

Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246



Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 10/23/2025
Completed By: National TAB

PROJECT

Wake County Public Health (Raleigh, NC)

200 Swinburne Street

Raleigh, NC 27610

Client

Kirlin-Way Mechanical, LLC
8610 Wallisville Rd.
Houston, TX 77029

National TAB

Project: Wake County Public Health (Raleigh, NC)

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CERTIFICATION

PROJECT: Wake County Public Health (Raleigh, NC)

The data presented in this report is a record of system measurements and final adjustments that have been obtained in accordance with the current edition of the NEBB *Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems*. Any variances from design quantities, which exceed NEBB tolerances, are noted in the Test-Adjust-Balance Report Project Summary.

The air distribution system has been tested and balanced and final adjustments have been made in accordance with NEBB standards and the project specifications.

NEBB TAB FIRM: National TAB-Southeast

REGISTRATION NO: 3755

CERTIFIED BY: J. Scott Springer 23312

DATE: 10/23/2025

The hydronic distribution system has been tested and balanced and final adjustments have been made in accordance with NEBB standards and the project specifications.

NEBB TAB FIRM: National TAB-Southeast

REGISTRATION NO: 3755

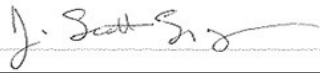
CERTIFIED BY: J. Scott Springer 23312

DATE: 10/23/2025

Submitted and Certified by:

NEBB TAB FIRM: National TAB-Southeast

TAB PROFESSIONAL: J. Scott Springer

SIGNATURE: 

