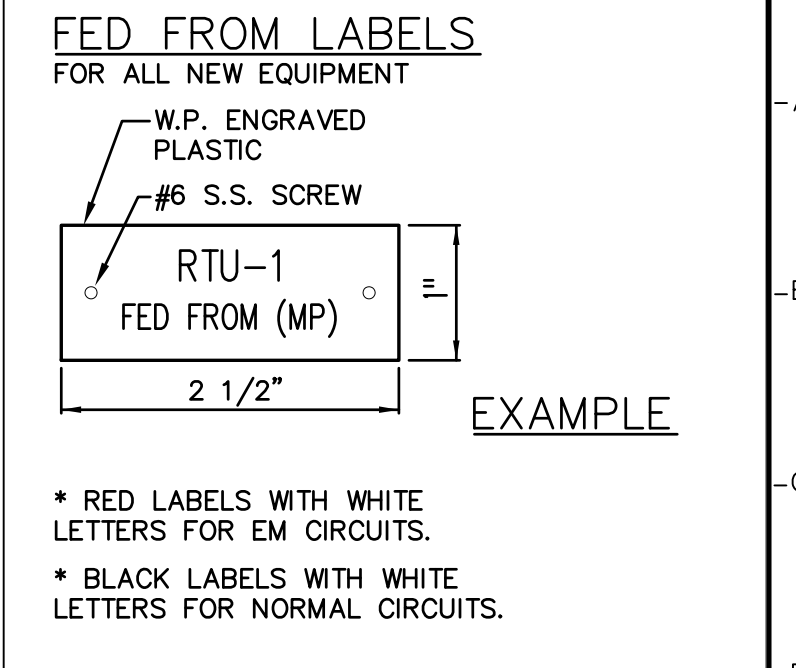
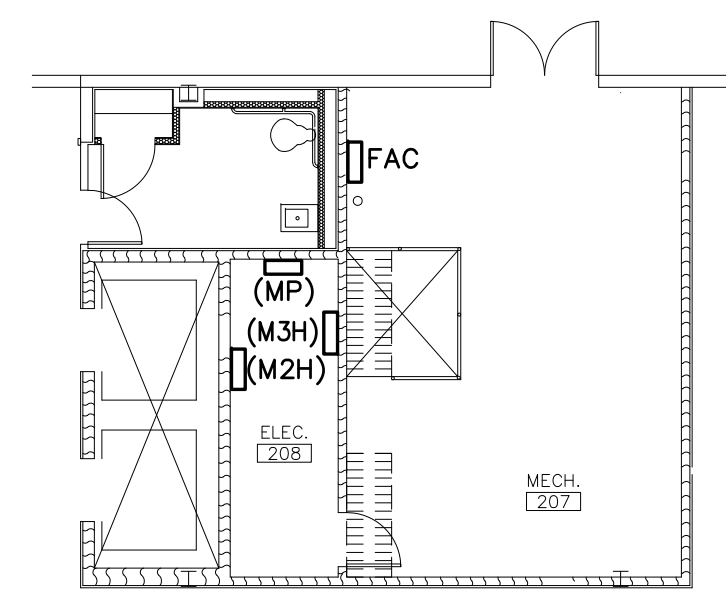
<p>The State of South Carolina</p>	AGENCY OR INSTITUTION Department of Disabilities and Special Needs	PROFESSIONAL SEAL 	A & E FIRM _____	SHEET TITLE ROOF-ELECTRICAL PLAN	PROJECT TITLE SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATIONS) COLUMBIA, SOUTH CAROLINA		
	DIVISION _____	REVISION _____	DATE _____	BY _____	APP. _____	STATE PROJECT NO. J16-9863-FW-A	DRAWING NO. _____
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ELEC. WATER HEATERS (ELECTRICAL DATA)

TAG	DESCRIPTION	RATED VOLTAGE	WATTAGE	REMARKS
WH-1	ELEC. WATER HEATER	208, 1φ	4500W	1st FLOOR
WH-2	"	208, 1φ	4100W	1st FLOOR (TANKLESS)
WH-4	"	120, 1φ	1650W	2nd FLOOR
WH-5	"	120, 1φ	1650W	2nd FLOOR

NOTE: ALL ABOVE EQUIPMENT SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO CONNECT TO ELECTRICAL SUPPLY.



