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Project Number: 230200  
File Name: 230200-G0100  
Plotted: 11/17/2023 11:05 AM

HVAC REPLACEMENT  
FOR  
YORK COUNTY EMERGENCY  
OPERATIONS CENTER  
149 W. BLACK STREET, ROCK HILL  
SOUTH CAROLINA  
NOVEMBER 17, 2023  
SKA PROJECT NUMBER 230200

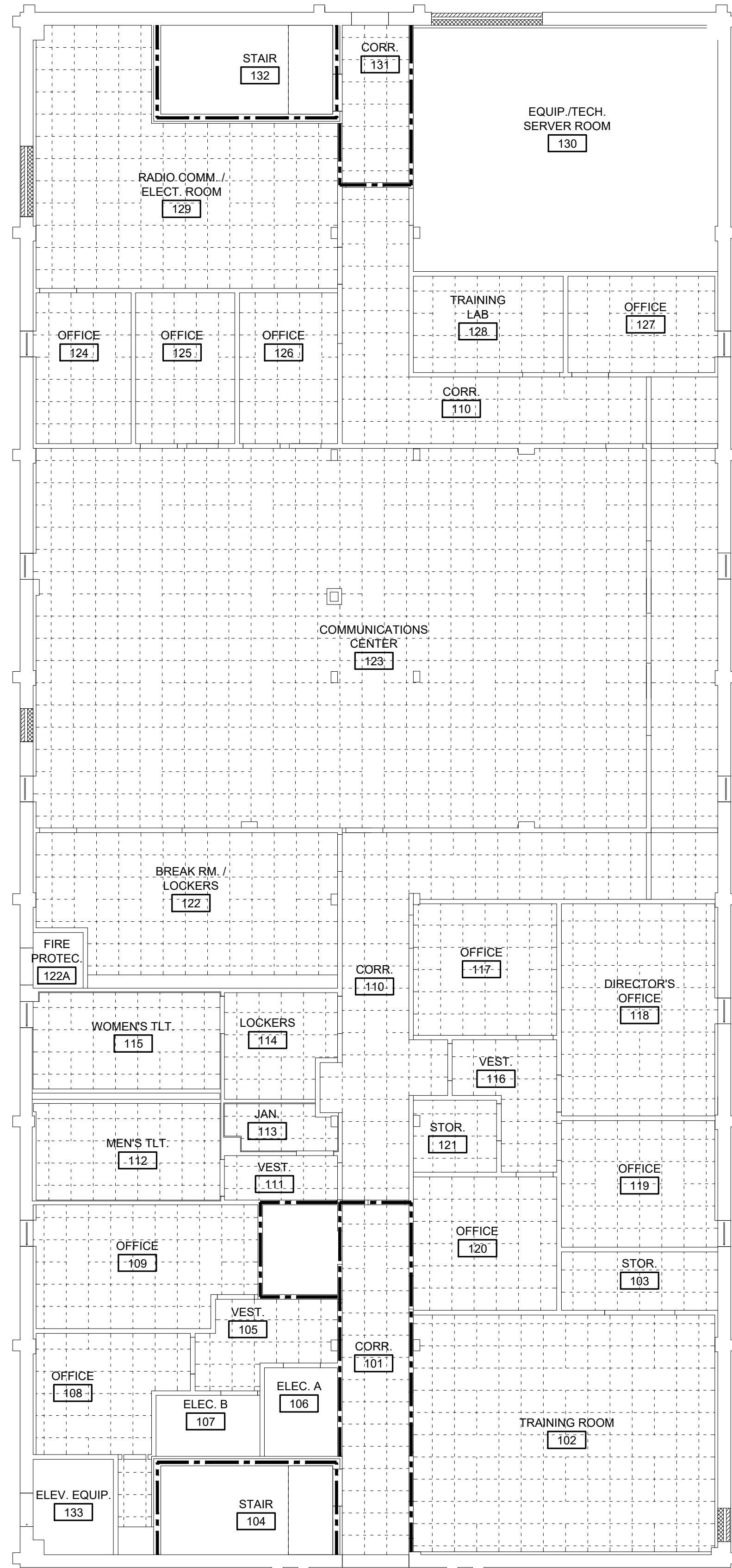
Revision	Date	Mark

PRELIMINARY: NOT FOR CONSTRUCTION

YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
YORK COUNTY GOVERNMENT  
778 JUSTICE BOULEVARD  
YORK, SC 29745

Designed By: MAS  
Drawn By: MAS  
Checked By: SDM  
Date: 11-17-2023

COVER SHEET  
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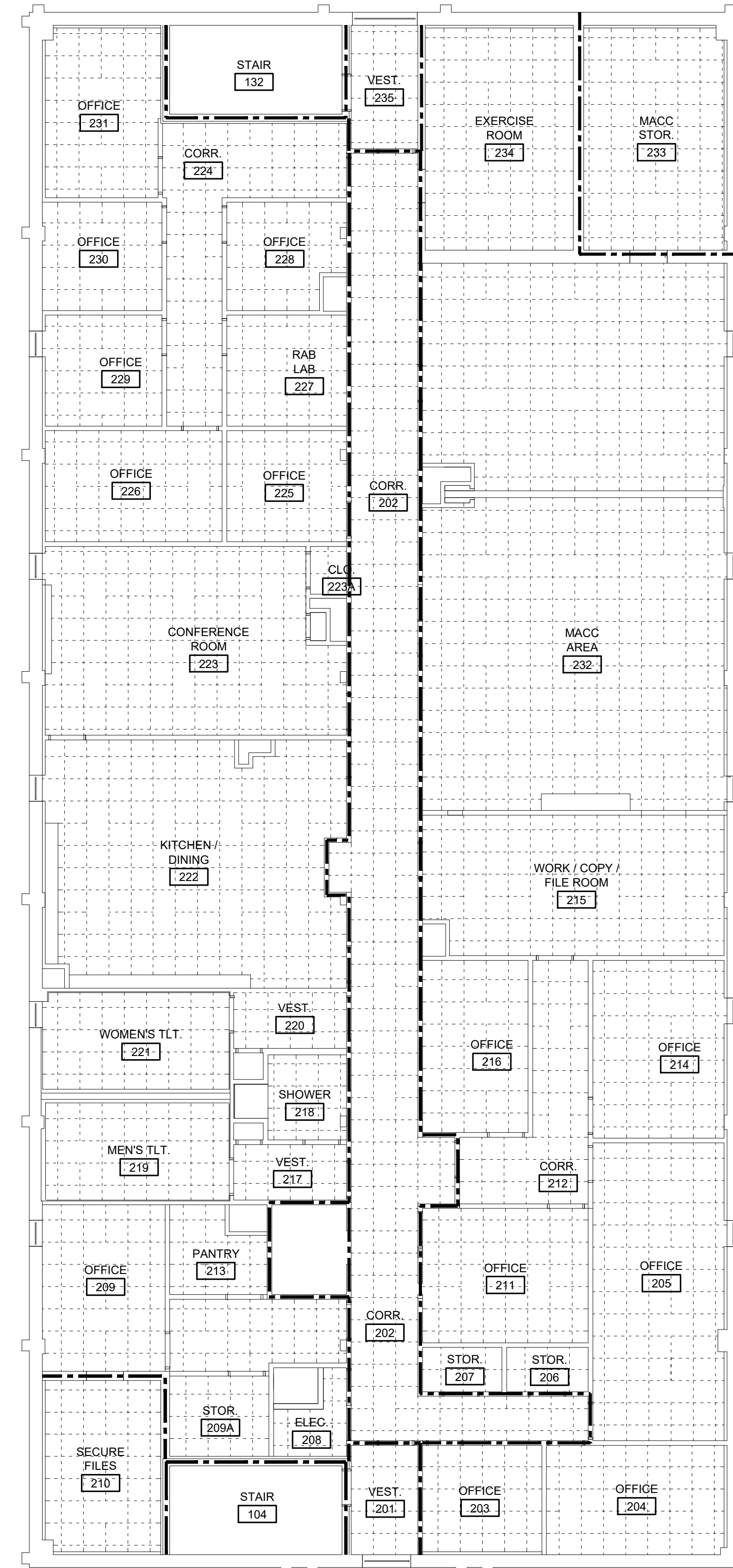


1 FIRST FLOOR CEILING PLAN  
G2.0 1/8" = 1'-0"  
Dwg.# 230200-A3011.DWG

**GENERAL NOTES:**

Dwg.# 230200-A1001.DWG

1. CEILING TILES AND GRID IN INDICATED AREAS SHALL BE REMOVED. NEW CEILING GRID AND TILES SHALL BE INSTALLED FOLLOWING COMPLETION OF DUCTWORK DEMOLITION AND SYSTEMS INSTALLATION. CEILINGS SHALL BE INSTALLED TO MATCH EXISTING HEIGHTS.
2. CONTRACTOR SHALL COORDINATE WITH OWNER FOR REMOVAL AND INSTALLATION OF ALL CEILING MOUNTED DATA AND AV EQUIPMENT.
3. EXISTING CEILING MOUNTED FIRE ALARM DEVICES SHALL BE RELOCATED TO NEW CEILING TILES.
4. EXISTING CEILING MOUNTED EXIT SIGNS SHALL BE RELOCATED TO NEW CEILING TILES.
5. SPRINKLER HEADS SHALL BE PROTECTED DURING DEMOLITION AND INSTALLATION OF NEW CEILING.
6. CEILING SYSTEM SHALL BE USG MARS FLB WITH DONN BRAND DXF 9/16". REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND ALTERNATE MANUFACTURERS.



2 SECOND FLOOR CEILING PLAN  
G2.0 1/8" = 1'-0"  
Dwg.# 230200-A3012.DWG

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YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
**ARCHITECTURAL CEILING PLANS**

Designed By: MAS  
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Date: 07-XX-23

**G2.0**

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Project Number: 230200  
File Name: 230200-M101  
Project: 11/20/2023 9:45 AM

**GENERAL NOTES:**

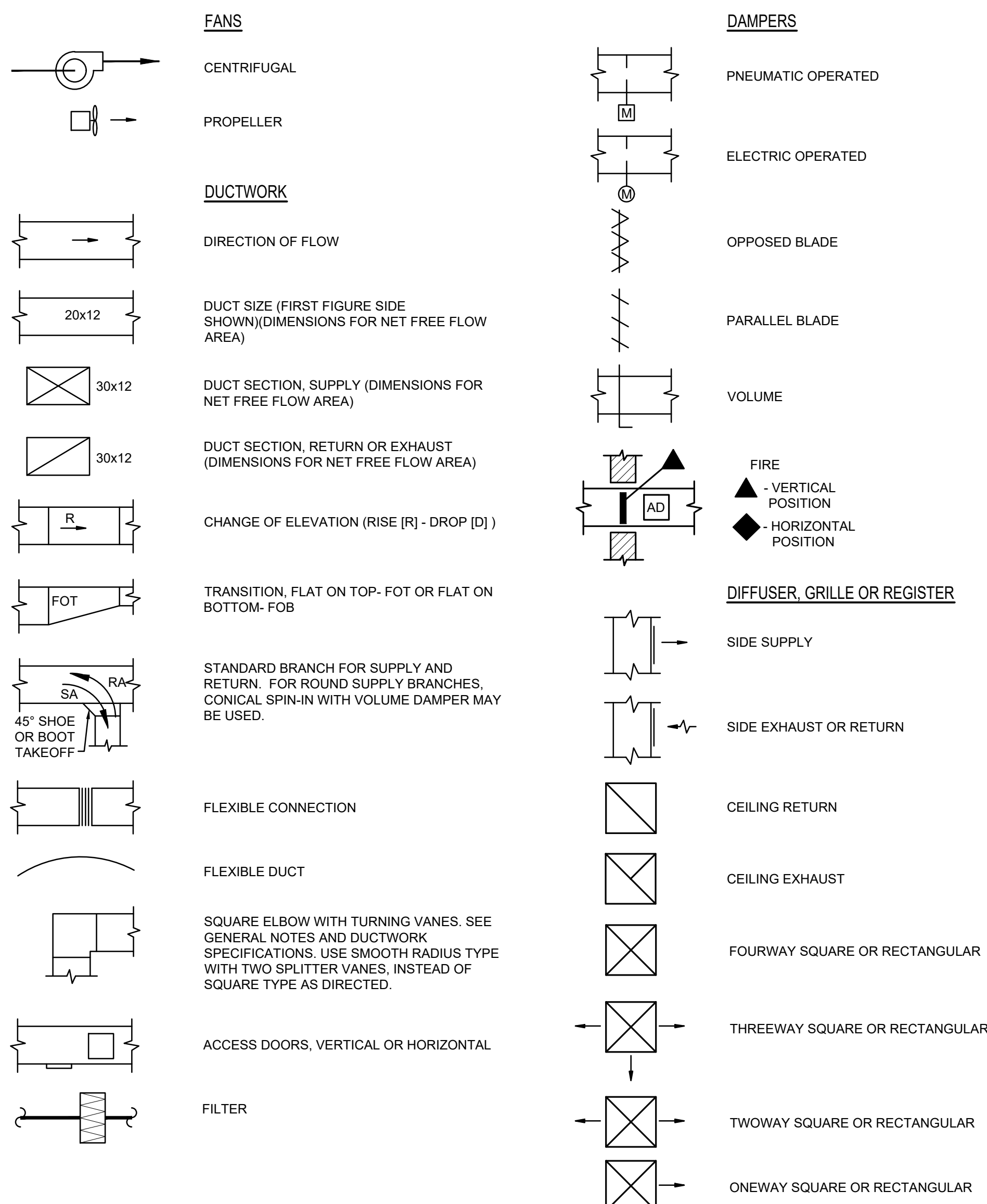
Dwg # 230200-M1002.DWG

- CONTRACTOR SHALL PREPARE, SUBMIT AND OBTAIN APPROVAL ON SHOP DRAWINGS SHOWING ALL DUCTWORK, UTILITIES, STRUCTURAL, PIPING, CONDUIT AND OTHER INTERFERENCES, BEFORE BEGINNING INSTALLATION. SEE SPECS FOR DETAILED SHOP DRAWING REQUIREMENTS.
- ALL DUCT LAYOUTS ARE GENERALLY DIAGRAMMATIC. CONTRACTOR SHALL VERIFY AVAILABLE SPACE FOR INDICATED DUCTS BASED ON DETAILED SHOP DWGS. AND MEASUREMENTS AND SURVEYS TAKEN OF THE AS-BUILT CONDITIONS.
- ALL PIPE LAYOUTS ARE GENERALLY DIAGRAMMATIC. CONTRACTOR SHALL VERIFY AVAILABLE SPACE FOR INDICATED PIPES BASED ON DETAILED SHOP DWGS. AND MEASUREMENTS AND SURVEYS TAKEN OF THE AS-BUILT CONDITIONS.
- CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL DUCT AND PIPING TO INTERFACE WITH PLUMBING, FIRE PROTECTION, ELECTRICAL, CONTROLS, STRUCTURAL, AND ALL OTHER WORK, EXISTING OR NEW. SEE MECHANICAL GENERAL PROVISIONS IN SPECS FOR FURTHER DETAILS.
- COORDINATE DUCTWORK ROUTING AND SIZES WITH PIPING, CONDUIT, STRUCTURES AND OTHER INTERFERENCES TO AVOID CONFLICTS. IF SIZE MUST BE CHANGED, USE EQUIVALENT FRICTION METHOD TO SELECT REVISED SIZE.
- ALL DIMENSIONS ARE SHOWN FOR FREE FLOW AREA IN NEW HVAC DUCTWORK.
- WHERE REQUIRED FOR CLEARANCE, PIPING AND CONDUIT SHALL BE INSTALLED BETWEEN LIGHTS AND UNDER DUCTWORK.
- TO PROVIDE ADEQUATE CLEARANCE WHERE DUCT CROSSINGS ARE EXTREMELY TIGHT, LOCATE FLANGED JOINTS AND DUCT REINFORCING SO THAT FLANGES AND REINFORCING OCCUR WHERE ADEQUATE SPACE IS AVAILABLE.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL ACCESS DOORS IN DUCTWORK AS REQUIRED FOR FIRE DAMPERS, CONTROLS, LOCATIONS RECOMMENDED BY SMACNA, AND WHERE REQUIRED BY THE CONTRACT DRAWINGS AND/OR THE SPECIFICATIONS. ALL ACCESS DOORS REQUIRED MAY NOT BE SHOWN ON THE DRAWINGS.
- ACCESS DOORS IN BUILDING FINISHES SHALL BE FURNISHED AND INSTALLED UNDER THE GENERAL CONSTRUCTION DIVISIONS OF THE SPECIFICATIONS.
- LOCATE ALL CONTROL VALVES, VRF/VRV UNITS, AND THE LIKE, IN ACCESSIBLE POSITIONS WITH ADEQUATE MAINTENANCE CLEARANCE. COORDINATE AND LOCATE DEVICES SO ACCESS IS NOT BLOCKED BY LIGHTS, GRILLES, DUCTWORK, PIPING, STRUCTURE, CONDUIT AND THE LIKE. THE GENERAL CONTRACTOR SHALL PROVIDE ACCESS DOORS IN WALLS AND NON LAY-IN TYPE CEILINGS AS NECESSARY. THE MECHANICAL CONTRACTOR SHALL PROMPTLY NOTIFY THE G.C. OF THE SIZE, LOCATION AND TYPE OF ALL ACCESS DOORS REQUIRED IN BUILDING SURFACES.
- MAINTAIN A MINIMUM OF 9" CLEARANCE FOR ACCESS TO CONTROLS ON ALL TERMINAL BOXES, CONTROL VALVES AND THE LIKE.
- MATERIALS, EQUIPMENT AND INSTALLATION SHALL COMPLY WITH ALL REQUIREMENTS OF THE SPECIFICATIONS. SEE MECHANICAL GENERAL PROVISIONS AND ALL OTHER MECHANICAL SECTIONS.
- ELBOWS IN ALL DUCTWORK SHALL BE SMACNA SMOOTH RADIUS TYPE. SEE DUCTWORK SPECIFICATIONS. SQUARE MITERED ELBOWS ARE SHOWN IN MANY PLACES ON THESE DRAWINGS FOR SIMPLICITY OF DRAFTING, BUT SQUARE MITERED ELBOWS SHALL NOT BE USED EXCEPT WHERE ABSOLUTELY NECESSARY TO FIT IN A SPECIFIC SITUATION, AND WHERE SPECIFICALLY APPROVED BY THE OWNER'S REPRESENTATIVE. WHERE SQUARE MITERED ELBOWS MUST BE USED, TURNING VANES SHALL BE PROVIDED PER SPECIFICATIONS.
- ALL BRANCH DUCT CONNECTIONS SHALL BE 45° ENTRY TYPE FOR RECTANGULAR DUCTS, OR CONICAL ENTRY TYPE FOR ROUND DUCTS. TYPICAL WHETHER SPECIFICALLY INDICATED OR NOT.
- ALL RETURN GRILLES OPEN TO THE RETURN AIR PLENUM SHALL HAVE ACOUSTICALLY INSULATED RETURN BOOTS. SEE TYPICAL DETAIL.
- ALL DUCTWORK INSULATION SHALL MEET THE REQUIREMENTS OF SPECIFICATIONS.
- MANUAL BALANCING DAMPERS, ACCESS DOORS AND OTHER DUCTWORK ACCESSORIES SHALL BE CONSTRUCTED OF THE SAME MATERIAL AS THE ADJACENT DUCTWORK IN WHICH THEY ARE INSTALLED.