REGISTRATION NO: 3755 (NTAB) / 23312

CERTIFICATION EXP: 12/31/2025





National TAB

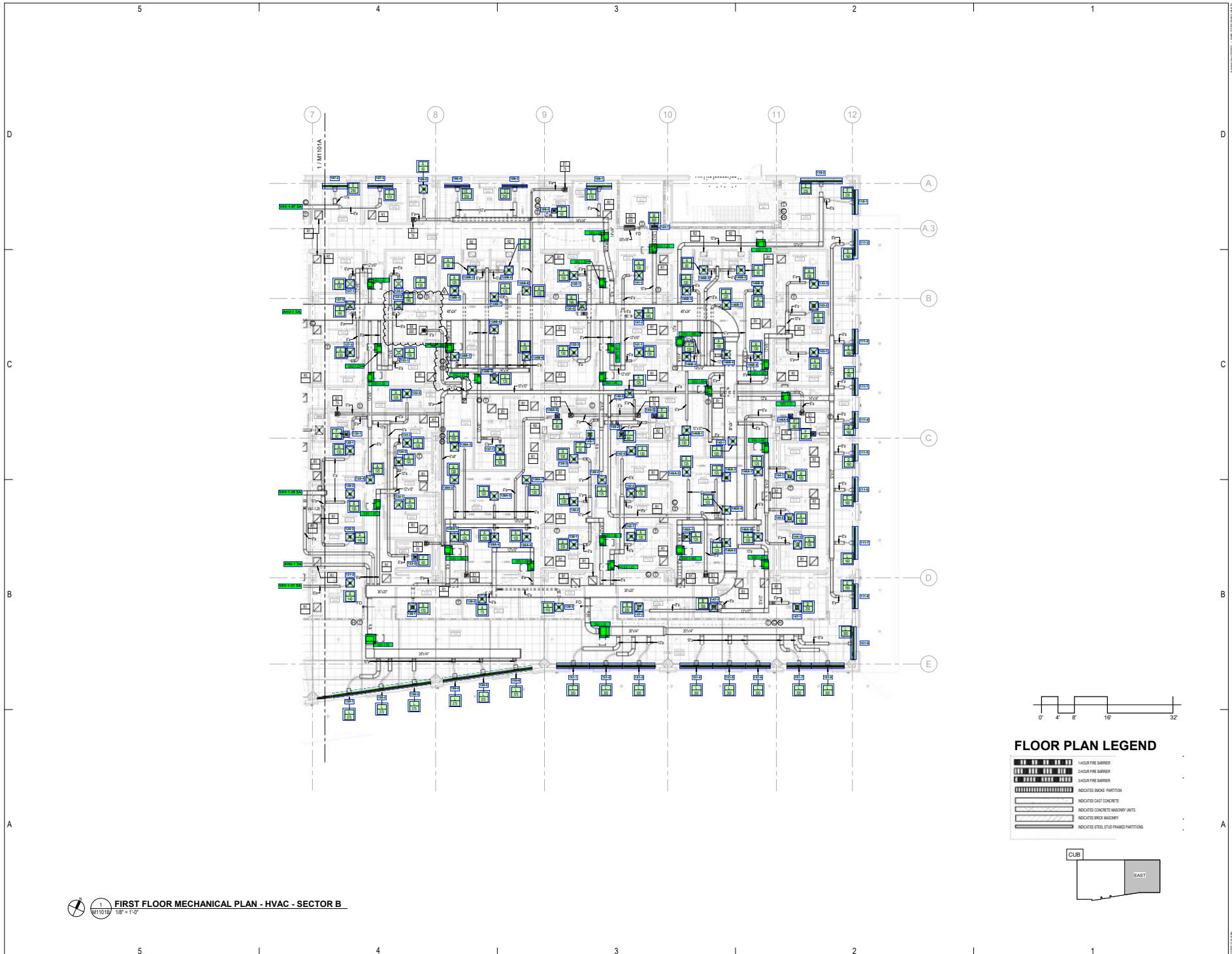


Testing, Adjusting, and Balancing Equipment

Function		Range	Minimum Accuracy	Instrument Information	Calibration Date	Date Due
AIR	AIR PRESSURE	0 in wg to 10 in wg	2% +/- 0.001 in wg	Shortridge ADM-860C S/N M19547	9/30/2025	9/30/2026
	AIR VELOCITY INSTRUMENT	50 fpm to 3900 fpm	+/- 5 % +/- 7 fpm	Shortridge ADM-860C S/N M19547	9/30/2025	9/30/2026
	DIRECT HOOD READING	100 cfm to 2000 cfm	+/- 3 % +/- 7 cfm	Evergreen Telemetry Capture Hood	8/12/2025	8/12/2026
TEMPERATURE	AIR METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 041018026	9/30/2025	9/30/2026
	AIR PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - 4011 S/N 33-20	9/30/2025	9/30/2026
	IMMERSION METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 041018026	9/30/2025	9/30/2026
	IMMERSION PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - 4011 S/N 33-20	9/30/2025	9/30/2026
	CONTACT METER	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - SRH77A S/N 041018026	9/30/2025	9/30/2026
	CONTACT PROBE	-20 F to 240 F	+/- .5 % 2 F	Cooper ATKINS - 4011 S/N 33-20	9/30/2025	9/30/2026
HUMIDITY	HUMIDITY PROBE	10 % RH to 90 % RH	3% of reading	Cooper ATKINS - SRH77A S/N 041018026	9/30/2025	9/30/2026
ELECTRICAL	VOLTAGE MEASUREMENT	0 VAC to 600 VAC	2 % reading +/- 5 digits	Dwyer CM-1 - S/N 190800099	9/30/2025	9/30/2026
	AMPERAGE MEASUREMENT	0 Amperers to 100 Amperes	2 % reading +/- 5 digits	Dwyer CM-1 - S/N 190800099	9/30/2025	9/30/2026
ROTATION	ROTATION MEASUREMENT	60 rpm to 5000 rpm	2 % reading 2 rpm	Dwyer TAC-L - S/N S1100123	9/30/2025	9/30/2026
HYDRONIC	PRESSURE MEASUREMENT	-30 in Hg to 200 psi	±2% of reading +/- 1 psi	Shortridge HDM 250 - S/N W25059	6/18/2025	6/18/2026
	DIFFERENTIAL PRESSURE MEASUREMENT	0 psi - 80 psi	±2% of reading +/- 1 psi	Shortridge HDM 250 - S/N W25059	6/18/2025	6/18/2026
DALT	DUCT LEAKAGE	-10" - +10" wc	±1% of reading +/- .0004" wc	Kanomax DALT 6900 S/N: 080439	3/7/2025	3/7/2026