HVAC EQUIPMENT (ELECTRICAL DATA)

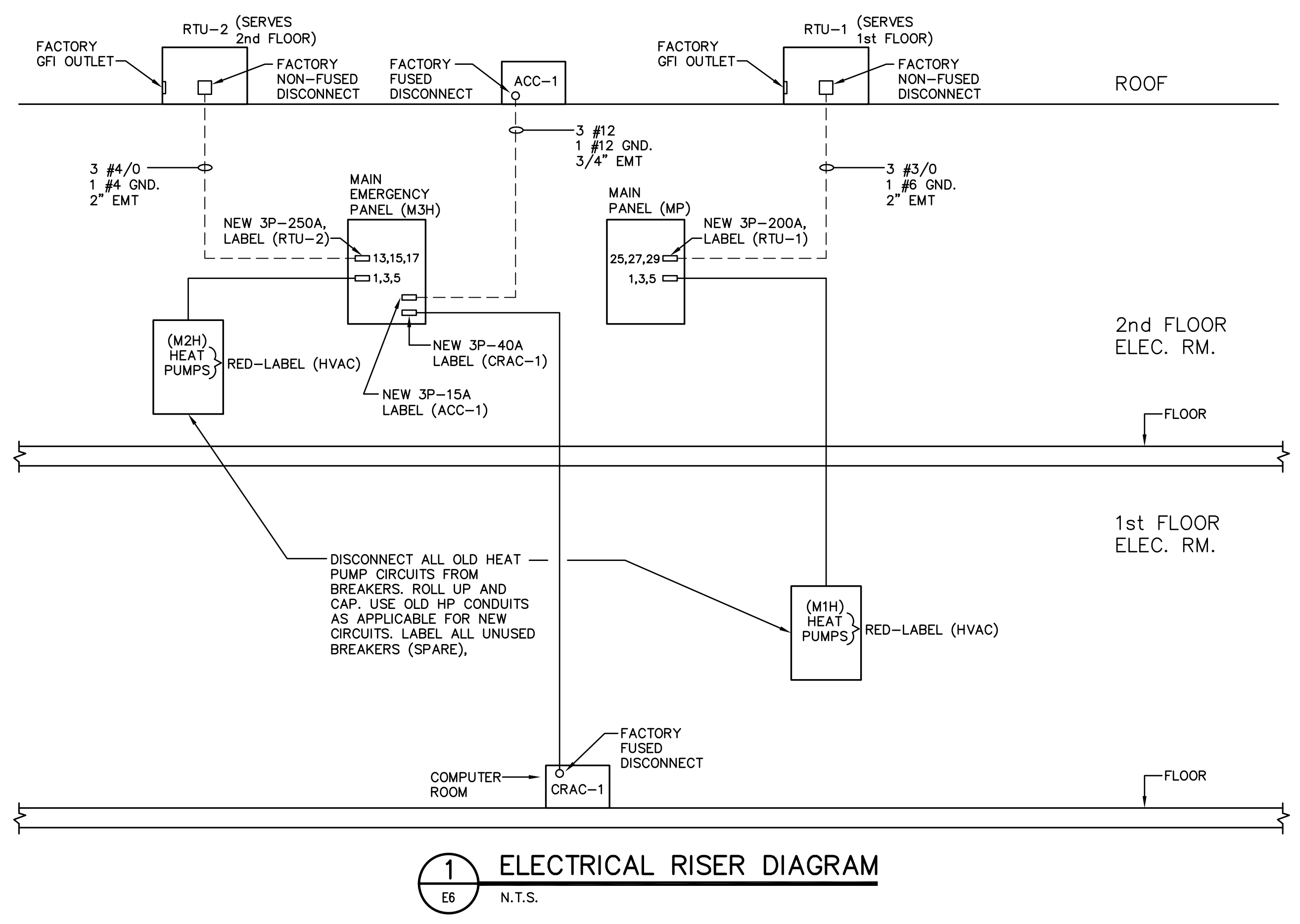
TAG	Unit Type	Description	Rated Voltage	MCA	MOCP	Remarks
RTU-1	Rooftop VAV	80 ton, 20,000 cfm	480/3ph	175	200	Factory non-fused disconnect and 15A GFI convenience outlet
RTU-2	Rooftop VAV	75 ton, 23,000 cfm	480/3ph	212	250	Factory non-fused disconnect and 15A GFI convenience outlet
CRAC-1	Split system computer room a/o unit	4,400 cfm, 8 ton air-cooled condenser	480/3ph	-	40	FLA = 31.8, WSA = 38.9 Factory fused disconnect
ACC-1			480/3ph	-	16	FLA = 2.8, WSA = 3.3 Factory fused disconnect
VAV 1-1 to VAV 1-18	Fan VAV	HW heat	277/1ph	3.0	16	Factory fuse and disconnect
VAV 2-3 to VAV 2-27	Fan VAV	HW heat	277/1ph	3.0	16	Factory fuse and disconnect
EWH-1, EWH-2	Elec. Wall Heater	3 kw	208/1ph			
EF-1 to EF-7	Roof exh fan	2,600 cfm to 3,000 cfm	480/3ph	-	-	Re-use existing circuit
B-1	Gas boiler	1,440 MBH	120/1ph	-	-	Re-use existing circuit
BP-1	Boiler Pump	1/2 hp	120/1ph	-	-	Re-use existing circuit
HWP-1, HWP-2	HW Pump	5 hp	480/3ph	-	-	FLA = 7.6A