- WHERE DUCTS PASS THROUGH NON-FIRE RATED WALLS, CONTRACTOR SHALL FRAME AROUND PENETRATION OPENING WITH SAME MATERIAL (TYPE AND GAUGE) AS THE DUCTWORK PENETRATING THE WALL. FRAMING SHALL BE SECURELY ATTACHED TO WALL AND DUCT. PENETRATION OPENING SHALL NOT BE VISIBLE WHEN FRAMING IS IN PLACE.
- ALL PIPING PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS AND CEILINGS SHALL BE PROPERLY FIRE-STOPPED IN ACCORDANCE WITH CODE AND UI REQUIREMENTS. WHERE FIRE RATED CHASES OR ENCLOSURES ARE REQUIRED, COORDINATE SUCH REQUIREMENTS WITH GENERAL CONTRACTOR.
- IN AREAS WHERE PIPING PENETRATIONS THROUGH WALLS, FLOORS AND CEILINGS ARE EXPOSED, ESCUTCHEONS SHALL BE PROVIDED TO IMPROVE THE APPEARANCE OF ALL PENETRATIONS. PROVIDE ADEQUATE SPACING BETWEEN PIPES THAT RUN PARALLEL THROUGH THE SAME WALLS, FLOORS AND CEILINGS TO ACCOMMODATE THE ESCUTCHEONS OF ALL PIPES. WHERE THE WALLS, FLOORS AND CEILINGS ARE FIRE RATED, THE ESCUTCHEONS SHALL BE PROVIDED, HOWEVER, THEY SHALL NOT BE PLACED OVER THE PENETRATIONS UNTIL THEY HAVE FIRST BEEN INSPECTED FOR PROPER CONSTRUCTION AND APPROVED BY THE OWNER'S REPRESENTATIVE.
- REFER TO CONTRACT SPECIFICATIONS FOR DUCT CONSTRUCTION PRESSURE CLASSIFICATIONS AND JOINT SEALING CLASSIFICATIONS, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- CONTRACTOR SHALL ADJUST ALL AIR DISTRIBUTION AND BALANCING DAMPERS TO OBTAIN SCHEDULED OR NOTED AIR FLOW RATES. SEE TESTING AND BALANCING REQUIREMENTS IN SPECIFICATIONS.
- CONTRACTOR SHALL ADJUST ALL FLOW CONTROL DEVICES IN PIPING SYSTEMS TO OBTAIN SCHEDULED OR NOTED LIQUID FLOW RATES. SEE TESTING AND BALANCING REQUIREMENTS IN SPECIFICATIONS.
- AIR DISTRIBUTION DEVICES ARE SHOWN APPROXIMATELY LOCATED. CONTRACTOR SHALL COORDINATE LOCATION WITH LIGHTING AND REFLECTED CEILING PLANS. CONFLICTS AND/OR DEVIATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
- EQUIPMENT CONNECTION SIZES, ELEVATION, AND CONFIGURATIONS ARE SUBJECT TO CHANGE WHEN CERTIFIED VENDOR SHOP DRAWINGS ARE RECEIVED. CONTRACTOR SHALL CHECK CERTIFIED SHOP DRAWINGS PRIOR TO INSTALLATION OF DUCTWORK AND PIPING, AND SHALL MAKE REQUIRED ADJUSTMENTS AT NO ADDITIONAL COST TO THE OWNER.
- EQUIPMENT SELECTIONS SCHEDULED ON THE DRAWINGS AND IN THE SPECIFICATIONS INDICATE A MINIMUM LEVEL OF ACCEPTABLE PERFORMANCE. SUBSTITUTION OF EQUIPMENT AND MATERIALS SHALL BE MADE IN ACCORDANCE WITH THE PRIOR APPROVAL CLAUSE LOCATED IN THE MECHANICAL GENERAL PROVISIONS.
- ALL PIPE ELEVATIONS ARE TO BOTTOM OF PIPE (NOT INSULATION), UNLESS NOTED OTHERWISE.
- PROVIDE OFFSETS IN PIPING AS REQUIRED TO PROVIDE FOR THERMAL EXPANSION, PER SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE CLOSELY WITH THE GENERAL CONTRACTOR TO VERIFY THAT ADEQUATE OPENINGS ARE PROVIDED IN THE BUILDING STRUCTURAL SYSTEMS AND SLABS TO ALLOW FOR INSTALLATION OF MECHANICAL DUCTWORK AND PIPING SYSTEMS.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LEADING AND ACHIEVING COORDINATION OF ALL TRADES, SO THAT ALL WORK WILL FIT AND CAN BE PROPERLY INSTALLED BY ALL OTHER TRADES CONTRACTORS. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING DETAILED INFORMATION FROM ALL TRADES TO SHOW LOCATIONS, SIZES AND COORDINATION ON COORDINATION OVERLAY SHOP DRAWINGS.
- MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING IN THE FIELD THAT THE MECHANICAL EQUIPMENT AND DUCTWORK FOR THIS PROJECT HAS BEEN INSTALLED IN SUCH A MANNER THAT VIBRATIONS WILL NOT BE TRANSMITTED TO THE BUILDING STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, AVOIDING CONTACT BETWEEN DUCTWORK, DUCTWORK SUPPORTS AND CEILING HANGERS, CONDUIT, WALL STUDS OR BRACES, PIPING AND PIPING HANGERS, AND THE LIKE. CEILING GRID SUPPORT HANGERS SHALL NOT BE SUSPENDED FROM DUCTWORK OR DUCTWORK SUPPORTS.
- MECHANICAL CONTRACTOR SHALL INSTALL MECHANICAL SYSTEMS IN ACCORDANCE WITH GOOD PRACTICE TO REDUCE THE POTENTIAL FOR VIBRATION TRANSMISSION AND ACOUSTICAL NOISE TO THE OCCUPIED SPACES. REFER TO SPECIFICATION SECTION 15042B-TESTS, REGARDING ROOM DESIGN NOISE CRITERIA (NC) LEVELS AND SOUND TESTING REQUIREMENTS.

**SYMBOLS - AIR MOVING DEVICES AND COMPONENTS**

Dwg # 230200-M1003.DWG



**MECHANICAL DRAWING INDEX**

Dwg # 230200-M1001.DWG

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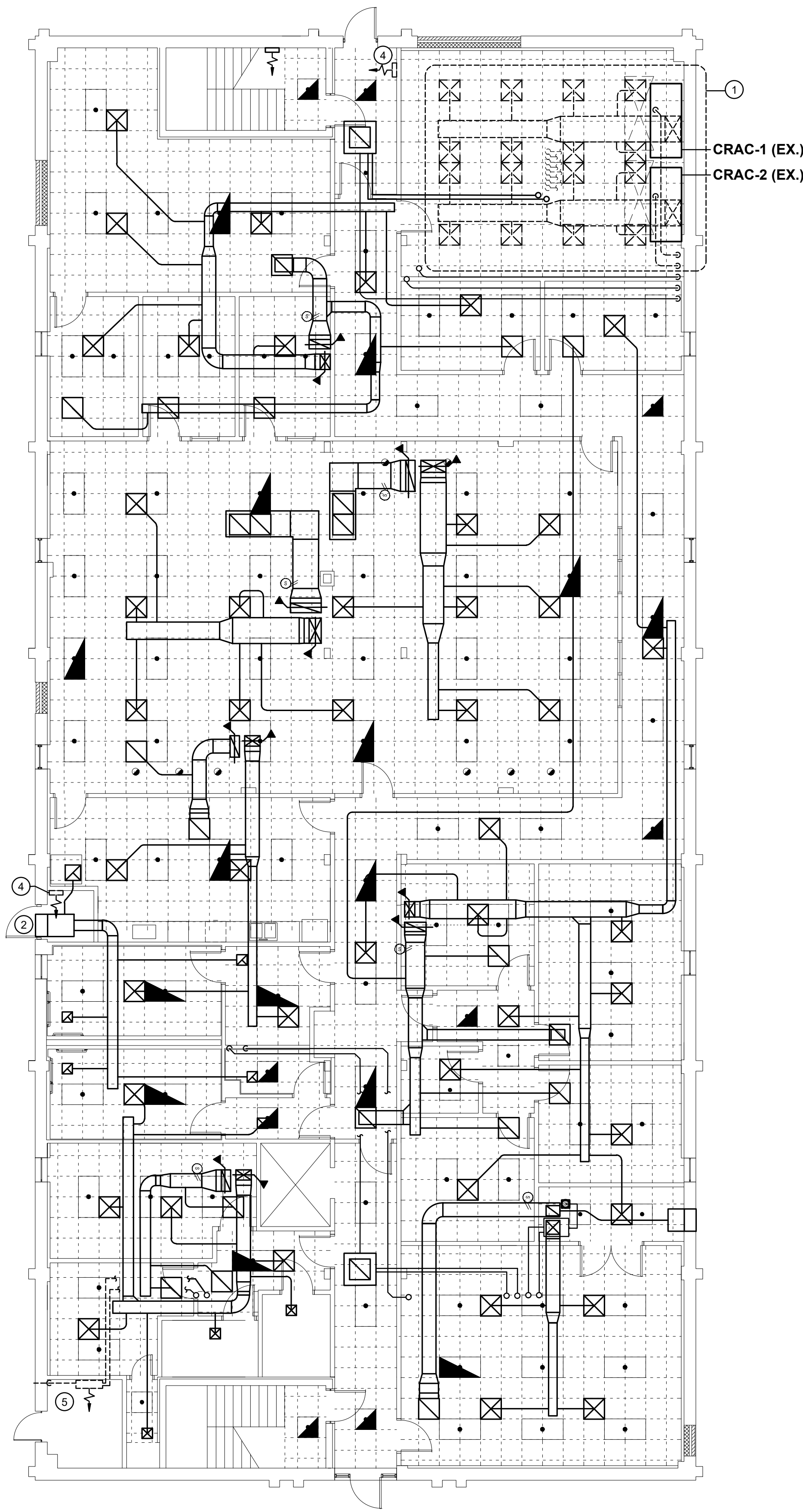
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YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
**MECHANICAL GENERAL NOTES AND SYMBOLS**

Designed By: MAS  
Drawn By: MAS  
Checked By: SDM  
Date: 11-16-23

**M1.1**



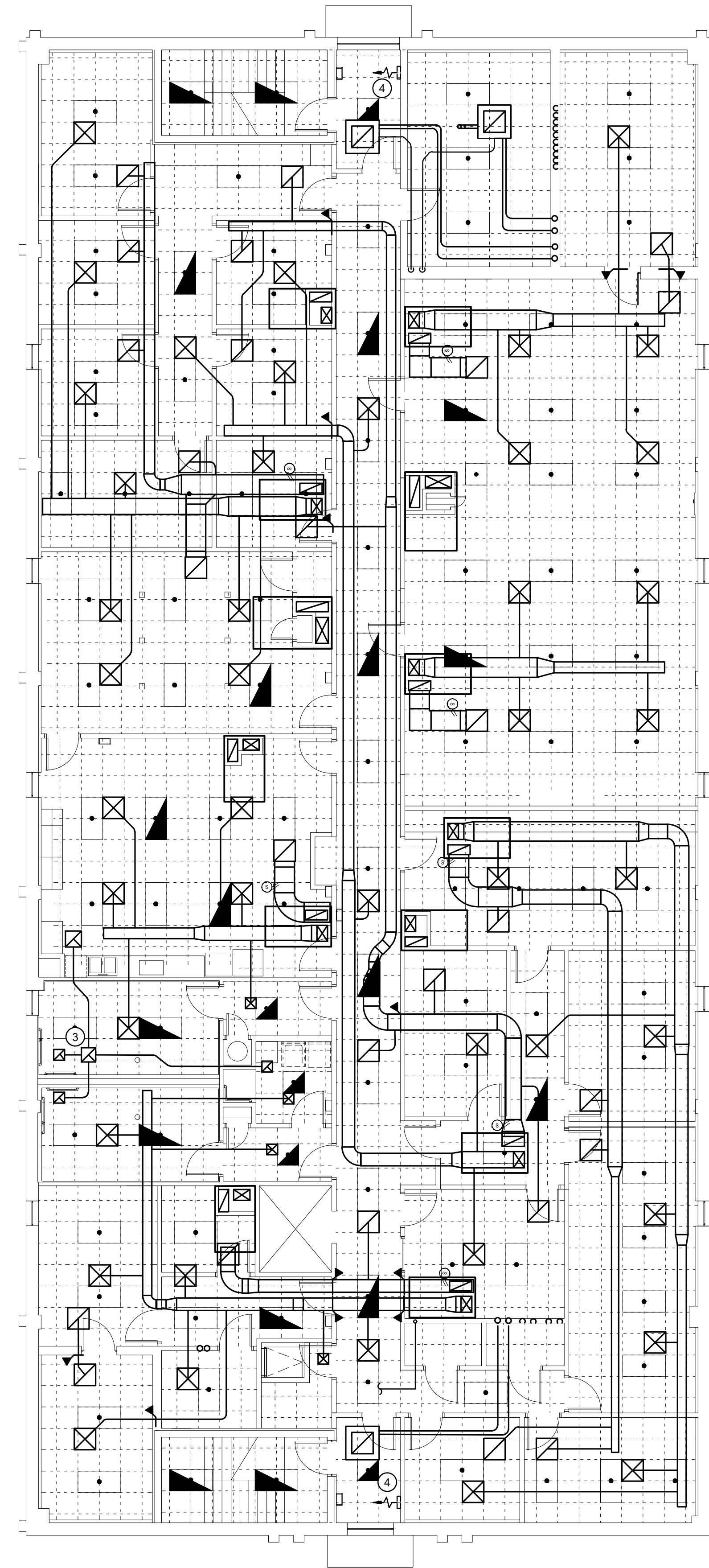


**GENERAL NOTES**  
Dwg.# 230200-MD201.dwg

REMOVE ALL EXISTING HVAC SYSTEMS -- INCLUDING DUCTWORK, ACCESSORIES, AIR DEVICES, EQUIPMENT, PIPING, ETC. -- ON BOTH LEVELS AND ROOFTOP UNLESS NOTED OTHERWISE.

**KEYED NOTES**  
Dwg.# 230200-MD201.dwg

- ① EXISTING LIEBERT COMPUTER ROOM INDOOR (CRAC-1,2) AND OUTDOOR (CU-1,2) UNITS TO BE REPLACED. ALL EXISTING DUCTWORK, DUCT ACCESSORIES, AIR DEVICES, PIPING, ETC. IN COMPUTER ROOM TO REMAIN. CREATE NEW TRANSITION AT CRAC EVAPORATOR INLET/OUTLET TO EXISTING DUCTWORK IF NECESSARY.
- ② EXISTING WALL LOUVER TO REMAIN. PROVIDE INSULATED BLANK OFF PANEL BEHIND LOUVER.
- ③ EXISTING ROOF CURB TO REMAIN. PROVIDE INSULATED CURB CAP.
- ④ EXISTING ELECTRIC WALL HEATER TO REMAIN.
- ⑤ EXISTING ELEVATOR EQUIPMENT ROOM SPLIT SYSTEM TO REMAIN.



1  
MD2.1  
MECHANICAL DEMOLITION PLAN - FIRST FLOOR  
1/8" = 1'-0"  
Dwg.# 230200-M2000.DWG

2  
MD2.1  
MECHANICAL DEMOLITION PLAN - SECOND FLOOR  
1/8" = 1'-0"  
Dwg.# 230200-M2000.DWG

Mark	Date	Revision

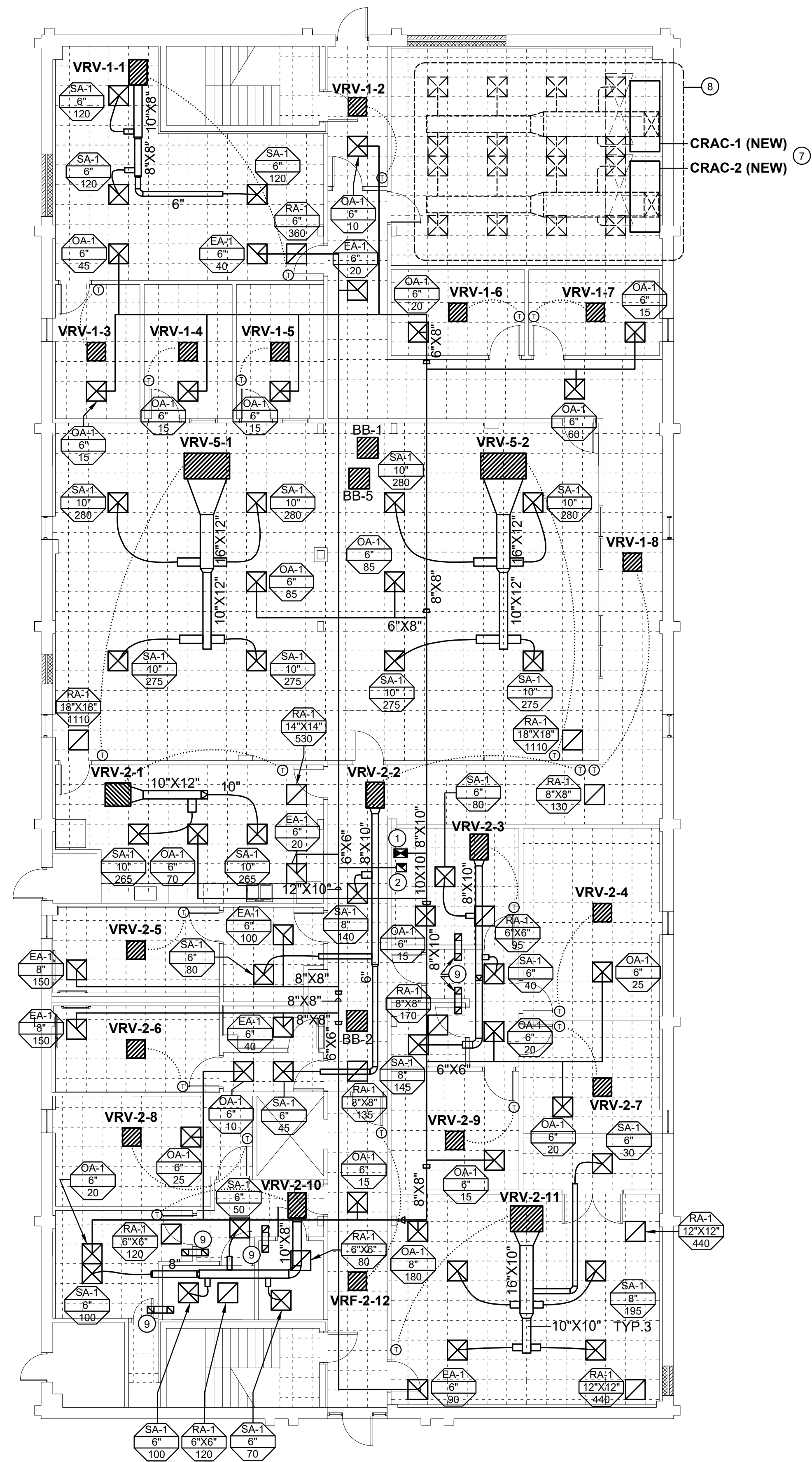
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**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
**MECHANICAL DEMOLITION PLANS**

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Checked By: SDM  
Date: 11-16-23

**MD2.1**

PRELIMINARY: NOT FOR CONSTRUCTION





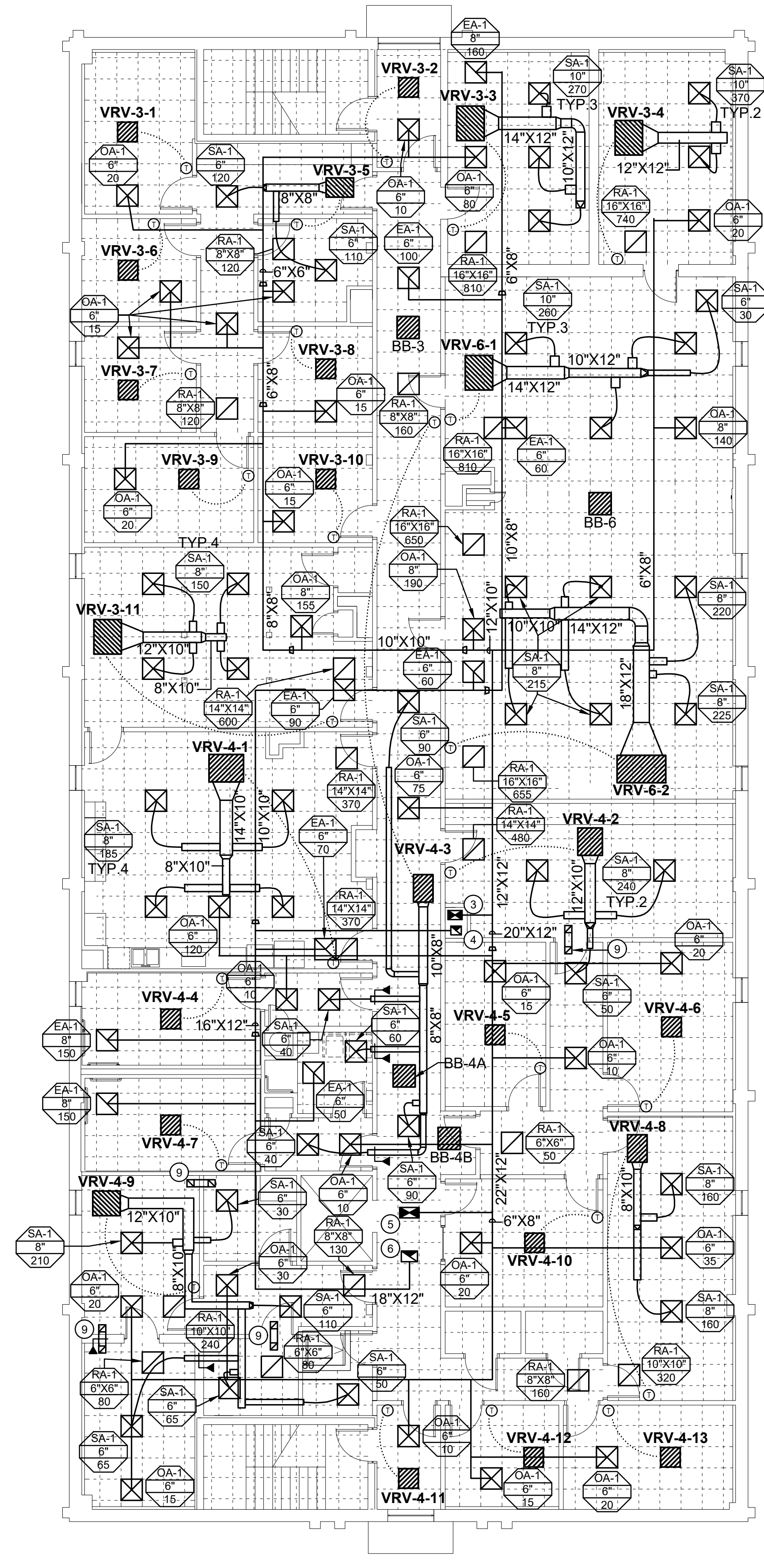
**GENERAL NOTES**  
Dwg # 230200-M2001.dwg

PROVIDE BALANCING DAMPER AT TAP FOR EACH SA-1 AND OA-1 DIFFUSER.

PROTECT PENETRATIONS OF RATED CORRIDOR WALLS IN ACCORDANCE WITH SC BUILDING CODE 714.4.1.

**KEYED NOTES**  
Dwg # 230200-M2001.dwg

- ① 16"X10" OUTSIDE AIR DUCT DOWN FROM LEVEL 2
- ② 12"X10" EXHAUST AIR DUCT UP TO LEVEL 2
- ③ 16"X10" OUTSIDE AIR DUCT DOWN TO LEVEL 1
- ④ 12"X10" EXHAUST AIR DUCT UP FROM LEVEL 1
- ⑤ 22"X12" OUTSIDE AIR DUCT DOWN FROM DOAS-1 ON ROOF
- ⑥ 18"X12" EXHAUST AIR DUCT UP TO DOAS-1 ON ROOF
- ⑦ REPLACE EXISTING LIEBERT COMPUTER ROOM INDOOR (CRAC-1.2) AND OUTDOOR (CU-1.2) UNIT. NEW CRAC-1.2 MODEL NUMBER: DS042ADC0E (WITH VFD). NEW CU-1.2 MODEL NUMBER: DCDP205-Y. NEW CU-1.2 TO BE INSTALLED ON ROOF IN SAME LOCATION AS CURRENT CU-1.2.
- ⑧ ALL EXISTING DUCTWORK, DUCT ACCESSORIES, AIR DEVICES, PIPING, ETC. IN COMPUTER ROOM TO REMAIN. CREATE NEW TRANSITION AT CRAC EVAPORATOR INLET/OUTLET TO EXISTING DUCTWORK AS REQUIRED.
- ⑨ 8"X8" TRANSFER BOOT. FIELD VERIFY NECESSITY FOR AIR TRANSFER - IF THERE IS MORE THAN 4" OF SPACE BETWEEN TOP OF WALL AND DECK, THE TRANSFER BOOT IS NOT NEEDED.