Abbreviation List

A = Area (ft ²)	S.F. = Service Factor
AHU = Air Handling Unit	SF = Supply Fan
A _k = Effective Area	SP = Static Pressure
BHP = Brake Horsepower (IP) HP	SR = Supply Register
Btu = British Thermal Unit	T = Temperature
Btu/h = Btuh = BTUH = BTU/Hour	T _{ma} = Mixed Air Temperature
CL = Center Distance (used in belt formula)	T _{oa} = Outside Air Temperature
CD = Ceiling Diffuser	T _{ra} = Return Air Temperature
CF = Correction Factor	H = Head (in wc, ft wc, psi)
CFM = Volumetric Flow: Cubic Feet Per Minute	h = Enthalpy
CO ₂ = Carbon Dioxide	HP = Horsepower
CO = Carbon Monoxide	hr = Hour
C _v = Flow Constant	K _v = Flow constant (SI)
d = Diameter (in.) IP	kW = Kilowatt = 1000 Watts
Δ = Difference or Change (Final - Initial)	LAT = Leaving Air Temperature
DB = Dry Bulb	lb = Pounds
EA = Exhaust Air	LWT = Leaving Water Temperature
EAT = Entering Air Temperature	ma = Mixed Air
EF = Exhaust Fan	MIN = Minimum
Eff = Efficiency	MAX = Maximum
EG = Exhaust Grille	N/A = Not Applicable
ESP = External Static Pressure	NA = No Access
EWT = Entering Water Temperature	NL = Not Listed
°F = Degrees Fahrenheit, °F	NPSHA = Net Positive Suction Head Available
FPB = Fan Powered Box	NS = Not Specified
FLA = Full Load Amps	OA = Outside Air
fpm = Feet per Minute (fpm)	OAT = Outside Air Temperature
ft = Foot	PD = Sheave Pitch Diameter
gal = Gallons	P.D. = Pressure Drop
GPM = Gallons Per Minute (GPM)	PF = Power Factor
h = Enthalpy (BTU/lb dry air)	SG = Supply Grille
P = Pressure	SR = Supply Register
ppm = parts per million	TP = Total Pressure
psi = Pounds Per Square Inch	T _{ra} = Return Air Temperature
psid = PSI Differential	TS = Tip Speed (fpm) IP, (m/s) SI
r = Radius (in)	TSP = Total Static Pressure
% _{ra} = % of Return Air	V = Velocity
RA = Return Air	VAV = Variable Air Volume
RAT = Return Air Temperature	VD = Volume Damper
RF = Return Fan	VFD = Variable Frequency Drive
RG = Return Grille	W = Watt
RH = Relative Humidity	WB = Wet Bulb
RPM = Revolutions Per Minute	wg = wc = water gauge = water column
RTU = Roof Top Unit	WHP = Water Horsepower (IP)
SA = Supply Air	ω = Humidity Ratio