Note: All above equipment supplied and installed by mechanical contractor. Electrical contractor to connect to electrical supply.

- NOTES AND SPECIFICATIONS**
- ALL WORK PER 2014 NEC.
 - ALL MATERIALS AND DEVICES (WHERE APPLICABLE) TO BE U.L. LISTED, MADE IN U.S.A. AND SPECIFICATION GRADE.
 - ALL CONDUCTORS TO BE COPPER TYPE THHN RUN IN EMT UNLESS NOTED OTHERWISE.
 - NEW BREAKERS TO BE SQUARE D, TO MATCH EXISTING FOR I-LINE AND NQ PANELS.
 - SEAL ALL CONDUIT PENETRATIONS WITH U.L. LISTED (4) HOUR RATED FIRE CAULK.
 - PROVIDE NEW TYPED DIRECTORY FOR ALL PANELS RELATING TO THIS JOB. IDENTIFY ALL BREAKERS, REPLACE BREAKER NUMBERS IF LOOSE OR MISSING.
 - VERIFY PROPER VOLTAGE, PHASE, BREAKER SIZES, WIRE SIZE, ETC. AS RECOMMENDED BY MANUFACTURER OF EQUIPMENT TO BE INSTALLED.

- SCOPE OF WORK**
- PROVIDE ELECTRIC HOOK-UP FOR (2) NEW ROOF TOP PACKAGE HVAC UNITS WITH VAV BOXES, (1) SPLIT HVAC SYSTEM FOR COMPUTER, AND RELATED WORK.
 - REMOVE ALL CONDUCTORS NOT RE-USED RELATING TO OLD HVAC SYSTEM. LEAVE OLD CONDUIT IN PLACE AND MARK (SPARE).

- SCHEDULING**
- THE WORK FOR THE NEW HVAC SYSTEM WILL BE DONE IN (2) PHASES WITH THE INTENT OF DE-ENERGIZING ONLY ONE OF THE (2) SECTIONS AT A TIME, (PHASE ONE-SECOND FLOOR & ROOF AND PHASE II-FIRST FLOOR) COORDINATE ALL WORK WITH MECHANICAL CONTRACTOR. SEE MECHANICAL DOCUMENTATION AND PROJECT MANUAL FOR WORK PHASING.



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<p>The State of South Carolina</p>	AGENCY OR INSTITUTION	PROFESSIONAL SEAL	A & E FIRM	SHEET TITLE	PROJECT TITLE						
	Department of Disabilities and Special Needs			ELECTRICAL RISER AND DETAILS	SCDDSN-CENTRAL OFFICE SAFETY/CODE/ENERGY REPAIRS (HVAC RENOVATIONS) COLUMBIA, SOUTH CAROLINA						
DIVISION	REVISION	DATE	BY	APP.	A & E PROJECT NO.	DRAWN BY: RM	CHECKED BY: RS	FINAL APP.: RS	STATE PROJECT NO. J16-9863-FW-A	DRAWING NO.	SHEET E6 of 6
									DATE 5/5/2014		