**2** MECHANICAL NEW WORK PLAN - SECOND FLOOR  
1/8" = 1'-0"  
Dwg # 230200-M2001.DWG

**1** MECHANICAL NEW WORK PLAN - FIRST FLOOR  
1/8" = 1'-0"  
Dwg # 230200-M2001.DWG

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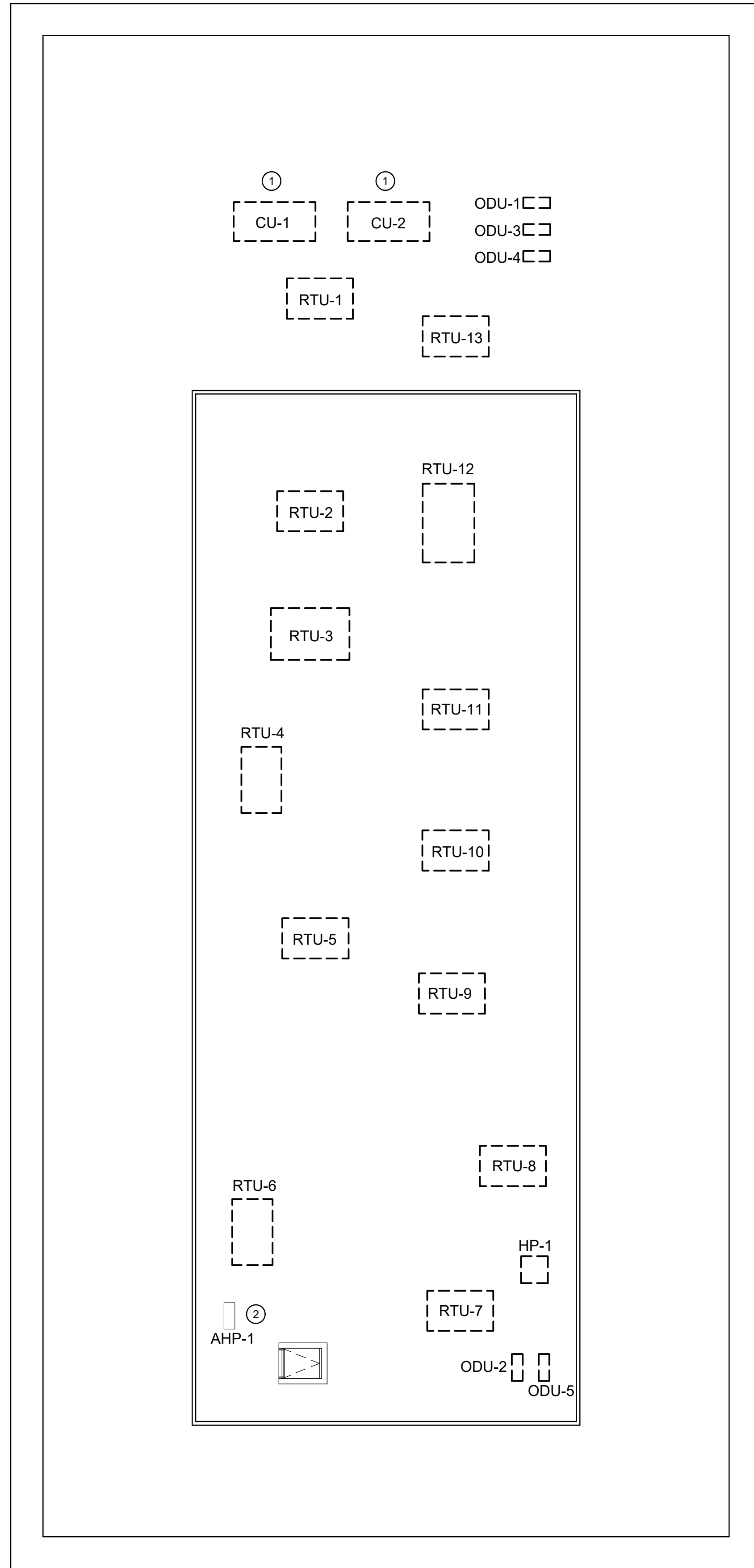
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YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
**MECHANICAL NEW WORK PLANS**

Designed By: MAS  
Drawn By: MAS  
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Date: 11-16-23

**M2.1**





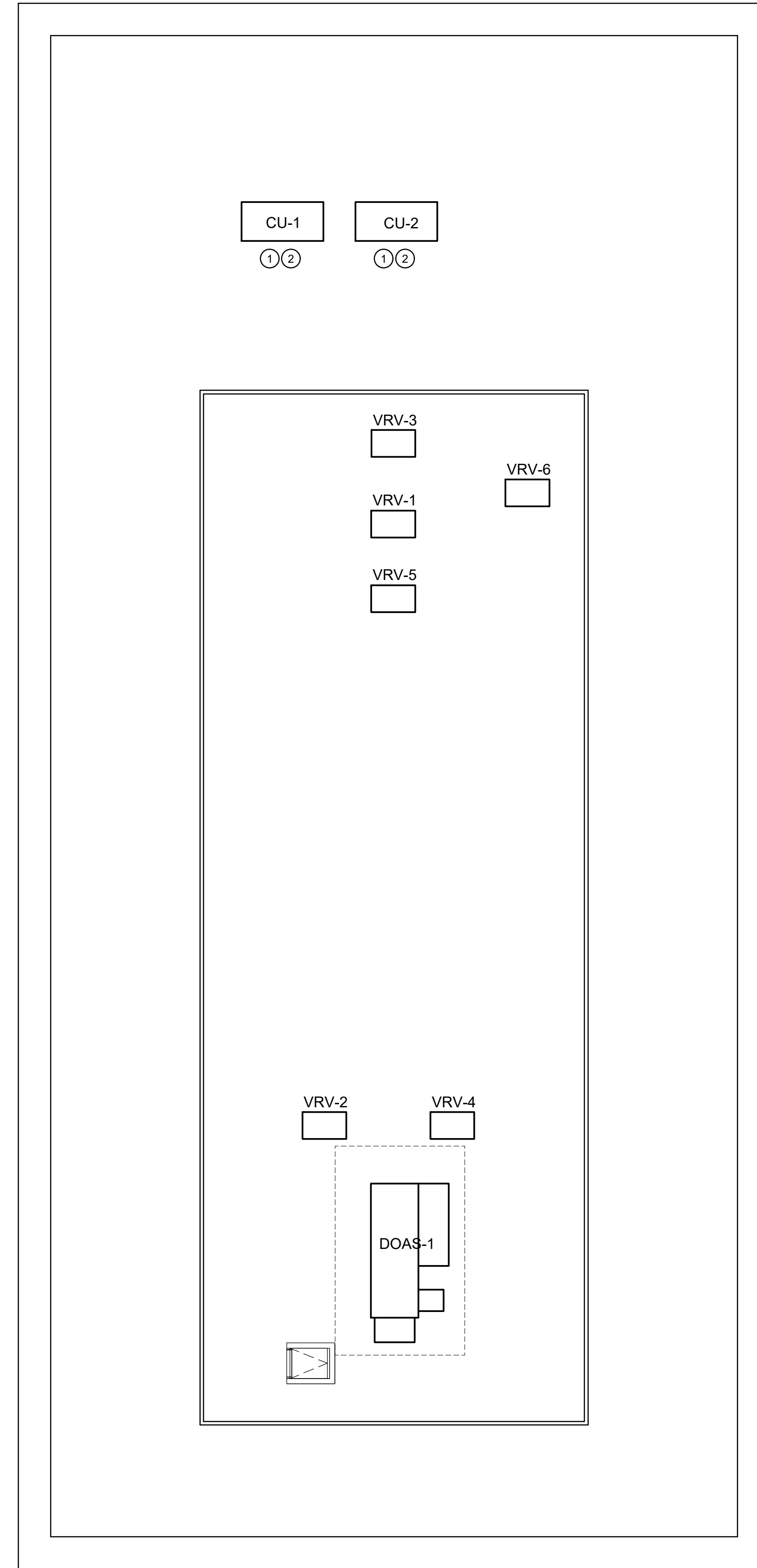
**GENERAL NOTES**  
Dwg # 230200-M2001.dwg

REMOVE ALL EXISTING HVAC SYSTEMS -- INCLUDING DUCTWORK, ACCESSORIES, AIR DEVICES, EQUIPMENT, PIPING, ETC. -- ON BOTH LEVELS AND ROOFTOP UNLESS NOTED OTHERWISE.

**KEYED NOTES**  
Dwg # 230200-M2001.dwg

- ① EXISTING LIEBERT COMPUTER ROOM OUTDOOR (CU-1,2) UNITS TO BE REPLACED. ALL EXISTING DUCTWORK, DUCT ACCESSORIES, AIR DEVICES, PIPING, ETC. TO REMAIN. CREATE NEW TRANSITIONS AT DUCTWORK AND PIPING INLETS/OUTLETS IF NECESSARY.
- ② EXISTING EQUIPMENT TO REMAIN.

**1**  
**M2.2** MECHANICAL DEMOLITION PLAN - ROOF  
1/8" = 1'-0"  
Dwg.# 230200-M3000.DWG



**KEYED NOTES**

- ① REPLACE EXISTING LIEBERT COMPUTER ROOM OUTDOOR (CU-1,2) UNIT. NEW CU-1.2 MODEL NUMBER: DCDF205-Y. NEW CU-1,2 TO BE INSTALLED ON ROOF IN SAME LOCATION AS CURRENT CU-1,2.
- ② ALL EXISTING PIPING FROM EXISTING CU TO EXISTING CRAC TO REMAIN. CREATE NEW TRANSITIONS FROM NEW PIPING INLETS/OUTLETS IF NECESSARY.

**2**  
**M2.2** MECHANICAL NEW WORK PLAN - ROOF  
1/8" = 1'-0"  
Dwg.# 230200-M2002.DWG

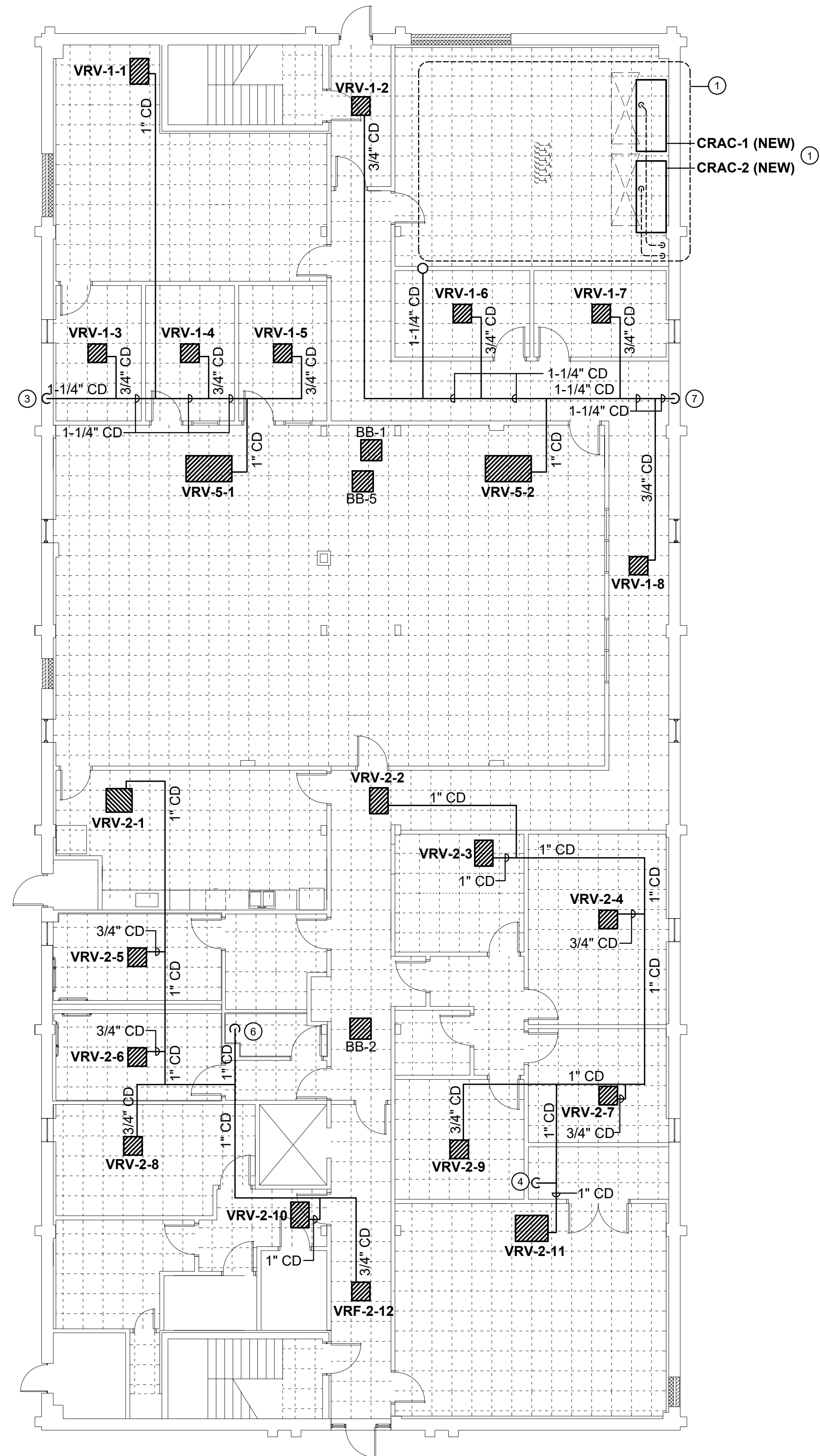
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778 JUSTICE BOULEVARD  
YORK, SC 29745  
MECHANICAL ROOF DEMOLITION AND NEW WORK PLANS

Designed By: MAS  
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Checked By: SDM  
Date: 11-16-23

**M2.2**





**GENERAL NOTES**

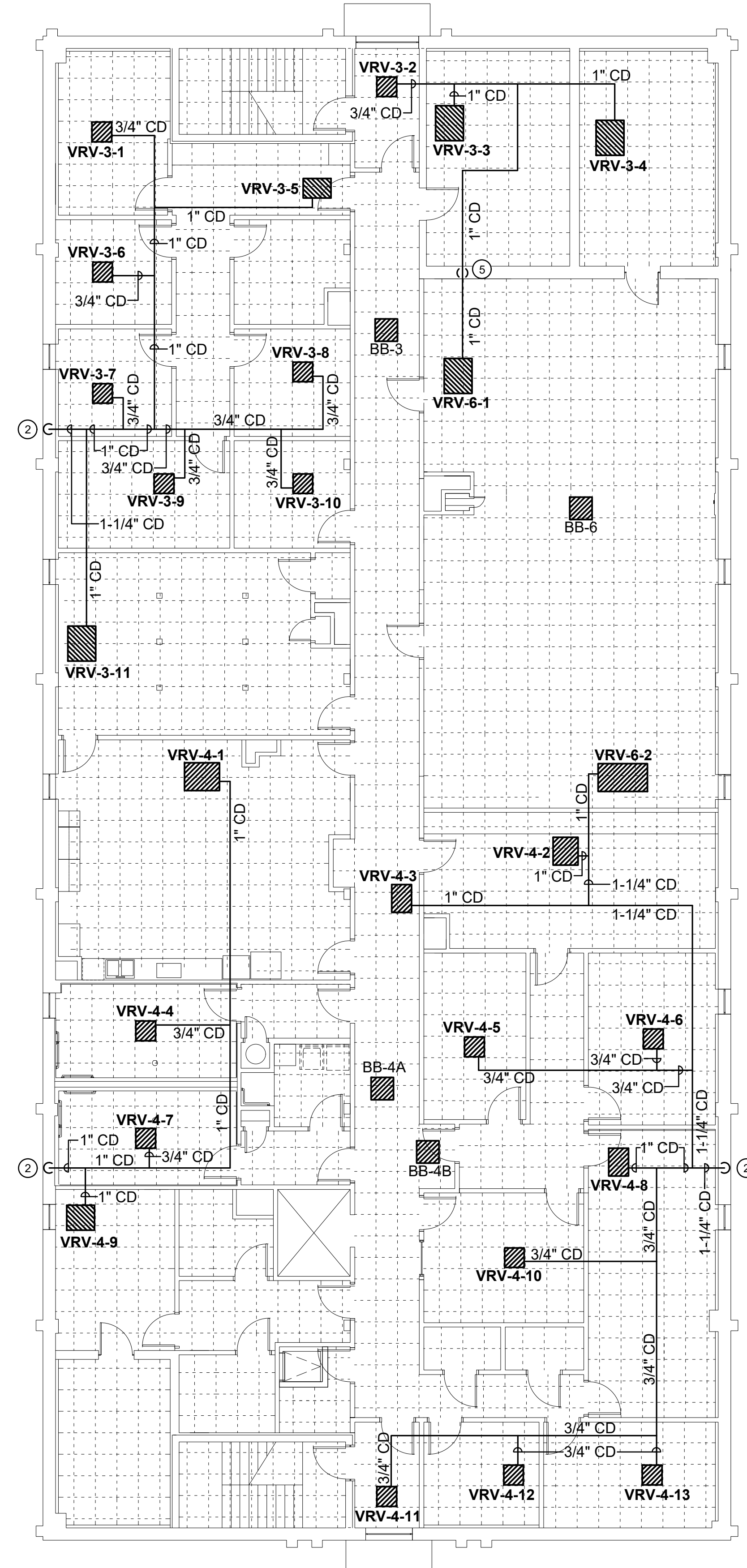
Dwg.# 230200-M3001.DWG

MANUFACTURER TO PROVIDE REFRIGERANT PIPING LAYOUT.

**KEYED NOTES**

Dwg.# 230200-M3001.DWG

- ① ALL PIPING AND PIPING ACCESSORIES IN COMPUTER ROOM TO REMAIN. CREATE NEW TRANSITION AT NEW CRAC EVAPORATOR PIPE INLETS/OUTLETS TO EXISTING PIPING IF NECESSARY.
- ② DROP CONDENSATE DRAIN PIPE DOWN TO FIRST FLOOR.
- ③ TAP INTO SECOND FLOOR CONDENSATE AND ROUTE 1-1/4\"/>



**2** MECHANICAL PIPING NEW WORK PLAN - SECOND FLOOR  
1/8" = 1'-0"  
Dwg.# 230200-M3001.DWG

**1** MECHANICAL PIPING NEW WORK PLAN - FIRST FLOOR  
1/8" = 1'-0"  
Dwg.# 230200-M3001.DWG

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YORK COUNTY EMERGENCY OPERATIONS CENTER  
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YORK, SC 29745  
**MECHANICAL PIPING NEW WORK PLANS**

Designed By: MAS  
Drawn By: MAS  
Checked By: SDM  
Date: 11-16-23

**M3.1**

PRELIMINARY: NOT FOR CONSTRUCTION



VRV INDOOR UNIT SCHEDULE										
DRAWING TAG	VRV-1-1	VRV-1-2	VRV-1-3	VRV-1-4	VRV-1-5	VRV-1-6	VRV-1-7	VRV-1-8		
SYSTEM	1	1	1	1	1	1	1	1		
FLOOR	1	1	1	1	1	1	1	1		
MANUFACTURER	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN		
MODEL	FXSQ09TAVJU	FXSQ09TAVJU	FXSQ09TAVJU	FXSQ09TAVJU	FXSQ09TAVJU	FXSQ09TAVJU	FXSQ09TAVJU	FXSQ12TAVJU		
TYPE	CONCEALED DUCTED MEDIUM STATIC	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE		
AIR FLOW, CFM	320	230	230	230	230	265	315	350		
COOLING TOTAL MBH	9.5	5.5	5.8	5.8	5.8	7.5	9.5	12		
COOLING SENSIBLE MBH	7	6.8	4.7	4.7	4.7	5.5	6.6	7.8		
HEATING TOTAL MBH	10.5	10.5	6.5	6.5	6.5	8.5	10.5	13.5		
ELECTRICAL										
VOLTS/PH	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1		
MCA	0.8	0.3	0.3	0.3	0.3	0.3	0.3	0.4		
MOP	15	15	15	15	15	15	15	15		
ACCESSORIES	1	1	1	1	1	1	1	1		
REMARKS	A	A	A	A	A	A	A	A		

VRV INDOOR UNIT SCHEDULE												
DRAWING TAG	VRV-2-1	VRV-2-2	VRV-2-3	VRV-2-4	VRV-2-5	VRV-2-6	VRV-2-7	VRV-2-8	VRV-2-9	VRV-2-10	VRV-2-11	VRV-2-12
SYSTEM	2	2	2	2	2	2	2	2	2	2	2	2
FLOOR	1	1	1	1	1	1	1	1	1	1	1	1
MANUFACTURER	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN
MODEL	FXSQ15TAVJU	FXSQ05TAVJU	FXSQ07TAVJU	FXSQ07TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ09TAVJU	FXSQ03TAVJU	FXSQ09TAVJU
TYPE	CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC	CEILING CASSETTE
AIR FLOW, CFM	530	265	265	230	230	230	230	230	230	320	810	230
COOLING TOTAL MBH	15	5.8	7.5	7.5	5.8	5.8	5.8	5.8	5.8	9.5	30	9.5
COOLING SENSIBLE MBH	11.3	4.7	5.8	5.5	4.7	4.7	4.7	4.7	4.7	7	22.6	6.6
HEATING TOTAL MBH	17	6.5	8.5	8.5	6.5	6.5	6.5	6.5	6.5	10.5	34	10.5
ELECTRICAL												
VOLTS/PH	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1
MCA	1.4	0.8	0.8	0.3	0.3	0.3	0.3	0.3	0.3	0.8	1.8	0.3
MOP	15	15	15	15	15	15	15	15	15	15	15	15
ACCESSORIES	1	1	1	1	1	1	1	1	1	1	1	1
REMARKS	A	A	A	A	A	A	A	A	A	A	A	A