1 M1101B
FIRST FLOOR MECHANICAL PLAN - HVAC - SECTOR B
1/8" = 1'-0"

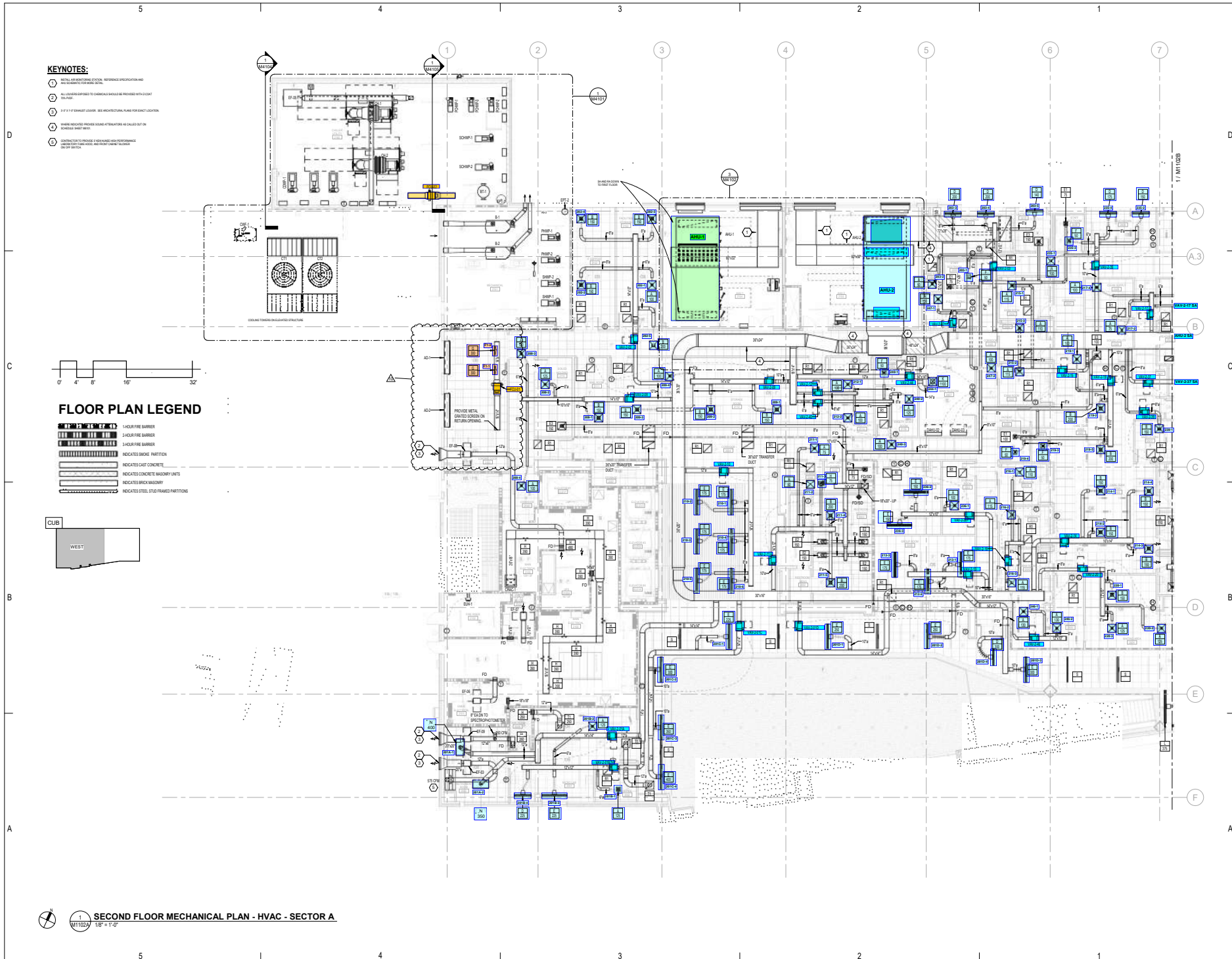
FLOOR PLAN LEGEND

- 1-HOUR FIRE BARRIER
- 2-HOUR FIRE BARRIER
- 3-HOUR FIRE BARRIER
- INDICATES SMOKE PARTITION
- INDICATES CAST CONCRETE
- INDICATES CONCRETE MASONRY UNITS
- INDICATES BRICK MASONRY
- INDICATES STEEL STUD FRAMED PARTITIONS

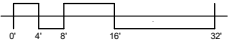


REVISION SCHEDULE

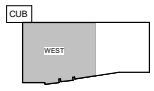
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1	SCHEMATIC 1	01/19/21
2	BLDFP006	02/17/21
3	BLDFP008	03/11/21
4	BLDFP011	03/24
5	BLDFP009	03/24
6	BLDFP009	07/16/24