VRV INDOOR UNIT SCHEDULE												
DRAWING TAG	VRV-3-1	VRV-3-2	VRV-3-3	VRV-3-4	VRV-3-5	VRV-3-6	VRV-3-7	VRV-3-8	VRV-3-9	VRV-3-10	VRV-3-11	
SYSTEM	3	3	3	3	3	3	3	3	3	3	3	
FLOOR	2	2	2	2	2	2	2	2	2	2	2	
MANUFACTURER	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	
MODEL	FXSQ07TAVJU	FXSQ07TAVJU	FXSQ07TAVJU	FXSQ07TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	
TYPE	CEILING CASSETTE	CEILING CASSETTE	CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CONCEALED DUCTED MEDIUM STATIC	
AIR FLOW, CFM	230	265	810	740	230	230	230	230	230	230	600	
COOLING TOTAL MBH	5.8	7.5	30	24	5.8	5.8	5.8	5.8	5.8	5.8	18	
COOLING SENSIBLE MBH	4.7	5.5	22.6	17.1	4.7	4.7	4.7	4.7	4.7	4.7	13.6	
HEATING TOTAL MBH	6.5	8.5	34	27	6.5	6.5	6.5	6.5	6.5	6.5	20	
ELECTRICAL												
VOLTS/PH	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	
MCA	0.3	0.3	1.8	1.8	0.8	0.3	0.3	0.3	0.3	0.3	1.6	
MOP	15	15	15	15	15	15	15	15	15	15	15	
ACCESSORIES	1	1	1	1	1	1	1	1	1	1	1	
REMARKS	A	A	A	A	A	A	A	A	A	A	A	

VRV INDOOR UNIT SCHEDULE													
DRAWING TAG	VRV-4-1	VRV-4-2	VRV-4-3	VRV-4-4	VRV-4-5	VRV-4-6	VRV-4-7	VRV-4-8	VRV-4-9	VRV-4-10	VRV-4-11	VRV-4-12	VRV-4-13
SYSTEM	4	4	4	4	4	4	4	4	4	4	4	4	4
FLOOR	2	2	2	2	2	2	2	2	2	2	2	2	2
MANUFACTURER	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN
MODEL	FXSQ15TAVJU	FXSQ15TAVJU	FXSQ09TAVJU	FXSQ15TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ15TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU	FXSQ05TAVJU
TYPE	CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE	CEILING CASSETTE
AIR FLOW, CFM	740	530	320	230	230	230	230	320	530	230	230	230	230
COOLING TOTAL MBH	24	15	9.5	5.8	5.8	7.5	5.8	9.5	15	5.8	5.8	5.8	5.8
COOLING SENSIBLE MBH	17.1	11.3	7	4.7	4.7	5.5	4.7	7	11.3	4.7	4.7	4.7	4.7
HEATING TOTAL MBH	27	17	10.5	6.5	6.5	8.5	6.5	10.5	17	6.5	6.5	6.5	6.5
ELECTRICAL													
VOLTS/PH	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1
MCA	1.8	1.4	0.8	0.3	0.3	0.3	0.3	0.8	1.4	0.3	0.3	0.3	0.3
MOP	15	15	15	15	15	15	15	15	15	15	15	15	15
ACCESSORIES	1	1	1	1	1	1	1	1	1	1	1	1	1
REMARKS	A	A	A	A	A	A	A	A	A	A	A	A	A

VRV INDOOR UNIT SCHEDULE													
DRAWING TAG	VRV-5-1	VRV-5-2		VRV-6-1	VRV-6-2								
SYSTEM	5	5		6	6								
FLOOR	1	1		2	2								
MANUFACTURER	DAIKIN	DAIKIN		DAIKIN	DAIKIN								
MODEL	FXSQ48TAVJU	FXSQ48TAVJU		FXSQ30TAVJU	FXSQ48TAVJU								
TYPE	CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC		CONCEALED DUCTED MEDIUM STATIC	CONCEALED DUCTED MEDIUM STATIC								
airflow from source data	918-1112-1307	918-1112-1307		565-689-812	918-1112-1307								
AIR FLOW, CFM	1110	1110		810	1305								
COOLING TOTAL MBH	48	48		30	48								
COOLING SENSIBLE MBH	34.3	34.3		22.6	34.3								
HEATING TOTAL MBH	54	54		34	54								
ELECTRICAL													
VOLTS/PH	208/1	208/1		208/1	208/1								
MCA	2.8	2.8		1.8	2.8								
MOP	15	15		15	15								
ACCESSORIES	1	1		1	1								
REMARKS	A	A		A	A								

**ACCESSORIES:**  
1. NEMA-1 TOGGLE SWITCH PROVIDED BY MECHANICAL CONTRACTOR.

**REMARKS:**  
A. SEE CONTROL DIAGRAMS FOR CONTROL REQUIREMENTS

VRV BRANCH BOXES							
DRAWING TAG	BB-1	BB-2	BB-3	BB-4	BB-4B	BB-5	BB-6
SYSTEM	VRV-1	VRV-2	VRV-3	VRV-4	VRV-4	VRV-5	VRV-6
CONNECTED INDOOR UNITS	ALL SYSTEM 1	ALL SYSTEM 2	ALL SYSTEM 3	1 THRU 5	6 THRU 13	ALL SYSTEM 5	ALL SYSTEM 6
MANUFACTURER	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN
MODEL	BSF9054TVJ	BS12054TVJ	BS12054TVJ	BSF9054TVJ	BSF9054TVJ	BSF4054TVJ	BSF4054TVJ
VOLTAGE/PHASE	208/1	208/1	208/1	208/1	208/1	208/1	208/1
AMPS	0.8	1.2	1.2	0.6	0.8	0.4	0.4

**REMARKS:**  
A. PIPING LAYOUT TO BE PROVIDED BY MANUFACTURER

AIR DISTRIBUTION SCHEDULE											
TAG	SA-10A-1	SUPPLY DIFFUSER	PRICE	AMD	33	ALUMINUM	WHITE	APPLICATION	LAY-IN	ACCESSORIES	1
RA-1	RETURN GRILLE	PRICE	630	3P	ALUMINUM	WHITE		LAY-IN			
EA-1	EXHAUST GRILLE	PRICE	630	3P	ALUMINUM	WHITE		LAY-IN			2

**ACCESSORIES:**  
1. SQUARE TO ROUND NECK ADAPTOR  
2. OBD FOR DUCTED EXHAUST

**DEDICATED OUTSIDE AIR SYSTEM (DOAS) SCHEDULE**

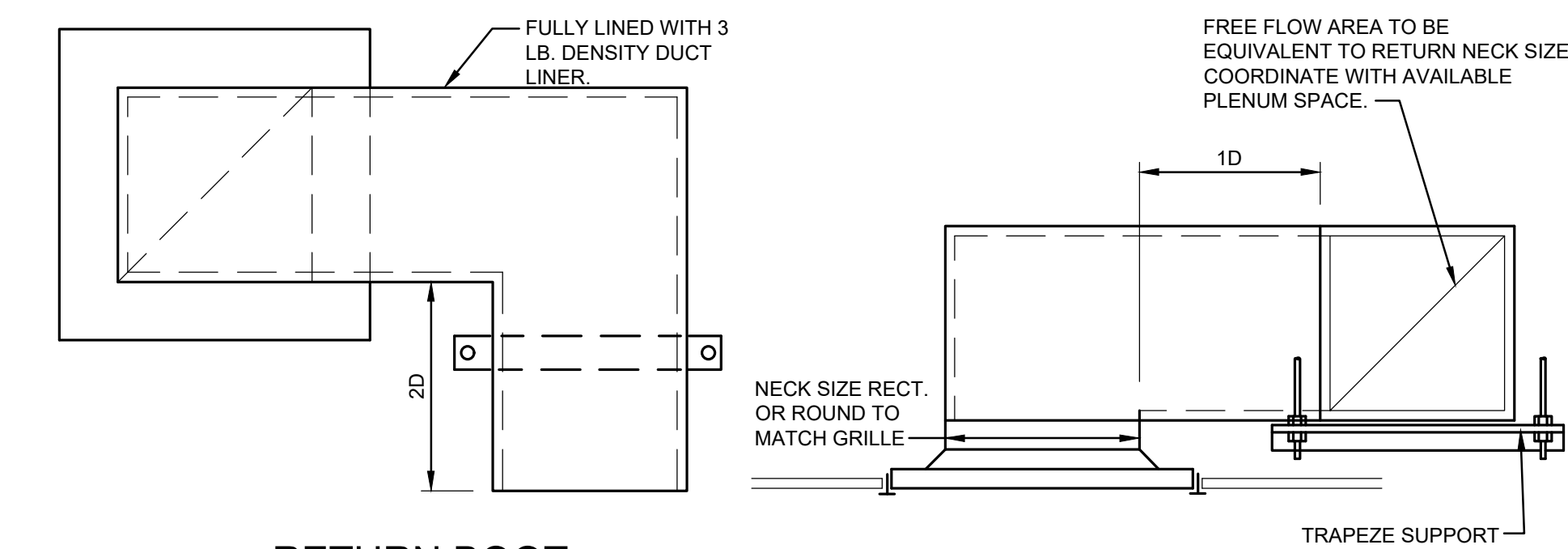
DRAWING TAG	DOAS-1
AREA SERVED	FULL BLDG
LOCATION	ROOFTOP
MANUFACTURER	GREENHECK
MODEL	RVE-40
SUPPLY FAN	
QTY	1
SUPPLY CFM, TOTAL	1930
RPM	1517
EXTERNAL STATIC PRESS, IN WG	1.3
DRIVE	DIRECT
MOTOR HP	1-1/2
EXHAUST FAN	
QTY	1
EXHAUST CFM, TOTAL	1500
RPM	1356
EXTERNAL STATIC PRESS, IN WG	1.3
DRIVE	DIRECT
MOTOR HP	1
COOLING	
TYPE	AIR SOURCE HEAT PUMP
EAT, F, db/wb	81.6/67.2
LAT, F, db/wb	51.7/51.5
SENSIBLE CAPACITY, MBH	63.3
TOTAL CAPACITY, MBH	92.7
REHEAT LAT, F	76.8
ISMRE	7.6
COMPRESSOR TYPE	INVERTER
PRIMARY HEAT	
TYPE	AIR SOURCE HEAT PUMP
TOTAL CAPACITY, MBH	41
EAT, F	49.3
LAT, F	68.9
COP47	3.4
SECONDARY HEAT	
TYPE	ELECTRIC SCR
CAPACITY, KW	20.4
EAT, F	49.3
LAT, F	82.7
ENERGY RECOVERY	
TYPE	ENTHALPY WHEEL
SUPPLY AIR FLOW, cfm	1930
EXHAUST AIR FLOW, cfm	1500
SUMMER PERFORMANCE	
OUTSIDE AIR, db/wb	93/74
RETURN AIR db/wb	75/62.4
ENERGY RECOVERY RATIO, %	62.4
WINTER PERFORMANCE	
OUTSIDE AIR, db/wb	15/12.1
RETURN AIR db/wb	72/56.7
ENERGY RECOVERY RATIO, %	59.1
ELECTRICAL	
VOLTS/PHASE	208/3
UNIT MCA	35.5
UNIT MOP	50
WEIGHT (LBS)	3223
ACCESSORIES	1,2,3,4,5,6,7
REMARKS	A,B

**ACCESSORIES:**  
1. OUTDOOR AIR DAMPER IS LOW LEAKAGE, MOTORIZED CLASS 1A  
2. PAINTED EXTERIOR CASING/GALVANIZED STEEL LINER  
3. STAINLESS STEEL DRAIN PAN AND CHILLED WATER COIL CASING  
4. VARIABLE FREQUENCY DRIVE AND COMBINATION MOTOR STARTER W/ FUSED DS AND HOA (FWE)  
5. HAIL GUARDS  
6. 18 IN ROOF CURB  
7. HOT GAS REHEAT

**REMARKS:**  
A. PROVIDE FLEX DUCT CONNECTION FOR FAN DUCT CONNECTIONS  
B. SEE CONTROL DRAWINGS FOR CONTROL REQUIREMENTS

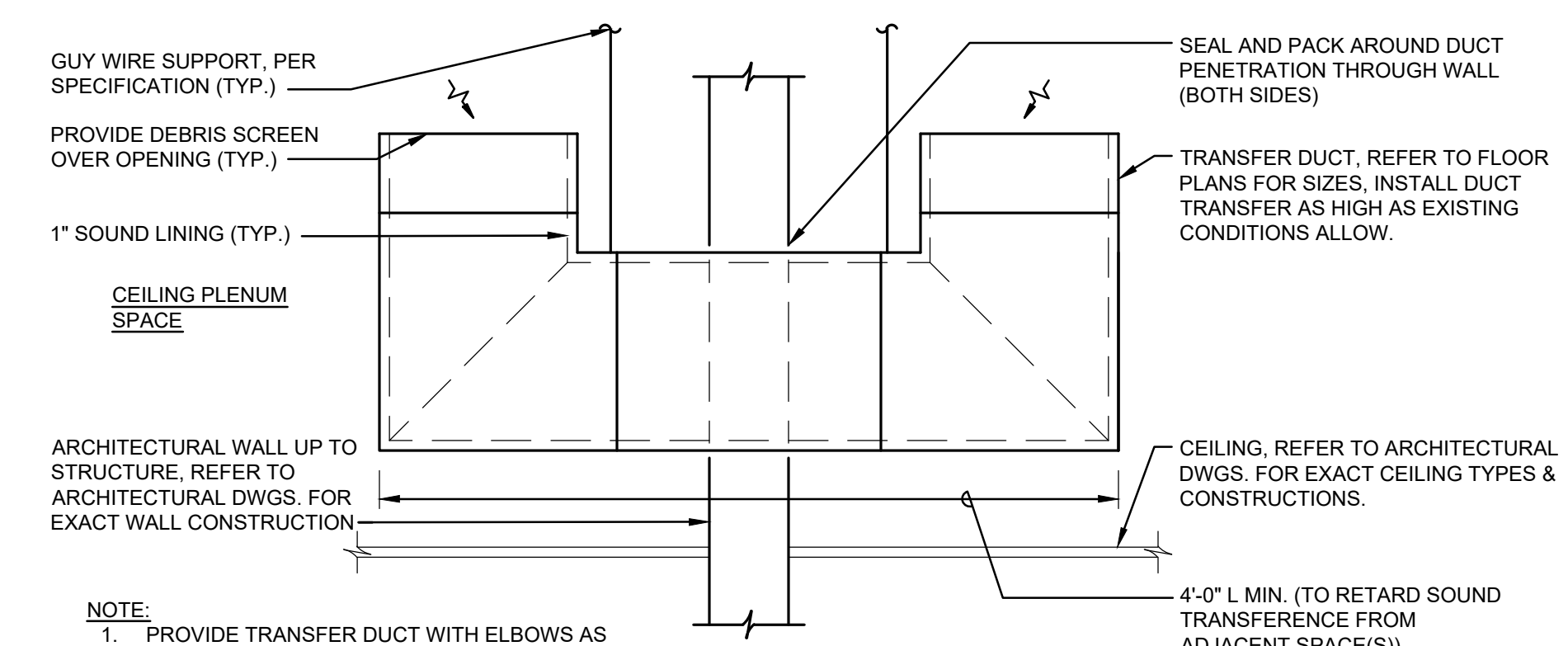
VRV OUTDOOR UNIT SCHEDULE						
DRAWING TAG	VRV-1	VRV-2	VRV-3	VRV-4	VRV-5	VRV-6
MANUFACTURER	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN
MODEL	REYQ96AATJA	REYQ120AATJA	REYQ168AATJA	REYQ144AATJA	REYQ144AATJA	REYQ96AATJA
RATED COOLING CAPACITY MBH	92	114	160	160	138	92
RATED HEATING CAPACITY MBH	103	129	180	180	154	103
EER (Non-Ducted/Ducted)	14.6/12.8	13.2/12.4	11.5/11.1	11.5/11.1	12.5/12.0	14.6/12.8
COP47 (Non-Ducted/Ducted)	4.3/3.56	4.0/3.48	3.5/3.2	3.5/3.2	3.8/3.35	4.3/3.56
CONNECTED UNITS (QTY.)	8	12	11	13	2	2
ELECTRICAL						





**RETURN BOOT**  
**TYPICAL FOR NON-DUCTED RETURN GRILLES**

NO SCALE  
Dwg.# 230200-M8001.DWG (TYPICAL UNLESS SHOWN OTHERWISE)