- KEYNOTES:**
- 1. ALL AIRWAYS SHALL BE REFERRED TO AS 'MECHANICAL' UNLESS OTHERWISE NOTED.
 - 2. ALL AIRWAYS SHALL BE CONSIDERED UNLESS OTHERWISE NOTED WITH A 'D' OR 'R' PREFIX.
 - 3. ALL 1" X 1" EXHAUST UNITS ARE MECHANICAL UNLESS OTHERWISE NOTED.
 - 4. WHERE INDICATED PROVIDE SOUND ATTENUATION AS NOTED ON THE DRAWING SHEET 10/11/2025.
 - 5. CONTRACTOR TO PROVIDE A RELEASE AND REPAIR SCHEDULE FOR ALL MECHANICAL UNITS.



- FLOOR PLAN LEGEND**
- 1. 1-HOUR FIRE BARRIER
 - 2. 2-HOUR FIRE BARRIER
 - 3. 3-HOUR FIRE BARRIER
 - INDICATES SMOKE PARTITION
 - INDICATES CAST CONCRETE
 - INDICATES CONCRETE MASONRY UNITS
 - INDICATES BRICK MASONRY
 - INDICATES STEEL STUD FRAMED PARTITIONS



1 SECOND FLOOR MECHANICAL PLAN - HVAC - SECTOR A
10/11/2025 1/8" = 1'-0"



REVISION SCHEDULE

REV#	DESCRIPTION	DATE
1	ISSUED SET	05/20/2023
2	REVISION	07/27/23
3	REVISION	11/02/23
4	REVISION	12/12/23
5	REVISION	01/22/24
6	REVISION	03/04/24
7	REVISION	06/04/24
8	REVISION	07/18/24
9	REVISION	09/26/24