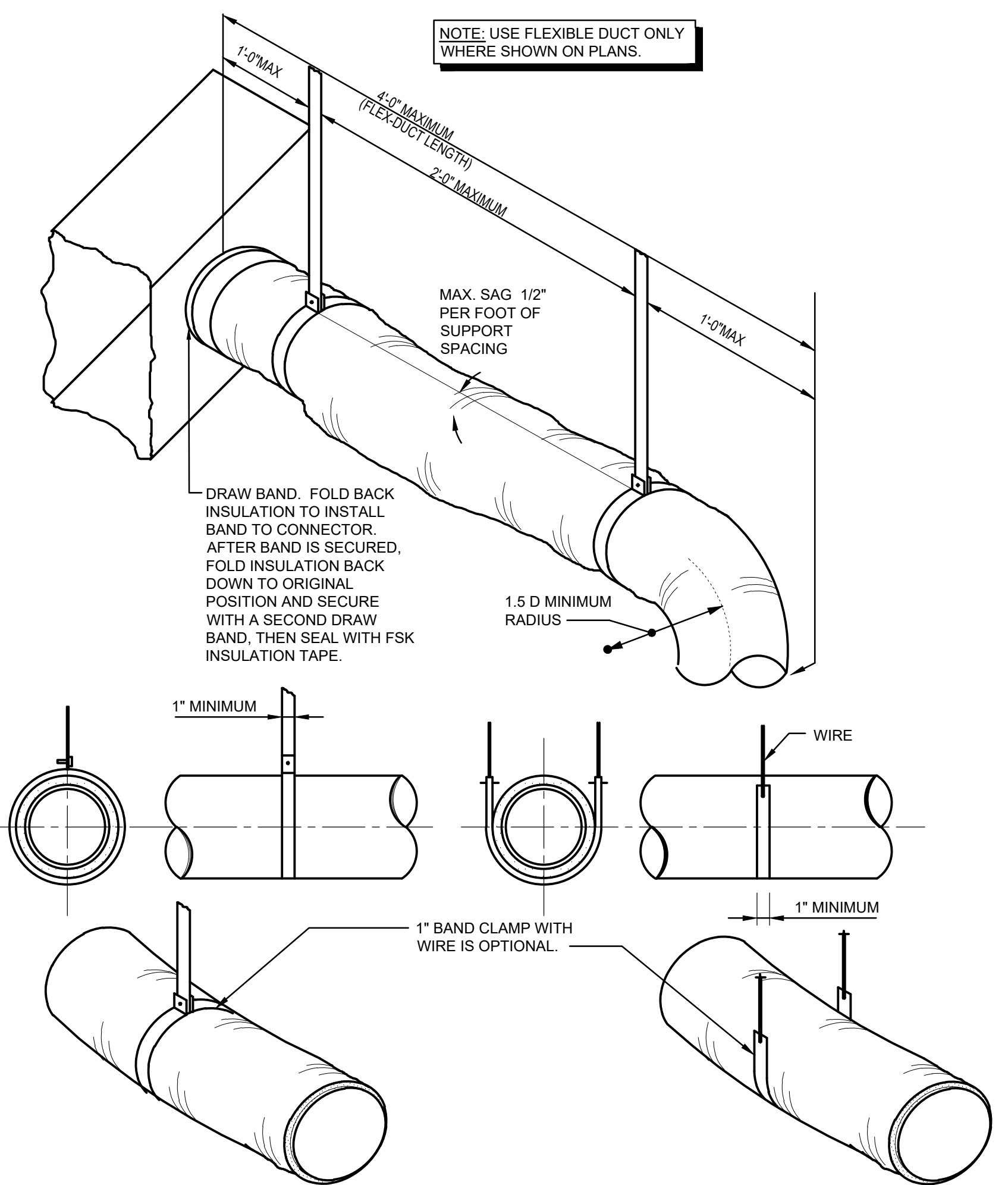


**TRANSFER DUCT THROUGH WALL DETAIL**

FULL SCALE  
Dwg.# 230200-M8008.DWG

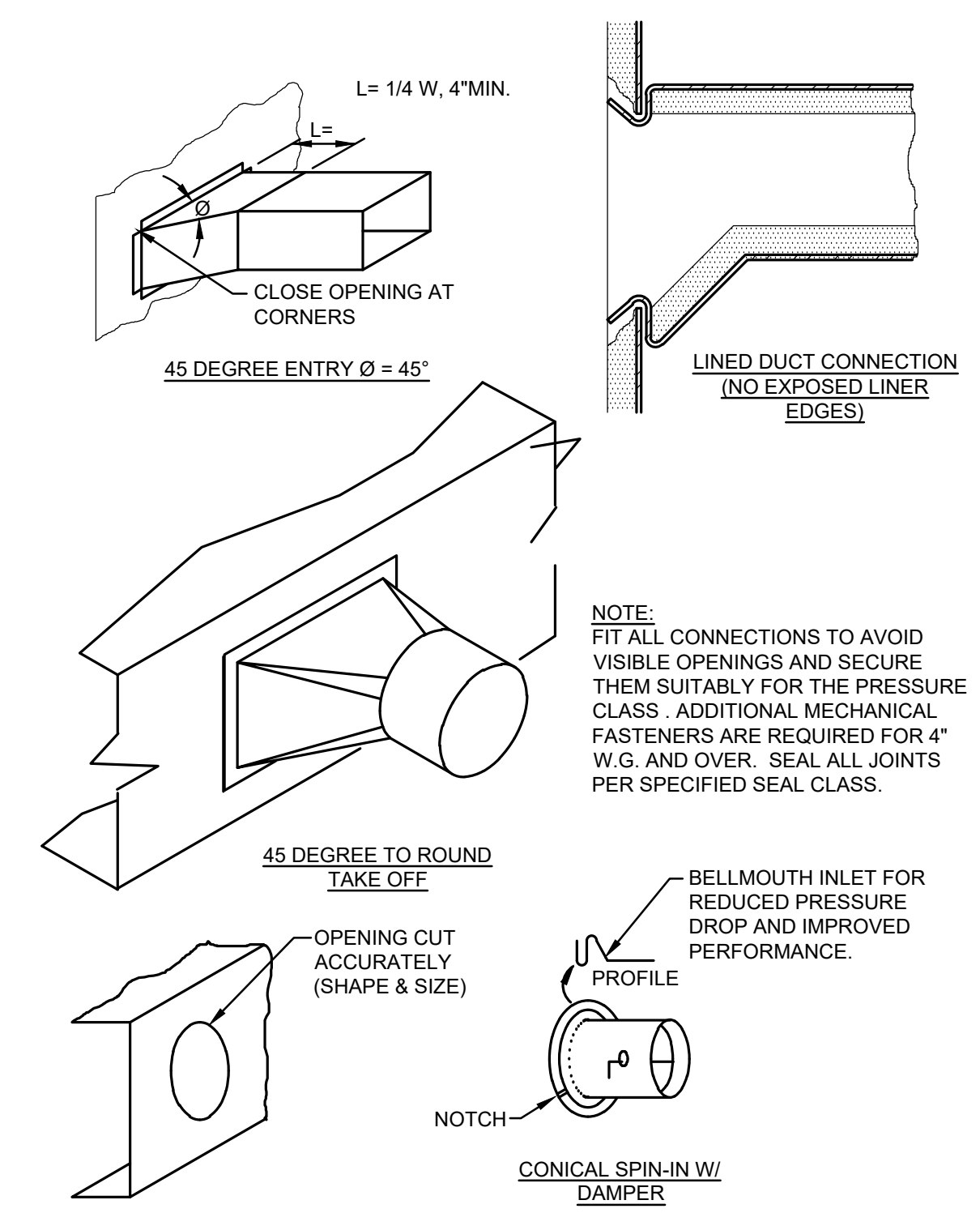
**NOTES:**

- THESE PROVISIONS APPLY FOR DUCTS USED FOR INDOOR COMFORT HEATING, VENTILATING AND AIR CONDITIONING SERVICE. SERVICE FOR CONVEYING PARTICULATE, HANDLING CORROSIVE FUMES AND VAPORS, HIGH TEMPERATURE DUTY, CORROSIVE OR CONTAMINATED ATMOSPHERE EXPOSURE, ETC., IS EXCLUDED.
- WHEN DUCT MUST CONFORM TO NFPA STANDARD 90A OR 90B, FLEXIBLE DUCTS MUST BE TESTED IN ACCORDANCE WITH UNDERWRITERS LABORATORY'S STANDARD FOR FACTORY MADE DUCT MATERIALS, UL-181, AND MUST BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING BY UL. SEPARATE INSTALLATION LIMITATIONS FOR FLEXIBLE CONNECTORS AND FLEXIBLE DUCTS ARE IDENTIFIED IN NFPA STANDARD 90A.
- BENDS SHALL BE MADE WITH NOT LESS THAN 1.5 DUCT DIAMETER CENTERLINE RADIUS. DUCTS SHOULD EXTEND A FEW INCHES BEYOND THE END OF A SHEET METAL CONNECTION BEFORE BENDING. DUCTS SHOULD NOT BE COMPRESSED.
- DUCTS SHALL BE LOCATED AWAY FROM HOT EQUIPMENT SUCH AS FURNACES, AND STEAM PIPES TO AVOID EXCESSIVE TEMPERATURE EXPOSURE.
- THE SPECIFICATIONS HEREIN, SHALL NOT SUPERSEDE THE APPLICATION CONTINGENCIES DICTATED BY THE FLEXIBLE DUCT MANUFACTURER IF THOSE ARE MORE STRINGENT.
- THE ENDS OF DUCTS SHALL BE TRIMMED SQUARELY PRIOR TO INSTALLATION.
- COLLARS TO WHICH FLEXIBLE DUCT ARE ATTACHED SHALL BE A MINIMUM OF 2" IN LENGTH. SLEEVES USED FOR JOINING TWO SECTIONS OF FLEXIBLE DUCT SHALL BE A MINIMUM OF 4" IN LENGTH.
- COLLARS AND SLEEVES SHALL BE INSERTED INTO FLEXIBLE DUCT A MINIMUM OF 1" BEFORE FASTENING.
- METALLIC FLEXIBLE DUCT SHALL BE ATTACHED USING A MINIMUM OF THREE #8 SHEET METAL SCREWS EQUALLY SPACED AROUND THE DUCT'S CIRCUMFERENCE; DUCTS LARGER THAN 12" DIAMETER SHALL HAVE A MINIMUM OF FIVE #8 SHEET METAL SCREWS. SCREWS SHALL BE LOCATED AT LEAST 1/2" FROM THE DUCT END.
- NON-METALLIC FLEXIBLE DUCT SHALL BE SECURED TO THE SLEEVE OR COLLAR USING A DRAW BAND. IF THE DUCT COLLAR EXCEEDS 12" DIAMETER THE DRAW BAND MUST BE POSITIONED BEHIND A BEAD ON THE METAL COLLAR.
- INSULATION AND VAPOR BARRIERS PRESENT ON FACTORY-FABRICATED DUCTS SHALL BE FITTED OVER THE CORE CONNECTION AND SHALL BE SUPPLEMENTALLY SECURED WITH A DRAW BAND, THEN SEALED WITH FSK INSULATION TAPE.
- FLEXIBLE DUCT SHALL BE SUPPORTED AT MANUFACTURER'S RECOMMENDED INTERVALS BUT AT NO GREATER DISTANCE THAN 2 FEET. MAXIMUM PERMISSIBLE SAG IS 1/2" PER FOOT OF SPACING BETWEEN SUPPORTS. A CONNECTION TO ANOTHER DUCT OR EQUIPMENT IS DEEMED A SUPPORT POINT.
- HANGER OR SADDLE MATERIAL IN CONTACT WITH THE FLEXIBLE DUCT SHALL BE OF SUFFICIENT WIDTH TO PREVENT ANY RESTRICTION OF THE INTERNAL DIAMETER OF THE DUCT WHEN THE WEIGHT OF THE SUPPORTED SECTION RESTS ON THE HANGER OR SADDLE MATERIAL. IN NO CASE WILL THE MATERIAL CONTACTING THE FLEXIBLE DUCT BE LESS THAN 1" INCH WIDE. NARROWER HANGER MATERIAL SHALL BE USED IN CONJUNCTION WITH A SHEET METAL SADDLE WHICH MEETS THE FOREGOING SPECIFICATIONS. THIS SADDLE MUST BE FORMED TO COVER ONE-HALF THE CIRCUMFERENCE OF THE OUTSIDE DIAMETER OF THE FLEXIBLE DUCT AND MUST BE ROLLED TO FIT NEATLY AROUND THE LOWER HALF OF THE DUCT'S OUTER CIRCUMFERENCE.
- FACTORY INSTALLED SUSPENSION SYSTEMS INTEGRAL TO THE FLEXIBLE DUCT ARE AN ACCEPTABLE ALTERNATIVE HANGING METHOD WHEN MANUFACTURERS' RECOMMENDED PROCEDURES ARE FOLLOWED.
- HANGERS SHALL BE ADEQUATELY ATTACHED TO THE BUILDING STRUCTURE.
- TO PREVENT TEARING OF VAPOR BARRIER, DO NOT SUPPORT ENTIRE WEIGHT OF FLEXIBLE DUCT ON ANY ONE HANGER DURING INSTALLATION. AVOID CONTACT OF FLEXIBLE DUCT WITH SHARP EDGES OF HANGER MATERIAL. DAMAGE TO VAPOR BARRIER MAY BE REPAIRED WITH APPROVED TAPE. IF INTERNAL CORE IS PENETRATED, REPLACE FLEXIBLE DUCT OR TREAT AS A CONNECTION.
- TERMINAL DEVICES CONNECTED BY FLEXIBLE DUCT SHALL BE SUPPORTED INDEPENDENTLY OF THE FLEXIBLE DUCT.



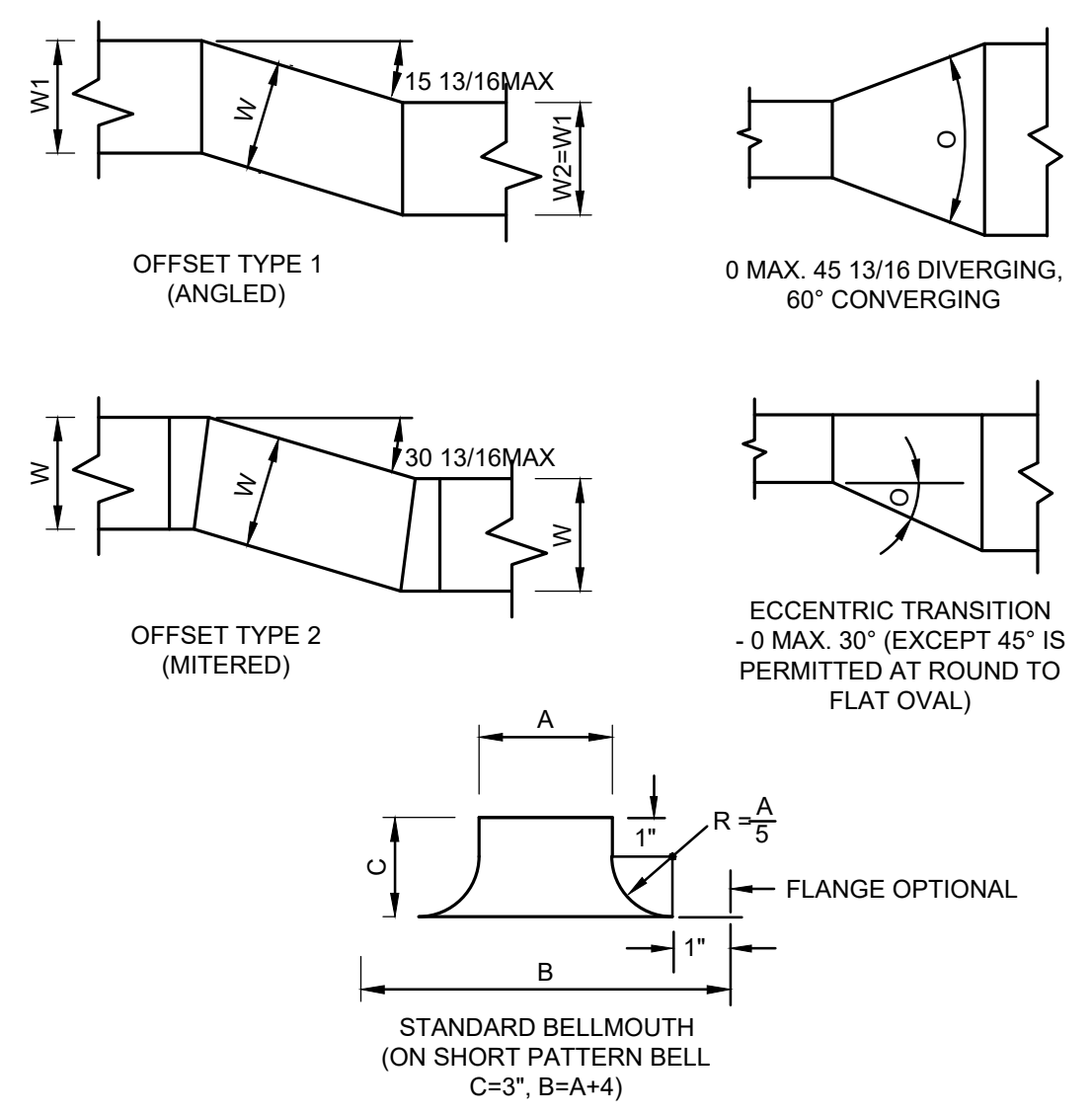
**TYPICAL DETAIL - FLEXIBLE DUCT INSTALLATION AND SUPPORT**

NO SCALE  
Dwg.# 230200-M8004.DWG



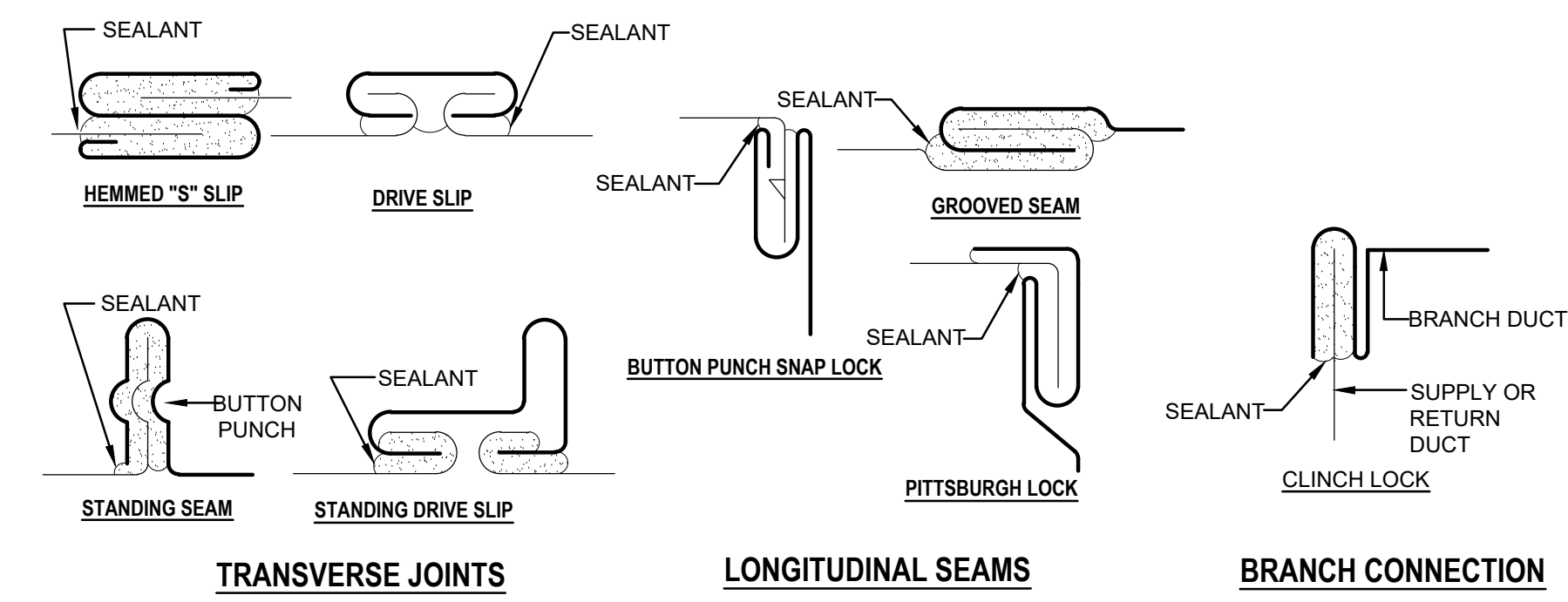
**TYPICAL BRANCH CONNECTION DETAILS**

NO SCALE  
Dwg.# 230200-M8009.DWG



**OFFSETS AND TRANSITIONS DETAIL**

NO SCALE  
Dwg.# 230200-M8005.DWG



**TYPICAL DUCT SEALING DETAILS**

- NOTES:**
- ALL SUPPLY, RETURN, AND OUTSIDE AIR DUCTWORK FOR THIS PROJECT SHALL HAVE A SEAL CLASS RATING OF "A". ALL JOINTS, SEAMS, AND WALL PENETRATIONS SHALL BE SEALED. SEAL CLASS "A" SHALL EXHIBIT LEAKAGE CHARACTERISTICS ASSOCIATED WITH LEAKAGE CLASS "B" FOR RECTANGULAR DUCT AND LEAKAGE CLASS "3" FOR ROUND DUCT.
  - SEALANT SHALL BE APPLIED DURING DUCT ASSEMBLY TO INSURE PROPER PENETRATION AND COVERAGE. SEALING OF DUCTWORK AFTER INSTALLATION IS NOT ACCEPTABLE.
  - OVERALL SYSTEM LEAKAGE SHALL COMPLY WITH THE SPECIFIED LEAKAGE CLASS REQUIREMENTS AND SHALL BE TESTED ACCORDINGLY WITH SMACNA DUCT LEAKAGE TEST CRITERIA.
  - MECHANICAL CONTRACTOR SHALL PROVIDE PRIMED AND PAINTED FINISH FOR ALL STACKS ABOVE ROOF IN ACCORDANCE WITH DIVISION 1 PAINTING SPECIFICATIONS. COORDINATE FINISH COLOR WITH ARCHITECT.

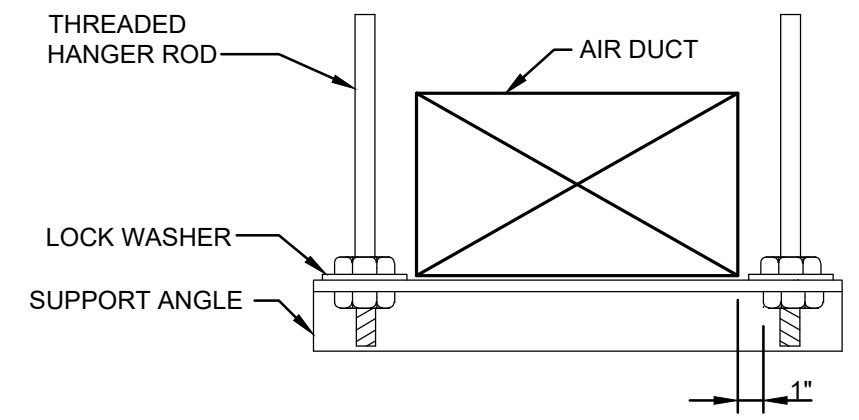
PRELIMINARY: NOT FOR CONSTRUCTION

YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
MECHANICAL DETAILS

Designed By: MAS  
Drawn By: MAS  
Checked By: SDM  
Date: 11-16-23

**M5.1**





**ALUMINUM DUCT**

AIR DUCT SIZE MAX. DUCT DIM.	ROD SIZE	SUPPORT ANGLE ALUMINUM 6061-T6	MAXIMUM SPACING
UP TO 36"	3/8"	2" x 2" x 3/16"	8'-0" O.C.
37" - 59"	3/8"	2 1/2" x 2 1/2" x 3/16"	8'-0" O.C.

**GALVANIZED DUCT**

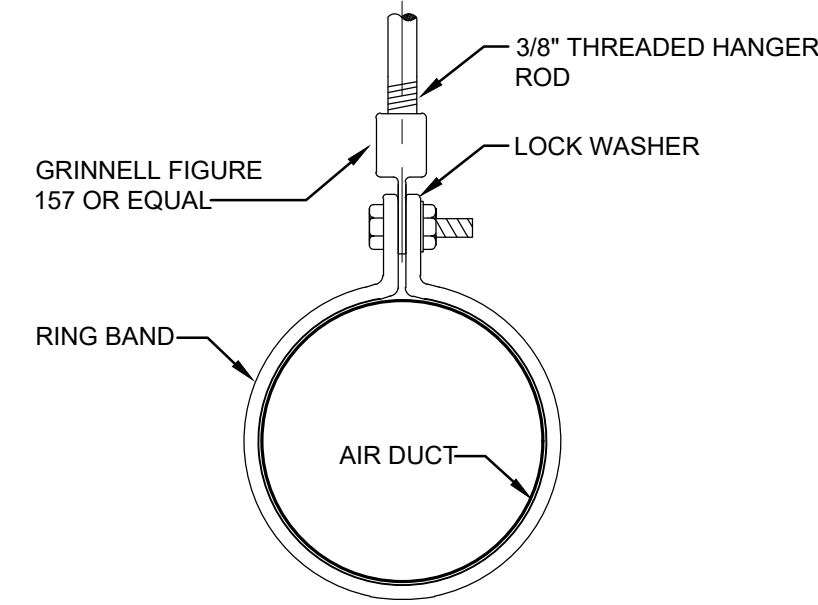
AIR DUCT SIZE MAX. DUCT DIM.	ROD SIZE	SUPPORT ANGLE STEEL ASTM A-36	MAXIMUM SPACING
UP TO 36"	3/8"	1 1/2" x 1 1/2" x 1/4"	8'-0" O.C.
37" - 59"	3/8"	2" x 2" x 3/8"	8'-0" O.C.
60" - 83"	3/8"	2" x 2" x 3/8"	6'-0" O.C.
84" - 100"	3/8"	3" x 3" x 3/8"	6'-0" O.C.
100" - 118"	3/8"	3 1/2" x 3 1/2" x 3/8"	6'-0" O.C.

**GALVANIZED DUCT WITH  
MAXIMUM 10'-0" SPACING**

AIR DUCT SIZE MAX. DUCT DIM.	ROD SIZE	SUPPORT ANGLE STEEL ASTM A-36	MAXIMUM SPACING
UP TO 36"	3/8"	1 1/2" x 1 1/2" x 1/4"	
37" - 58"	3/8"	2" x 2" x 3/8"	
59"	1/2"	2 1/2" x 2 1/2" x 3/8"	
60" - 83"	1/2"	2 1/2" x 2 1/2" x 3/8"	
84" - 100"	1/2"	3" x 3" x 3/8"	
100" - 118"	1/2"	3 1/2" x 3 1/2" x 3/8"	

**TRAPEZE SUPPORT**  
(MAX. 2" W.G. MAX. 2000 FPM)

NO SCALE  
Dwg # 230200-M8003.DWG

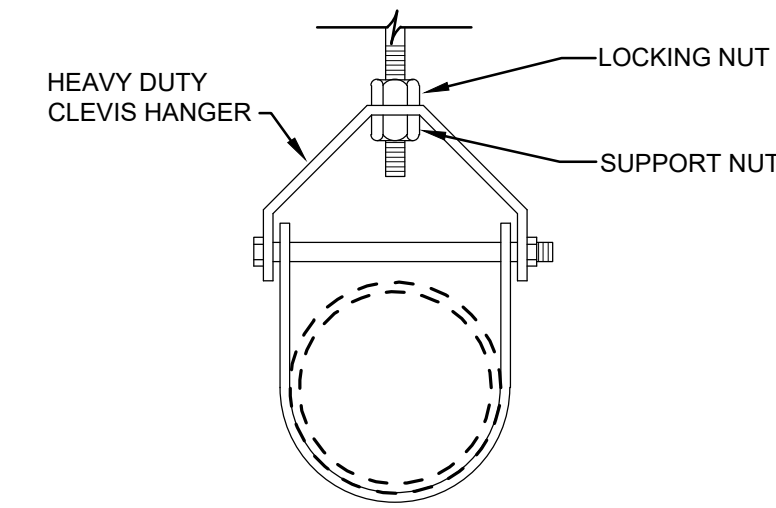


**GALVANIZED STEEL DUCT**

AIR DUCT SIZE	RING BAND SIZE	RING BAND BOLT SIZE	MAXIMUM SPACING
UP TO 18" DIA.	1" x 1/8"	2" x 3/8"	8'-0"
19" - 36" DIA.	1 1/2" x 1/8"	2" x 3/8"	8'-0"

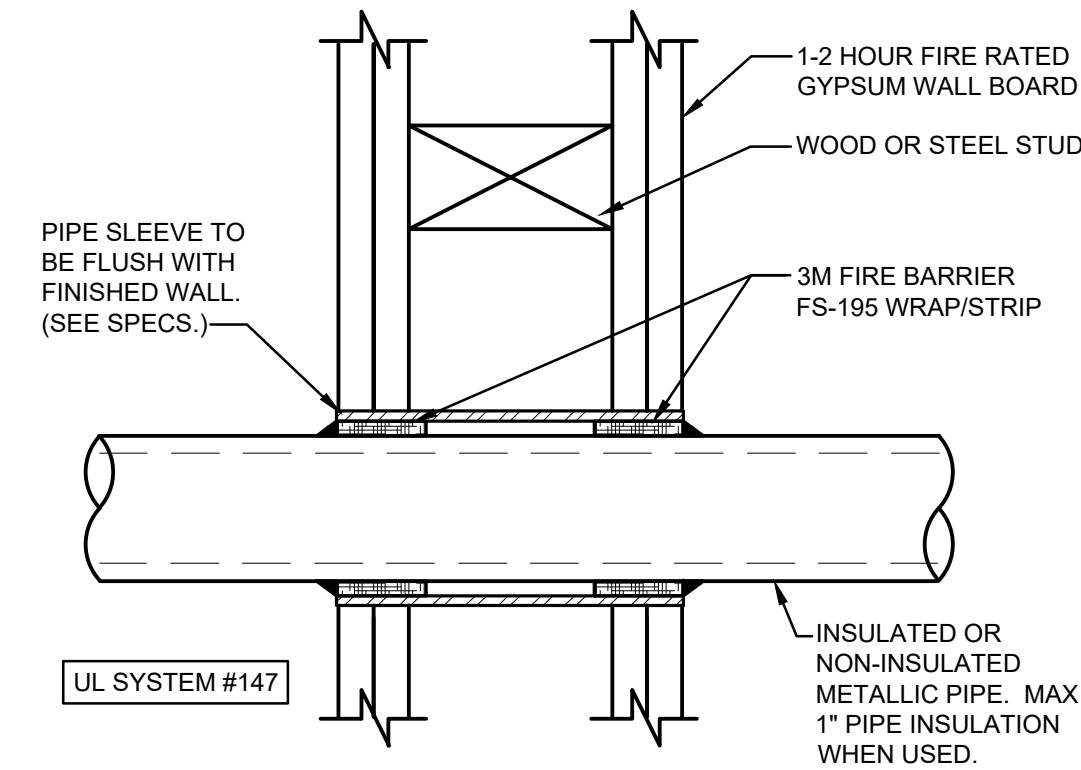
**ROUND DUCT SUPPORTER**  
(UP TO 36" DIAMETER)

FULL SCALE  
Dwg # 230200-M8006.DWG



**CLEVIS HANGER DETAIL**

FULL SCALE  
Dwg # 230200-M8007.DWG



**NOTES:**

1. THE SPACE BETWEEN THE PENETRATING ITEM AND SLEEVE MUST ACCOMMODATE AT LEAST ONE WRAP (1/4") OF 3M FIRE BARRIER FS-195 WRAP/STRIP.
2. IF THE ANNULAR SPACE IS LESS THAN 1/2", ONE WRAP OF FS-195 WRAP/STRIP IS REQUIRED. IF THE ANNULAR SPACE IS 1/2" OR GREATER, FILL WITH ADDITIONAL WRAPS OF FS-195 WRAP/STRIP UNTIL THE ANNULAR SPACE IS LESS THAN 1/4". FS-195 WRAP/STRIPS MAY BE FRICTION FIT INTO OPENING.
3. SLIDE THE FS-195 WRAP/STRIPS INTO THE OPENING, LEAVING A MAX. 3/4" EXPOSED WRAP BEYOND THE WALL SURFACE.
4. SEAL THE FS-195 WRAP/STRIP EDGES AND SEAMS WITH A 1/4" MIN. BEAD OF 3M FIRE BARRIER CP 25 CAULK.
5. INSTALL 3M FIRESTOP ON BOTH SIDES OF WALL.
6. THESE RECOMMENDATIONS ARE BASED ON PRODUCT PERFORMANCE PER ASTM E-814 (UL 1479) FIRE TEST AND UL THROUGH-PENETRATION FIRESTOP SYSTEM #147.

**PENETRATION FIRESTOP FOR INSULATED OR NON-INSULATED  
METAL PIPE THRU 1 OR 2 HR. RATED GYPSUM WALLBOARD**

NO SCALE  
Dwg # 230200-M8010.DWG

Revision	Date	Mark

Mark	Date

Mark	Date

YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
MECHANICAL DETAILS

Designed By: MAS  
Drawn By: MAS  
Checked By: SDM  
Date: 11-16-23

**M5.2**

PRELIMINARY: NOT FOR CONSTRUCTION



# ELECTRICAL SPECIFICATIONS

## GENERAL REQUIREMENTS

GENERAL CONDITIONS OF THE CONTRACT, SUPPLEMENTAL GENERAL CONDITIONS, AND INSTRUCTION TO BIDDERS ARE A PART OF THESE SPECIFICATIONS. REFER TO THESE DOCUMENTS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

THIS CONTRACTOR SHALL PAY ALL REQUIRED INSPECTION FEES AND SHALL INCLUDE THE COST OF SUCH FEES IN THE PROPOSAL.

PROVIDE INSURANCE, TEMPORARY UTILITIES, AND OTHER ITEMS AFFECTING THIS CONTRACT AS INDICATED IN THE GENERAL CONDITIONS OR AS DIRECTED BY THE OWNER.

BIDDERS ARE RESPONSIBLE FOR OBTAINING EACH ISSUED ADDENDA AND TO INCORPORATE THEM INTO THEIR PROPOSAL.

EACH BIDDER IS RESPONSIBLE FOR BIDDING ALTERNATES WHETHER LISTED OR NOT ON THE BID PROPOSAL FORM.

THIS CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER CONTRACT DOCUMENTS FOR THE PROJECT INCLUDING OTHER TRADES' DRAWINGS, SPECIFICATIONS, AND SUBMITTALS. CONNECT AND PROVIDE SERVICES FOR EQUIPMENT AS SHOWN OR INDICATED.

THIS CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, EQUIPMENT, AND PERFORM ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM AS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS.

THE TERM "PROVIDE" USED THROUGHOUT THESE SPECIFICATIONS AND ON THE DRAWINGS SHALL MEAN TO FURNISH, INSTALL, AND CONNECT WITH ALL RELATED HARDWARE, SOFTWARE, AND ACCESSORIES FOR A COMPLETE INSTALLATION READY FOR USE.

MODIFICATIONS: MINOR CHANGES IN OUTLET, LIGHT FIXTURE, AND EQUIPMENT LOCATIONS MAY BE MADE AT ANY TIME PRIOR TO ROUGHING-IN OF THE ELECTRICAL WORK WITHOUT ANY ADDITIONAL COST TO THE OWNER.

NOTIFY INSPECTORS: THIS CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ELECTRICAL INSPECTOR OF THE PROJECT AUTHORITY HAVING JURISDICTION, AND THE ENGINEER TO SCHEDULE REQUIRED INSPECTIONS.

SITE CONDITIONS: IT SHALL BE THE DUTY OF THE PROSPECTIVE CONTRACTOR TO VISIT THE JOB SITE AND BECOME FAMILIAR WITH THE PROJECT CONDITIONS PRIOR TO BID. EVIDENT JOB CONDITIONS THAT ARE NOT INDICATED ON THE DRAWINGS SHALL BE INCLUDED IN THE CONTRACTOR'S BID. DIRECT ANY QUESTIONS TO THE ENGINEER A MINIMUM OF 10 DAYS PRIOR TO BID.

CONTRACT SUPERVISOR: THE CONTRACTOR SHALL ASSIGN AND MAINTAIN A SINGLE QUALIFIED PERSON AS THE JOB SUPERINTENDENT ON THIS PROJECT.

QUALIFIED PERSONNEL: THE CONTRACTOR SHALL PROVIDE ADEQUATE MANPOWER AS REQUIRED TO MEET THE SCHEDULE. THIS INCLUDES QUALIFIED ELECTRICIANS AND MECHANICS THAT ARE LICENSED BY THE PROPER AUTHORITIES AND SKILLED IN THE INSTALLATION OF THIS TYPE OF WORK. WORKMANSHIP SHALL BE OF THE HIGHEST GRADE AND FIRST CLASS IN EVERY RESPECT.

ARRANGE WORK TO AVOID CUTTING THE WORK OF OTHER TRADES. WHERE CUTTING IS UNAVOIDABLE, COORDINATE WITH THE OTHER TRADE(S) FIRST. REPAIR WORK TO MATCH.

TO AVOID WEAKENING THE STRUCTURE, DO NOT CUT STRUCTURAL MEMBERS WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER AND THE GENERAL CONTRACTOR.

FURNISH, PLACE AND GROUT NEATLY IN PLACE PIPE SLEEVES FOR ELECTRICAL WORK IN NEW WALLS AND PARTITIONS.

SEAL AIRTIGHT AROUND ALL CONDUITS, CABLES, BOXES, ETC. THAT ARE RUN THRU ALL NEW WALLS, PARTITIONS, AND CEILINGS. USE FIRE BARRIER CAULK AND/OR PUTTY AS APPLICABLE AROUND PENETRATIONS THRU FIRE-RATED WALLS, PARTITIONS, CEILING, ETC. ACCORDING TO LISTED UL ASSEMBLY SYSTEM DETAILS FOUND AT WWW.UL.COM.

ELECTRICAL AND OTHER EQUIPMENT AND/OR MATERIALS THAT ARE DEFECTIVE, OR THAT ARE DAMAGED IN THE COURSE OF CONSTRUCTION, SHALL BE REMOVED AND REPLACED BY THIS CONTRACTOR AT THIS CONTRACTOR'S EXPENSE.

DEPARTURES AND/OR DEVIATIONS FROM THE DRAWINGS AND SPECIFICATIONS SHALL BE REQUESTED IN WRITING BY THE CONTRACTOR FROM THE ENGINEER. DEPARTURES AND/OR DEVIATIONS SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.

## SUBMITTALS:

SUBMIT ELECTRONIC COPY OF SUBMITTAL DATA FOR ALL MATERIALS AND EQUIPMENT THAT ARE TO BE INSTALLED ON THIS PROJECT. UPON APPROVAL BY THE ENGINEER, ELECTRONIC COPY WILL BE RETURNED.

PRIOR TO SUBMITTING INFORMATION, THE CONTRACTOR SHALL REVIEW INFORMATION TO ENSURE IT COMPLIES WITH THE CONTRACT DOCUMENTS AND ALL APPLICABLE CODES. THE CONTRACTOR SHALL NOT SUBMIT DATA UNTIL IT COMPLIES.

STAMP ALL SUBMITTAL DATA AND SHOP DRAWINGS AS "APPROVED" ONCE THE DATA COMPLIES INDICATING FULL COMPLIANCE WITH THE DRAWINGS AND SPECIFICATIONS. SHOP DRAWINGS AND SUBMITTAL DATA WILL NOT BE REVIEWED WITHOUT THE "APPROVED" STAMP.

SUBMITTAL DATA AND SHOP DRAWINGS SHALL CLEARLY INDICATE WHICH PIECES OF EQUIPMENT ARE TO BE INSTALLED FOR THIS PROJECT. DATA SHALL INCLUDE EQUIPMENT SIZES, CAPACITIES, REQUIREMENTS FOR ACCESS AND MAINTENANCE, MINIMUM CLEARANCES AS REQUIRED BY THE MANUFACTURER AND CODE, AND ALL OTHER PERTINENT INFORMATION FOR THIS PARTICULAR PROJECT. ALL SHOP DRAWINGS SHALL BE SUBMITTED AT THE SAME TIME AND AS SOON AS POSSIBLE AFTER AWARD OF CONTRACT.

MATERIALS AND EQUIPMENT SHALL NOT BE PLACED ON THE JOB SITE, OR INSTALLED, WITHOUT PRIOR APPROVAL BY THE ENGINEER.

## RECORD DRAWINGS:

THIS CONTRACTOR SHALL MAINTAIN A SET OF RECORD DRAWINGS THROUGHOUT CONSTRUCTION AND SHALL UPDATE THEM DAILY.

MARK THE DRAWINGS WITH ALL DEVIATIONS SHOWING THE AS-BUILT CONDITIONS. INCLUDE REVISIONS TO ALL SCHEDULES AS WELL AS REVISED LOCATIONS OF ALL DEVICES, CONDUITS, PANELBOARDS, EQUIPMENT, BOXES, WALLS, ETC....

SUBMIT 2 COPIES OF THE MARKED UP RECORD DRAWINGS SHOWING THE AS-BUILT CONDITIONS TO THE ENGINEER WHEN CONSTRUCTION IS COMPLETE OR AS DIRECTED BY THE ENGINEER.

## CODES AND STANDARDS:

THE ENTIRE INSTALLATION SHALL COMPLY WITH ALL REQUIREMENTS, LAWS, ORDINANCES, REGULATIONS, THE NATIONAL ELECTRICAL CODE, REFERENCED STANDARDS, THE OWNER'S GUIDELINES, THE SOUTH CAROLINA BUILDING CODE, AND OTHER CODES APPLICABLE TO THIS PROJECT. EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS AS REQUIRED BY THE NEC.

MATERIALS INSTALLED IN THIS CONTRACT SHALL CONFORM TO THE STANDARDS LISTED BELOW WHERE SUCH STANDARDS ARE APPLICABLE AND SHALL BE NEW AND FIRST CLASS IN ALL RESPECTS.

AEIC AMERICAN ASSOCIATION OF EDISON ILLUMINATING COMPANIES  
ANSI AMERICAN NATIONAL STANDARDS INSTITUTE STANDARDS  
ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS

ASHRAE/IES 90.1 ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS  
BOCA BUILDING OFFICIALS CODE ADMINISTRATORS  
CBM CERTIFIED BALLAST MANUFACTURER'S STANDARDS  
EEI EDISON ELECTRICAL INSTITUTE  
ETL ELECTRICAL TESTING LABORATORIES STANDARDS

ICEA INSULATED CABLE ENGINEERS ASSOCIATION  
ICC INTERNATIONAL CODE COUNCIL  
ICBO INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS  
IEEE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS

NEC NATIONAL ELECTRICAL CODE  
NECA NATIONAL ELECTRICAL CONTRACTOR ASSOCIATION  
NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

NESC NATIONAL ELECTRICAL SAFETY CODE  
NFPA NATIONAL FIRE PROTECTION ASSOCIATION  
NEIS NATIONAL ELECTRICAL INSTALLATION STANDARDS

UL UNDERWRITER'S LABORATORIES, INC.  
OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

SBCCI SOUTHERN BUILDING CODE CONGRESS  
SCBC SOUTH CAROLINA BUILDING CODE  
TCLP TOXICITY CHARACTERISTIC LEACHING PROCEDURE

## WIRING METHODS:

RUN ALL WIRING FOR LIGHTING, POWER AND ALL OTHER SYSTEMS, BELOW SLAB ON GRADE AND UNDERGROUND IN SCHEDULE 40 PVC CONDUIT WITH PVC ASPHALT COATED RIGID GALVANIZED ELBOWS, AND WITH GROUND WIRE AND WITH ALL THREADED CONNECTIONS AND JOINTS WATERPROOFED FOR WATERTIGHT INSTALLATION. RUN ALL WIRING FOR LIGHTING, POWER AND ALL OTHER SYSTEMS ABOVE SLAB ON GRADE AND OVERHEAD IN EMT CONDUIT WITH STEEL COMPRESSION TYPE FITTINGS.

FOR CONNECTIONS TO MOTORS USE LIQUID TIGHT FLEXIBLE CONDUIT.

SUPPORT AND ATTACH ALL CONDUITS, BOXES, ETC. ABOVE CEILING WITH APPROVED HANGERS AND CLAMPS AS REQUIRED BY CODE. DO NOT SUPPORT CONDUITS OR CABLES FROM DUCTWORK, PIPING, ANY PART OF CEILING TILES OR CEILING SUPPORT SYSTEM. PROVIDE SUPPLEMENTARY STEEL SUPPORTS BETWEEN JOISTS, BEAMS, PURLINS, AND TRUSSES. WIRE TYPE OR PERFORATED HANGERS WILL NOT BE PERMITTED.

PROVIDE NEW TYPED CIRCUIT INDEX FOR ALL NEW AND EXISTING PANELS AND EQUIPMENT, SHOWING ALL CIRCUIT DESIGNATIONS, INCLUDING ROOM NAMES, EQUIPMENT AND AREAS SERVED.

PROVIDE PROPER GROUNDING FOR ALL RECEPTACLES, LIGHTS, EQUIPMENT, ETC. AS REQUIRED TO COMPLY WITH ARTICLE 250 OF THE LATEST NEC. PROVIDE SEPARATE INSULATED GREEN GROUNDING CONDUCTOR FOR EACH NEW LIGHT, RECEPTACLE AND PIECE OF EQUIPMENT INSIDE THE BUILDING. SIZES OF CONDUCTORS SHALL BE AS SHOWN, BUT SHALL NOT BE SMALLER THAN #12. IF NOT INDICATED, SIZE IN ACCORDANCE WITH CODE.

ALL WIRING DEVICES SHALL BE PERMANENTLY AND SECURELY CONNECTED TO THE ENCLOSURE AND BUILDING GROUNDING SYSTEM IN WHICH THEY ARE MOUNTED WITH A COPPER GROUNDING JUMPER.

ALL WIRING SHALL BE COPPER WITH THHN/THWN INSULATION. TEMPERATURE RATING OF WIRE INSULATION SHALL NOT EXCEED THE TEMPERATURE RATING OF CIRCUIT BREAKERS, FUSES, CONNECTORS, ETC. IF WIRE WITH HIGHER TEMPERATURE RATING IS USED, IT SHALL BE DERATED TO THE TEMPERATURE RATING OF EQUIPMENT TO WHICH IT IS CONNECTED.

WIRE MARKERS AROUND THE CONDUCTOR SHALL BE NON-METALLIC PERMANENT TYPE AS MANUFACTURED BY W.H. BRADY OR APPROVED EQUAL.

SPLICING (CIRCUITS OF 600 VOLTS OR LESS): SOLID CONDUCTORS, NAMELY THOSE SIZED #10 AWG COPPER AND SMALLER, SHALL BE SPLICED BY USE OF IDEAL "WIRE-NUTS", 3M CO.'S "SCOTCHLOK", OR T&B "PIGGY" CONNECTORS. "STA-KON" OR OTHER PERMANENT TYPE CRIMP CONNECTORS SHALL NOT BE USED.

STRANDED CONDUCTORS, NAMELY #8 AWG AND LARGER, SHALL BE SPLICED BY APPROVED MECHANICAL CONNECTORS PLUS GUM TAPE, PLUS FRICTION OR PLASTIC TAPE. SOLDERLESS MECHANICAL CONNECTORS FOR SPLICES AND TAPS PROVIDED WITH UL APPROVED INSULATING COVERS MAY BE USED INSTEAD OF MECHANICAL CONNECTORS PLUS TAPE.

CONDUCTORS IN ALL CASES SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND NO SPLICING SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES, TROUGHS AND GUTTERS.

ALL WIRES, CABLES, ETC. SHALL BE APPROVED BY THE UNDERWRITER'S LABORATORIES, INC.

ALL BRANCH CIRCUIT CONDUCTORS SHALL BE FACTORY COLOR CODED AND ALL OTHER CONDUCTORS SHALL BE COLOR-TAPED IN LIKE MANNER THROUGHOUT THE BUILDING TO INDICATE VARIOUS PHASES AND NEUTRAL.

COLOR CODING FOR CONDUCTORS SHALL MATCH EXACTLY THE CODING OF EXISTING SYSTEMS. IN GENERAL THE COLOR CODING FOR SYSTEMS OF LESS THAN 150 VOLT TO GROUND SHALL BE BLACK-RED-BLUE FOR PHASES A-B-C RESPECTIVELY, WHITE FOR GROUND/NEUTRAL AND GREEN FOR EQUIPMENT GROUNDING. ON 277/480V, 3 PHASE, 4 WIRE POWER SYSTEMS CONDUCTORS SHALL BE COLOR CODED BROWN (PHASE A), ORANGE (PHASE B), YELLOW (PHASE C), GRAY (NEUTRAL), AND GREEN FOR EQUIPMENT GROUND.

FLUSH MOUNTED GROUNDING TYPE CONVENIENCE OUTLETS SHALL BE SOLIDLY GROUND TO METAL CONDUIT SYSTEM AND BUILDING GROUNDING SYSTEM WITH GROUNDING SCREW AND GREEN COLORED INSULATED CONDUCTOR. ELECTRICAL CONNECTIONS SHALL BE MADE FROM GROUNDING SCREW TO HEX-NUT ON CONVENIENCE OUTLET WITH GREEN COLORED CONDUCTOR.

OUTLET BOXES FOR LIGHTING AND APPLIANCE CIRCUITS, WHERE CONCEALED SHALL BE STAMPED STEEL, GALVANIZED OR CADMIUM PLATED. EXPOSED COVERS SHALL BE STAINLESS STEEL, OF THE SIZE REQUIRED TO COVER THE ENTIRE WALL OPENING.

OUTLET BOXES FOR EXPOSED OR SURFACE MOUNTED WORK SHALL BE CAST TYPE FD WITH MATCHING DEVICE PLATE, OF SAME MANUFACTURER AS THE BOX, AND MATCHING THE OUTLINE OF THE BOX.

## LIGHTING:

LIGHTING FIXTURES SHALL BE AS SCHEDULED ON THE DRAWINGS.

SUPPORT: LAY-IN FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AT TWO OPPOSITE CORNERS OF THE FIXTURE.

## PAINTING AND FINISHING:

CLEAN ALL CONDUITS, HANGERS, SUPPORTS, PANELS, DEVICES, LIGHTS, AND OTHER ELECTRICAL EQUIPMENT.

WHERE INSTALLED IN FINISHED AREAS, EXPOSED EQUIPMENT, RACEWAYS, PANEL COVERS, ETC., SHALL BE SUPPLIED WITH A PRIME COAT, AND SHALL BE PROFESSIONALLY PAINTED OR ENAMELED AS DIRECTED TO MATCH OR BLEND WITH ADJACENT SURFACES.

IN UNFINISHED AREAS SUCH AS EQUIPMENT ROOMS, EXPOSED EQUIPMENT SHALL BE FURNISHED WITH A SUITABLE FACTORY APPLIED FINISH.

EQUIPMENT FURNISHED IN FINISHES SUCH AS STAINLESS STEEL, BRUSHED ALUMINUM, ETC., SHALL NOT BE PAINTED.

ALL FINISHING SHALL BE AS DIRECTED BY AND SATISFACTORY TO THE OWNER'S REPRESENTATIVE.

TOUCH UP ALL DAMAGED AND SCRATCHED SURFACES ON FACTORY FINISHED EQUIPMENT AND MATERIALS WITH PAINT OF SAME TYPE AND COLOR.

## MISC.:

ALL CABLES, CONNECTORS, DEVICES, ETC. SHALL BE PLENUM RATED.

## WARRANTY:

GUARANTEE ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP FOR ONE YEAR. THE GUARANTEE PERIOD SHALL BE AS DEFINED IN THE CONTRACT AND SHALL BE AGREED UPON BY THE OWNER IN WRITING UPON COMPLETION OF THE WORK.

FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE, THIS CONTRACTOR SHALL REPLACE, WITHOUT ANY EXPENSE TO THE OWNER, ANY DEFECTIVE MATERIALS OR WORKMANSHIP. THIS INCLUDES CUTTING AND PATCHING WHICH MAY BE REQUIRED.

# ELEC SYMBOL LEGEND

(NOTE 1)

MTG. HGT. (NOTE 2)	SYMBOL (NOTES 3 & 4)	DESCRIPTION
6'-0" TO TOP		208/120 VOLT SURFACE MOUNTED PANELBOARD.
6'-0" TO TOP		208/120 VOLT RECESSED MOUNTED PANELBOARD.
		CONDUIT CONCEALED IN OR BELOW FLOOR SLAB OR BELOW GRADE.
		CONDUIT EXPOSED OR CONCEALED IN WALL OR ABOVE CEILING.
5'-0" TO TOP		DISCONNECT SWITCH. NUMBER INDICATES DISCONNECT SWITCH POLES/ AMP RATING/ (AND IF FUSIBLE TYPE) FUSE SIZE. "WP" = INDICATES WEATHER PROOF (NEMA 3R) ENCLOSURE. "FWE" = INDICATES FURNISHED WITH EQUIPMENT.
		MOTOR RATED TOGGLE DISCONNECT SWITCH. COORDINATE RATING WITH EQUIPMENT. "FWE" = INDICATES FURNISHED WITH EQUIPMENT.
2'-0"		JUNCTION BOX, WALL MOUNTED. REFER TO DRAWINGS FOR MOUNTING HEIGHTS.
1'-6" (NOTE 5)		DUPLEX RECEPTACLE, WALL MOUNTED. PROVIDE WITH STAINLESS STEEL FACEPLATE. ALPHA-NUMERIC OR NUMERIC SUBSCRIPT INDICATES PANELBOARD CIRCUIT. (TYPICAL FOR ALL RECEPTACLES). "GF" = GROUND FAULT RECEPTACLE. "WP" = WEATHER PROOF. RECEPTACLE MOUNTED IN A WATER PROOF (NEMA-3R) WALL PLATE. "TI" = TVSS AND ISOLATED GROUND RECEPTACLE. "V" = MOUNT RECEPTACLE 2" ABOVE BACKSPASH/COUNTER TO BOTTOM OF BOX. "H" = MOUNT RECEPTACLE HORIZONTALLY (ALL RECEPTACLE SHALL BE MOUNTED VERTICALLY UNLESS NOTED BY AN "H"). "U" = DUPLEX RECEPTACLE WITH USB-A AND USB-C PORTS.
1'-6" (NOTE 5)		TWO DUPLEX RECEPTACLES, WALL MOUNTED.
		FLOOR MOUNTED BOX WITH DUPLEX RECEPTACLE.
		FLOOR MOUNTED BOX WITH DUPLEX RECEPTACLE AND DATA OUTLET. EXTEND 1-1/4" CONDUIT FROM BOX TO ABOVE ACCESSIBLE CEILING FOR DATA. PROVIDE INSULATED BUSHINGS BOTH ENDS. EXTEND TWO (2) CAT6 DATA CABLES FROM OUTLET BOX TO DATA RACK LOCATION IN IT CLOSET THROUGH ACCESSIBLE J-HOOK PATHWAY. EXTEND 2" CONDUIT TO V TO OUTLET BOX IN WALL AS INDICATED ON PLANS.
1'-6"		DATA OUTLET. EXTEND 1-1/4" CONDUIT FROM OUTLET BOX TO ABOVE ACCESSIBLE CEILING. PROVIDE INSULATED BUSHINGS BOTH ENDS. EXTEND TWO (2) CAT6 DATA CABLES FROM OUTLET BOX TO DATA RACK LOCATION IN IT CLOSET THROUGH ACCESSIBLE J-HOOK PATHWAY. "C" = MOUNT OUTLET BOX 2" ABOVE BACKSPASH/COUNTER TO BOTTOM OF BOX IN LINE WITH RECEPTACLE.
3'-6"		CARD READER. SINGLE GANG OUTLET BOX WITH 3/4" CONDUIT STUBBED TO ACCESSIBLE PATHWAY. COORDINATE EXACT REQUIREMENTS, LOCATIONS, AND MOUNTING HEIGHT WITH OWNER'S SECURITY VENDOR.
		SECURITY CAMERA. SINGLE GANG OUTLET BOX WITH 3/4" CONDUIT STUBBED TO ACCESSIBLE PATHWAY. COORDINATE EXACT REQUIREMENTS, LOCATIONS, AND MOUNTING HEIGHT WITH OWNER'S SECURITY VENDOR.
		LED LUMINAIRE SURFACE OR PENDANT MOUNTED FROM CEILING.
		EMERGENCY EGRESS LED LUMINAIRE SURFACE OR PENDANT MOUNTED FROM CEILING. CONDUIT TO DRIVER FOR UTILITY POWER SENSING. FIXTURE SHALL ILLUMINATE TO FULL BRIGHTNESS OF BATTERY PACK UPON LOSS OF POWER.
		LED LUMINAIRE RECESSED MOUNTED IN CEILING.
		EMERGENCY EGRESS LED LUMINAIRE RECESSED IN CEILING. EXTEND UNSWITCHED CONDUCTOR TO DRIVER FOR UTILITY POWER SENSING. FIXTURE SHALL ILLUMINATE TO FULL BRIGHTNESS OF BATTERY PACK UPON LOSS OF POWER.
		EMERGENCY BATTERY LIGHT WITH TWO AIMABLE HEADS. CONNECT TO UNSWITCHED NORMAL POWER LIGHTING CIRCUIT, UNO.
		CEILING MOUNTED LED EXIT SIGN. SHADED QUADRANT(S) INDICATES FACE(S). PROVIDE ARROWS AS INDICATED ON DRAWINGS.
		WALL MOUNTED LED EXIT SIGN. SHADED QUADRANT(S) INDICATES FACE(S). PROVIDE ARROWS AS INDICATED ON DRAWINGS.
3'-10"		SINGLE-POLE LIGHT SWITCH. PROVIDE WITH STAINLESS STEEL FACEPLATE. "WP" = WEATHER PROOF RATED NEMA 4.
3'-10"		3-WAY LIGHT SWITCH. PROVIDE WITH STAINLESS STEEL FACEPLATE.
3'-10"		WATTSTOPPER DECORATOR "RADIANT STYLE" DIMMER, RECESSED MOUNTED IN JUNCTION BOX. VERIFY SWITCHING LOAD TYPE WITH LIGHTING FIXTURE SCHEDULE. FOR 0-10V DIMMING, PROVIDE WATTSTOPPER-RH4BL3PW. FOR SCREW IN LED LAMPS, PROVIDE WATTSTOPPER-RH703PTUW. PROVIDE WITH STAINLESS STEEL FACEPLATE.
3'-10"		OCCUPANCY SENSOR LIGHT SWITCH, WALL MOUNTED. DUAL TECHNOLOGY TYPE UNLESS INDICATED OTHERWISE. SET TIME DELAY TO AUTOMATIC UNLESS INDICATED OTHERWISE. SET TO AUTO-ON OPERATION UNLESS INDICATED OTHERWISE. PROVIDE WITH STAINLESS STEEL FACEPLATE.
		OCCUPANCY SENSOR WITH POWER PACK, CEILING MOUNTED. DUAL TECHNOLOGY TYPE UNLESS INDICATED OTHERWISE. SET TIME DELAY TO AUTOMATIC UNLESS INDICATED OTHERWISE. SET TO AUTO-ON OPERATION UNLESS INDICATED OTHERWISE. "HB" = PROVIDE HIGH BAY SENSOR LISTED FOR HIGH CEILING APPLICATION.
		120V EXTERIOR RATED PHOTOCELL WITH SWIVEL MOUNTING. AIM PHOTO EYE TO THE NORTH AS MUCH AS POSSIBLE.

## NOTES (ELECTRICAL SYMBOL LEGEND):

- THESE ARE STANDARD SYMBOLS AND MAY NOT ALL APPEAR ON THE PROJECT DRAWINGS. HOWEVER, WHEREVER THIS SYMBOL APPEARS ON THE PROJECT DRAWINGS, THE ITEM SHALL BE FURNISHED AND INSTALLED.
- UNLESS NOTED OTHERWISE, MOUNTING HEIGHTS ARE FROM FINISHED FLOOR TO CENTERLINE OF OUTLET. WHERE THE MOUNTING HEIGHT INDICATED ON PLAN IS DIFFERENT FROM THE LEGEND, THE PLAN TAKES PRECEDENT.
- INSTALL RECEPTACLE AND TELEDATA OUTLET BOXES 6" APART (EDGE TO EDGE) WHERE SHOWN SIDE BY SIDE ON WALL.
- SEE ELECTRICAL ABBREVIATIONS FOR ALPHABETIC SUBSCRIPT WITH SYMBOL, UNO.
- MOUNT ALL SINGLE AND DUPLEX RECEPTACLES VERTICALLY WITH GROUND SLOT UP, EXCEPT RECEPTACLES MOUNTED HORIZONTALLY WITH GROUND SLOT TO THE LEFT.

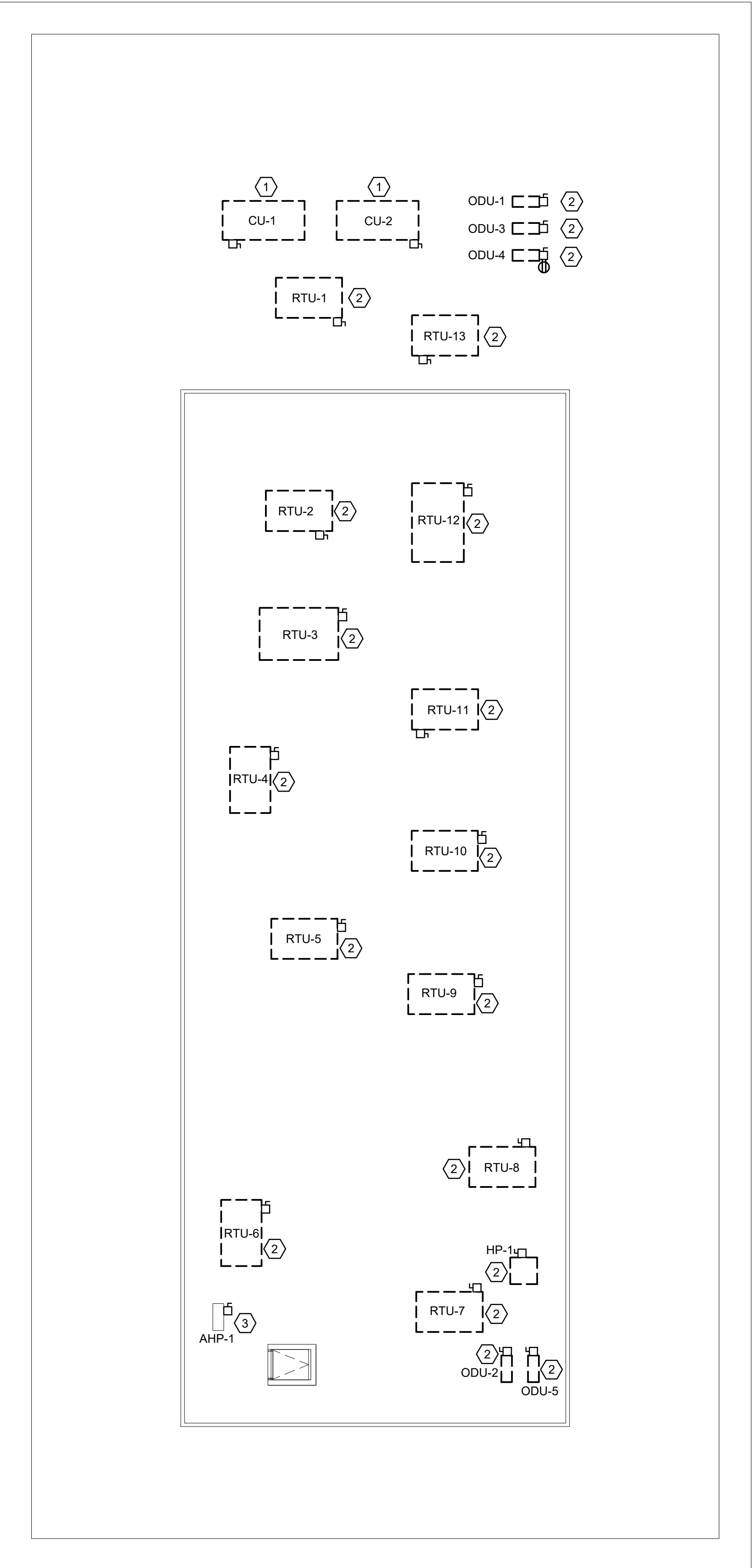
# ELECTRICAL ABBREVIATIONS

A OR AMP	AMPERE	JB	JUNCTION BOX
ABV	ABOVE	KO	KNOCKOUT
AC	ALTERNATING CURRENT	KV	KILOVOLT
ACB	ABOVE COUNTER BACKSPASH	KVA	KILOVOLT-AMPERE
AFD	ADJUSTABLE FREQUENCY DRIVE	KVAR	KILOVOLT-AMPERE REACTIVE
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AIC	AMPERES INTERRUPTING CAPACITY	KWH	KILOWATT-HOUR
AL	ALUMINUM	LA	LIGHTNING ARRESTER
AM	AMMETER	LC	LOAD CENTER
AMPL	AMPLIFIER	LPFS	LOW PRESSURE SODIUM
ASYM	ASYMMETRICAL	LTG	LIGHTING
ATS	AUTOMATIC TRANSFER SWITCH	LUM	LUMENS
AWG	AMERICAN WIRE GAGE	MAG	MAGNETIC
BEL	BELOW	MAN	MANUAL
BD	BUS DUCT	MATV	MASTER ANTENNA TELEVISION
BRKR	BREAKER	MCB	MAIN CIRCUIT BREAKER
CA	CABLE	MCC	MOTOR CONTROL CENTER
CAB	CABINET	MCM	THOUSAND CIRCULAR MILS
CATV	COMMUNITY ANTENNA TELEVISION OR CABLE TELEVISION	MG	MOTORGENERATOR
CB	CIRCUIT BREAKER	MH	METAL HALIDE OR MOUNTING HEIGHT
CCTV	CLOSED CIRCUIT TELEVISION	MIN	MINIMUM
CCF	COMPACT FLOURESCENT	MLO	MAIN LUGS ONLY
CKT	CIRCUIT	MOT	MOTOR OPERATED DAMPER
CLG	CEILING	MTR	MOTOR
CON	CONDUIT	MS	MAGNETIC STARTER
CTR	CENTER	MTG	MOUNTED OR MOUNTING
COMB	COMBINATION	MTR	METER
COND	CONDUCTOR	MV	MERCURY VAPOR
CONN	CONNECTION	NEC	NATIONAL ELECTRICAL CODE
CONT	CONTACTOR	NEUT	NEUTRAL
CT	CURRENT TRANSFORMER	NFSS	NON-FUSIBLE SAFETY SWITCH
CTRL	CONTROL	NO	NUMBER
CW	COPPER	OH	OVERHEAD
CU	COLD WATER	P	POLE
DC	DIRECT CURRENT	PB	PULL BOX OR PUSHBUTTON
DISC	DISCONNECT	PBS	PUSHBUTTON STATION
DIST	DISTRIBUTION	PEPS	PERSONAL EMERGENCY RESPONSE SYSTEM
DR	DOOR RELEASE SERVICE	PH(0)	PHASE
E OR EMER	EMERGENCY	PH	PANEL
EC	EMPTY CONDUIT	PMBD	PANELBOARD
EL	EXISTING TO BE RELOCATED	PR	PRIMARY
ELEC	ELECTRIC(AL)	PT	POTENTIAL TRANSFORMER
EM	EXISTING TO BE REMOVED	PVC	POLYVINYL CHLORIDE
EML	EXIST REMOVED AND RELOCATED TO THIS POSITION	PWR	POWER
EMN	EXISTING TO BE REMOVED AND NEW INSTALLED	QTY	QUANTITY
EMT	ELECTRICAL METALLIC TUBING	RCPT	RECEPTACLE
ENCL	ENCLOSURE	RSC	RIGID STEEL CONDUIT
ENG	ENGINE	SCC	SHORT CIRCUIT CURRENT
EP	EXPLOSIONPROOF EQUIPMENT	SDR	MOTOR OPERATED SMOKE DAMPER
EQUIP	EQUIPMENT	SEC	SECONDARY
ER	EXISTING TO REMAIN	SMR	SURFACE METAL RACEWAY
EWC	ELECTRIC WATER COOLER	SP	SURGE PROTECTION DEVICE
EXIST	EXISTING	SPKR	SPEAKER
EXT	EXTERIOR	SR	SURFACE RACEWAY
FA	FIRE ALARM	SS	SURGE SUPPRESSOR/ISOLATED GROUND
FACP	FIRE ALARM CONTROL PANEL	STR	STARTER
FDR	FEEDER	SW	SWITCH
FC	FOOTCANDLE	SWBD	SWITCHBOARD
FLUOR	FLOURESCENT	SWGR	SWITCHGEAR
FSS	FUSIBLE SAFETY SWITCH	SYM	SYMMETRICAL
FWE	FURNISHED WITH EQUIPMENT	SN	SOLID NEUTRAL
FXTD	FIXTURE	TC	TIME CLOCK
GEN	GENERATOR	TEL	TELEPHONE
GF	GROUND FAULT	TGB	TELECOMMUNICATIONS GROUND BAR
GFCl	GROUND FAULT CIRCUIT INTERRUPTER	TMGB	TELECOMMUNICATIONS MAIN GROUND BAR
GND	GROUND	TV	TELEVISION
		TYF	TYPICAL
		UF	UNDERFLOOR
HG	HOSPITAL GRADE	UG	UNDERGROUND
HD	HIGH INTENSITY DISCHARGE	UL	UNDERWRITER'S LABORATORIES
HOA	HAND-OFF-AUTOMATIC	UNO	UNLESS NOTED OTHERWISE
HP	HORSEPOWER OR HEAT PUMP	V	VOLT
HPF	HIGH POWER FACTOR	VA	VOLT-AMPERE
HPS	HIGH PRESSURE SODIUM	VAR	VOLT-AMPERE REACTIVE
HTR	HEATER	VM	VOLTMETER
HW	HOT WATER	W	WATT OR WIRE
HZ	HERTZ	WP	WEATHERPROOF
IC	INTERCOM OR INTERRUPTING CAPACITY	XFER	TRANSFER
IG	ISOLATED GROUND	XFMR	TRANSFORMER
IMC	INTERMEDIATE METAL CONDUIT		
INC	INCANDESCENT		









**NOTES KEYED TO PLAN**  
Dwg # 230200-ED001.DWG

- ① EXISTING HVAC EQUIPMENT TO BE DEMOLISHED BY OTHERS. REMOVE DISCONNECT SWITCH AND MAINTAIN CIRCUIT FOR RECONNECTION. SEE NEW WORK PLAN.
- ② EXISTING HVAC EQUIPMENT TO BE DEMOLISHED BY OTHERS. REMOVE DISCONNECT, CONDUIT AND CONDUCTORS BACK TO PANEL M2. COORDINATE WITH OWNER'S ROOF PROVIDER/WARRANTER FOR SEALING CONDUIT PENETRATIONS IN ROOF.
- ③ EXISTING EQUIPMENT TO REMAIN.

**1**  
**ED2.1** ELECTRICAL DEMOLITION PLAN - ROOF  
1/8" = 1'-0"  
Dwg # 230200-E2001.DWG

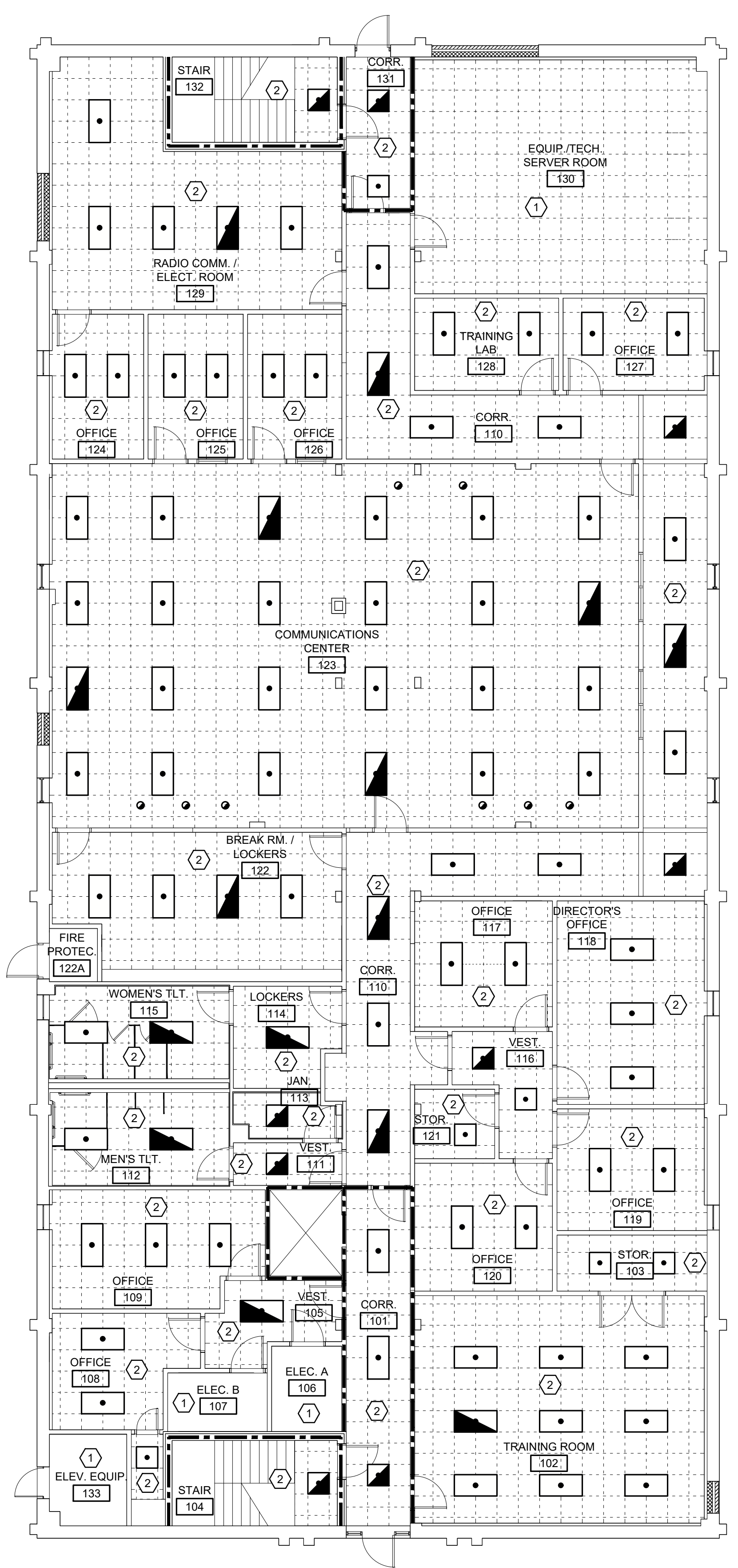
PRELIMINARY: NOT FOR CONSTRUCTION

YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
**ELECTRICAL DEMOLITION ROOF PLAN**

Designed By:	MAS
Drawn By:	MAS
Checked By:	SDM
Date:	07-XX-23

**ED2.1**





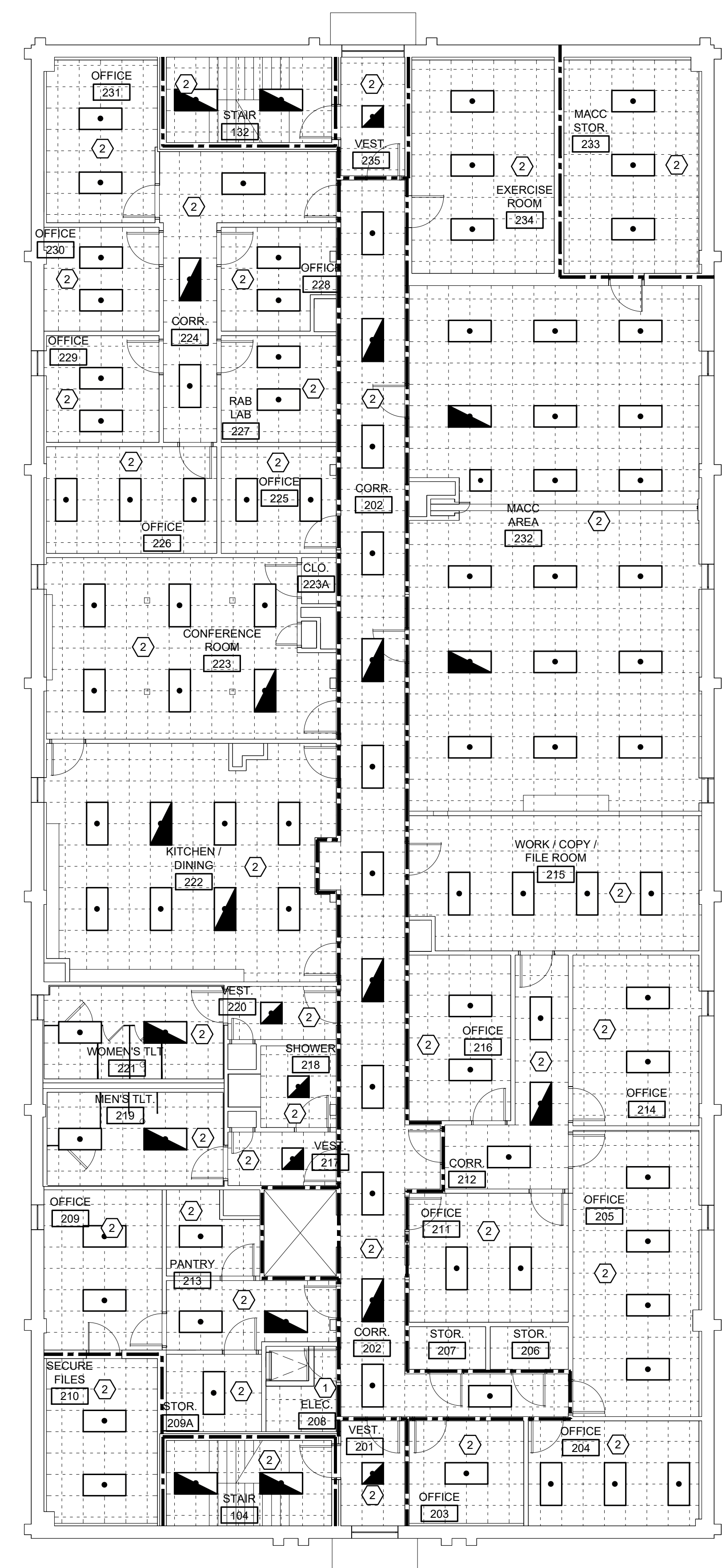
**GENERAL NOTE**  
Dwg.# 230200-E3000.DWG

1. ALL EXISTING CEILING MOUNTED EXIT SIGNS SHALL BE CAREFULLY REMOVED, PROTECTED, AND STORED DURING DEMOLITION FOR REINSTALLATION INTO NEW CEILING. CONTRACTOR SHALL VERIFY ALL DIRECTIONAL CHEVRONS ARE REINSTALLED TO BE THE SAME AS PRIOR TO DEMOLITION.

**NOTES KEYED TO PLAN**  
Dwg.# 230200-E3000.DWG

① EXISTING LIGHT FIXTURES AND LIGHTING CONTROLS TO REMAIN.

② EXISTING LIGHT FIXTURES TO BE REMOVED. MAINTAIN LIGHTING CONTROLS AND CIRCUITING FOR RECONNECTION. SEE NEW WORK PLANS.



**NOTES KEYED TO PLAN**  
Dwg.# 230200-E3000.DWG

① EXISTING LIGHT FIXTURES AND LIGHTING CONTROLS TO REMAIN.

② EXISTING LIGHT FIXTURES TO BE REMOVED. MAINTAIN LIGHTING CONTROLS AND CIRCUITING FOR RECONNECTION. SEE NEW WORK PLANS.

**1** LIGHTING DEMOLITION PLAN - FIRST FLOOR  
ED3.0 1/8" = 1'-0"  
Dwg.# 230200-E3000.DWG

**2** LIGHTING DEMOLITION PLAN - SECOND FLOOR  
ED3.0 1/8" = 1'-0"  
Dwg.# 230200-E3000.DWG

PRELIMINARY: NOT FOR CONSTRUCTION

YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
LIGHTING DEMOLITION PLANS

Designed By: MAS  
Drawn By: MAS  
Checked By: SDM  
Date: 07-XX-23

**ED3.0**

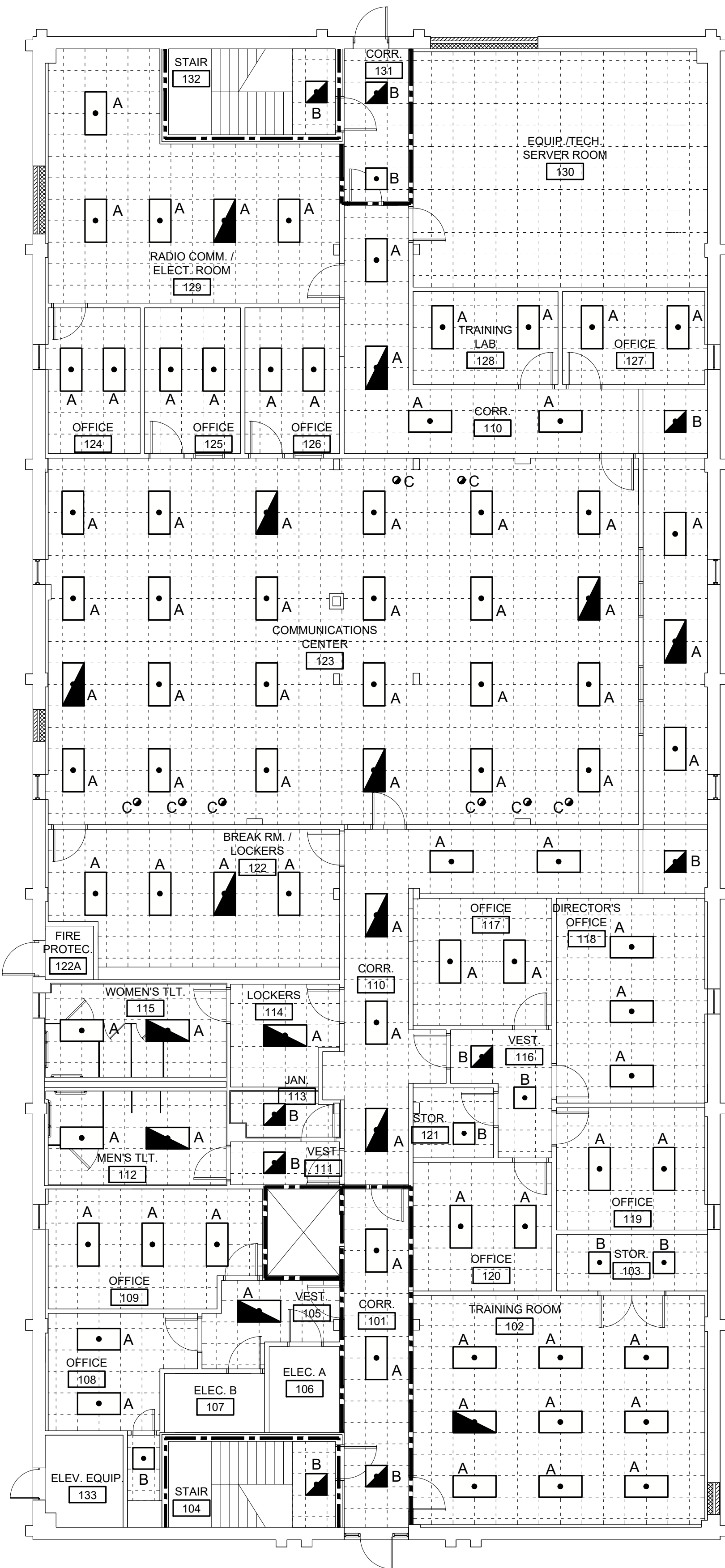












LIGHTING FIXTURE SCHEDULE								
SYMBOL	MANUFACTURER	CATALOG NO.	VOLTS	LAMPS		ENERGY INPUT WATTS	MOUNTING	DESCRIPTION
				NO.	TYPE			
A	LITHONIA	STAKS 2X4 AL06 SWW7	120-277	-	LED 5,300 LUMENS 3500°K, 80+ CRI	40	RECESSED IN CEILING GRID	2x4 LED TROFFER WITH DIFFUSE ACRYLIC CENTER LENS, SWITCHABLE LUMENS, AND SWITCHABLE COLOR TEMPERATURE.
	CURRENT LTG	EQUIVALENT FIXTURE						
	SIGNIFY	EQUIVALENT FIXTURE						
B	COOPER	STAKS 2X2 AL03 SWW7	120-277	-	LED 4,300 LUMENS 3500°K, 80+ CRI	34	RECESSED IN CEILING GRID	2x2 LED TROFFER WITH DIFFUSE ACRYLIC CENTER LENS, SWITCHABLE LUMENS, AND SWITCHABLE COLOR TEMPERATURE.
	LITHONIA	EQUIVALENT FIXTURE						
	CURRENT LTG	EQUIVALENT FIXTURE						
C	COOPER	LDN6 AL02 SSW1 LW6 AR LSS MVOLT UGZ	120-277	-	LED 1,300 LUMENS 3500°K, 80+ CRI	12	RECESSED IN CEILING GRID	6" LED OPEN WALL WASH FIXTURE WITH SEMI-SPECULAR REFLECTOR, SELF-FLANGE, SWITCHABLE LUMENS, AND SWITCHABLE COLOR TEMPERATURE.
	LITHONIA	EQUIVALENT FIXTURE						
	CURRENT LTG	EQUIVALENT FIXTURE						

230200-E3001.DWG

**GENERAL NOTE**

Dwg # 230200-E3000.DWG

1. CONNECT NEW LIGHT FIXTURES TO EXISTING CONTROLLED LIGHTING CIRCUIT. VERIFY EMERGENCY LIGHT FIXTURES ARE CONNECTED TO EMERGENCY LIGHTING CIRCUIT AS EXISTING EMERGENCY LIGHT FIXTURES WERE PRIOR TO DEMOLITION.



**1**  
E3.0 LIGHTING NEW WORK PLAN - FIRST FLOOR  
1/8" = 1'-0"  
Dwg.# 230200-E3001.DWG

**2**  
E3.0 LIGHTING NEW WORK PLAN - SECOND FLOOR  
1/8" = 1'-0"  
Dwg.# 230200-E3001.DWG

Revision  
Date  
Mark

YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
LIGHTING NEW WORK PLANS

Designed By: MAS  
Drawn By: MAS  
Checked By: SDM  
Date: 07-XX-23

**E3.0**

PRELIMINARY: NOT FOR CONSTRUCTION



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Project Number: 230200  
File Name: 230200-E9400  
Project: 11/02/2023 9:21 AM

EXISTING

PANEL: M2 (Section 1)		AMPERE RATING: 1200		VOLTAGE (L-L): 208		PHASE: 3		MOUNTING:									
MAIN TYPE: MCB		VOLTAGE (L-N): 120		WIRE: 4		MIN. KAIC:		YES									
LUGS/PHASE:		LUGS/NEUTRAL:		SERVICES ENTRANCE RATED:		NO											
C	LOAD (KVA)	BRANCH CIRCUIT		BRANCH CIRCUIT		LOAD (KVA)		C O D E									
E	A Ø B Ø C Ø	PHASE/NEUT. NO.	GND SIZE	MIN CND SIZE	BRKR TRIP	CKT NO.	N O T E	PHASE/NEUT. NO.	GND SIZE	MIN CND SIZE	BRKR TRIP	CKT NO.	N O T E	LOAD DESCRIPTION	A Ø B Ø C Ø	LOAD (KVA)	C O D E
D	0.3	VRV INDOOR - 1ST FLOOR				20	2	1	CB	CB	2	20	2	VRV INDOOR - COMM CENTR	0.5	D	
D	0.3	SPACE				3								SPACE	0.5	D	
D	0.4	VRV INDOOR - 1ST FLOOR				20	2	9	CB	CB	10	20	2	VRV INDOOR - 1ST FLOOR	0.4	D	
D	0.4	SPACE				11								SPACE	0.4	D	
D	0.4	VRV INDOOR - 2ND FLOOR				20	2	13	CB	CB	14	20	2	VRV INDOOR - 2ND FLOOR	0.5	D	
D	0.4	SPACE				15								SPACE	0.5	D	
D	1.2	VRV INDOOR - 2ND FLOOR				20	2	21	CB	CB	22	20	2	VRV INDOOR - 2ND FLOOR	0.3	D	
D	6.7	SPACE				17								SPACE	0.3	D	
D	6.7	VRV-1 - ON ROOF				70	3	27	CB	CB	28	70	3	VRV-3 - ON ROOF	6.7	D	
D	4.6	SPACE				29								SPACE	6.7	D	
D	4.6	VRV-2 - ON ROOF				50	3	33	CB	CB	34	70	3	VRV-4 - ON ROOF	6.7	D	
D	4.6	SPACE				31								SPACE	6.7	D	
D	4.6	SPACE				37								SPACE	6.7	D	
D	4.6	SPACE				39								SPACE	6.7	D	
D	4.6	SPACE				41								SPACE	6.7	D	
D	12.0	13.6	13.0	LEFT SIDE SUB-TOTAL										RIGHT SIDE SUB-TOTAL	14.4	15.0	14.1

\*NOTE\*  
CB - PROVIDE NEW CIRCUIT BREAKER AS INDICATED. TURN OVER EXISTING CIRCUIT BREAKER TO OWNER IN GOOD CONDITION.

EXISTING

PANEL: M2 (Section 2)		AMPERE RATING: 1200		VOLTAGE (L-L): 208		PHASE: 3		MOUNTING:									
MAIN TYPE: MCB		VOLTAGE (L-N): 120		WIRE: 4		MIN. KAIC:		YES									
LUGS/PHASE:		LUGS/NEUTRAL:		SERVICES ENTRANCE RATED:		NO											
C	LOAD (KVA)	BRANCH CIRCUIT		BRANCH CIRCUIT		LOAD (KVA)		C O D E									
E	A Ø B Ø C Ø	PHASE/NEUT. NO.	GND SIZE	MIN CND SIZE	BRKR TRIP	CKT NO.	N O T E	PHASE/NEUT. NO.	GND SIZE	MIN CND SIZE	BRKR TRIP	CKT NO.	N O T E	LOAD DESCRIPTION	A Ø B Ø C Ø	LOAD (KVA)	C O D E
D	3.8	DOAS-1				50	3	45	CB	CB	46	100	3	DOAS AUX HEAT	6.8	H	
D	3.8	SPACE				47								SPACE	6.8	H	
D	3.8	SPACE				49								SPACE	6.8	H	
D	3.8	SPACE				51								SPACE	6.8	H	
D	3.8	SPACE				53								SPACE	6.8	H	
D	3.8	SPACE				55								SPACE	6.8	H	
D	3.8	SPACE				57								SPACE	6.8	H	
D	3.8	SPACE				59								SPACE	6.8	H	
D	3.8	SPACE				61								SPACE	6.8	H	
D	3.8	SPACE				63								SPACE	6.8	H	
D	3.8	SPACE				65								SPACE	6.8	H	
D	3.8	SPACE				67								SPACE	6.8	H	
D	3.8	SPACE				69								SPACE	6.8	H	
D	3.8	SPACE				71								SPACE	6.8	H	
D	3.8	SPACE				73								SPACE	6.8	H	
D	3.8	SPACE				75								SPACE	6.8	H	
D	3.8	SPACE				77								SPACE	6.8	H	
D	3.8	SPACE				79								SPACE	6.8	H	
D	3.8	SPACE				81								SPACE	6.8	H	
D	3.8	SPACE				83								SPACE	6.8	H	
D	3.8	3.8	3.8	LEFT SIDE SUB-TOTAL										RIGHT SIDE SUB-TOTAL	6.8	6.8	6.8

\*NOTE\*  
CB - PROVIDE NEW CIRCUIT BREAKER AS INDICATED. TURN OVER EXISTING CIRCUIT BREAKER TO OWNER IN GOOD CONDITION.

PRELIMINARY: NOT FOR CONSTRUCTION

YORK COUNTY EMERGENCY OPERATIONS CENTER  
HVAC RENOVATION  
**YORK COUNTY GOVERNMENT**  
778 JUSTICE BOULEVARD  
YORK, SC 29745  
ELECTRICAL PANEL SCHEDULES

Designed By: MAS  
Drawn By: MAS  
Checked By: SDM  
Date: 07-XX-23

**E4.0**