ISSUED SETS
 IFC PACKAGE 05/20/2023

Drawn By: JEM
 Project No: 2020031



REVISION SCHEDULE

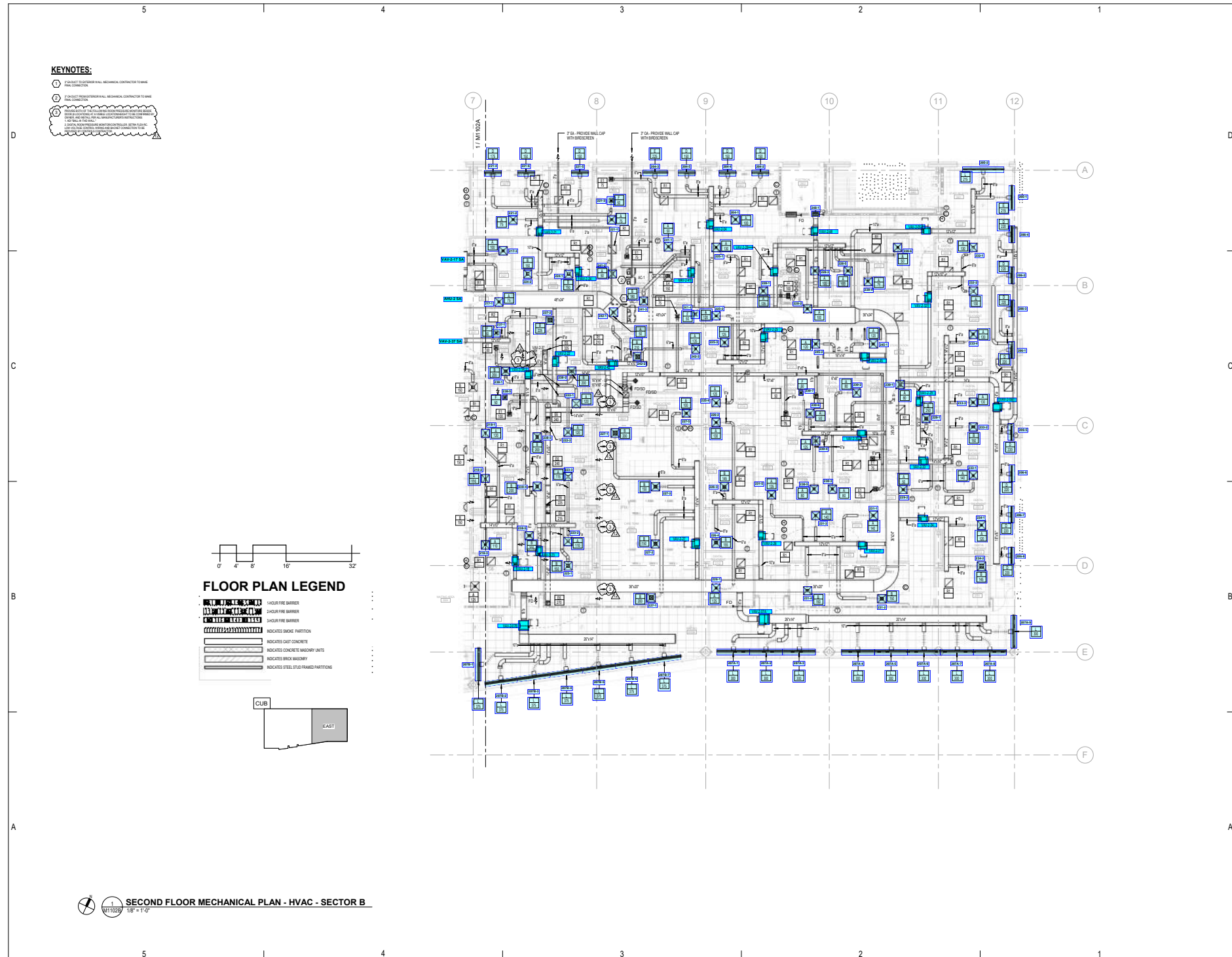
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1	ADDENDUM 1	6/19/21
2	BLP-F1006	8/27/21
3	BLP-F1007	11/22/21
4	BLP-F1008	12/1/21
5	BLP-F1009	1/24/22
6	BLP-F1010	2/20/22
7	BLP-F1011	3/10/22
8	BLP-F1012	03/18/22
9	BLP-F1013	11/18/22
10	BLP-F1014	11/29/22
11	BLP-F1015	01/18/23
12	BLP-F1016	03/04/23

WAKE COUNTY PUBLIC HEALTH BUILDING IFC PACKAGE
 WAKE COUNTY
 NORTH CAROLINA

ISSUED SETS
 IFC PACKAGE 05/20/2023

Drawn By: JEM
 Project No: 2020051

M1102B
 SECOND FLOOR MECHANICAL PLAN - HVAC - SECTOR B



KEYNOTES:

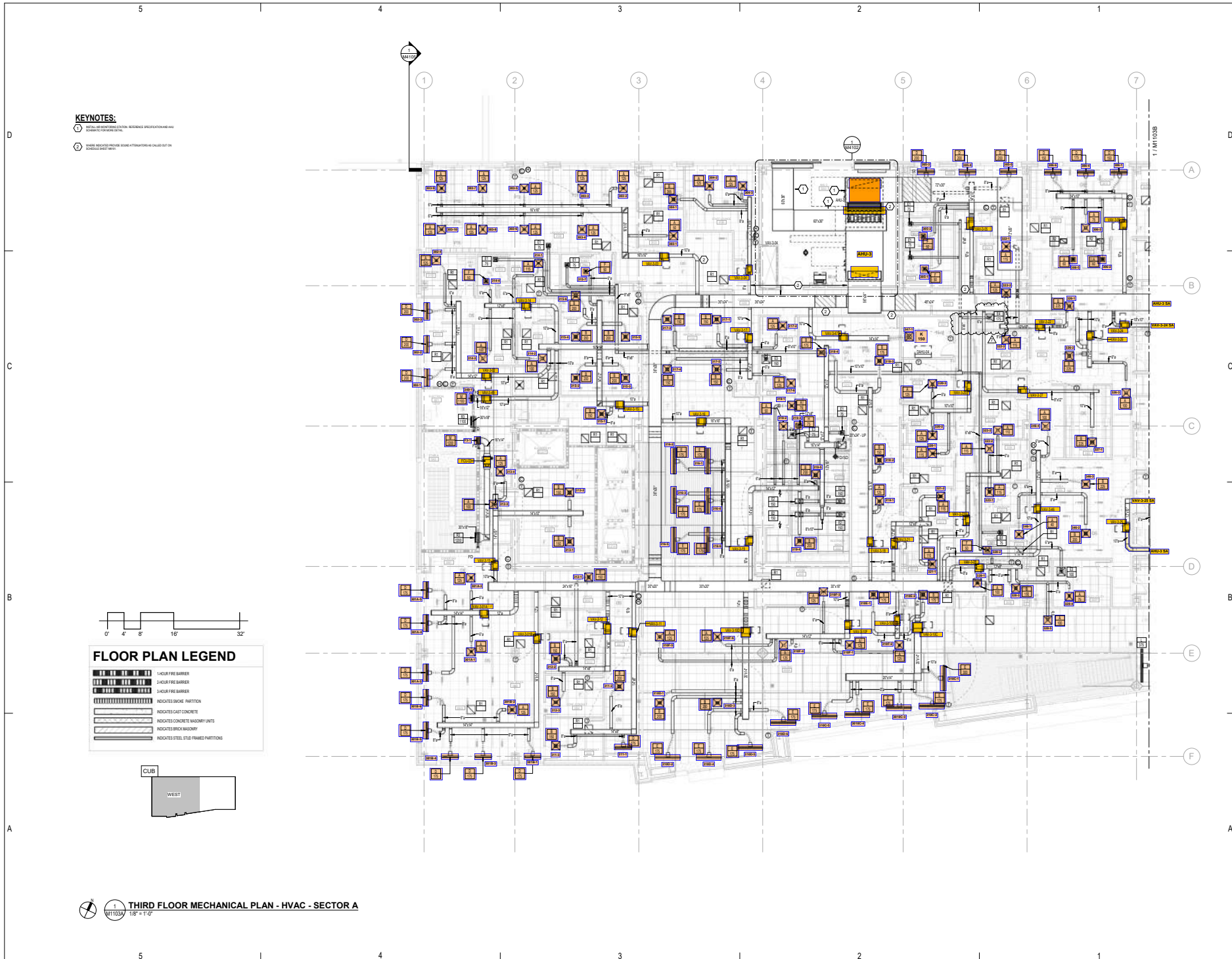
- 1. VERIFY ALL EXTERIOR WALL MECHANICAL CONTRACTOR TO BE FINAL CONNECTION.
- 2. FOR 100% FROM EXTERIOR WALL MECHANICAL CONTRACTOR TO BE FINAL CONNECTION.
- 3. VERIFY ALL EXTERIOR WALL MECHANICAL CONTRACTOR TO BE FINAL CONNECTION. THIS IS A REQUIREMENT FOR ALL EXTERIOR WALL MECHANICAL CONTRACTOR TO BE FINAL CONNECTION. THIS IS A REQUIREMENT FOR ALL EXTERIOR WALL MECHANICAL CONTRACTOR TO BE FINAL CONNECTION. THIS IS A REQUIREMENT FOR ALL EXTERIOR WALL MECHANICAL CONTRACTOR TO BE FINAL CONNECTION.

FLOOR PLAN LEGEND

- 1-HOUR FIRE BARRIER
- 2-HOUR FIRE BARRIER
- 3-HOUR FIRE BARRIER
- INDICATES SMOKE PARTITION
- INDICATES GAIT CONCRETE
- INDICATES CONCRETE MASONRY UNITS
- INDICATES BRICK MASONRY
- INDICATES STEEL STUD FRAMED PARTITIONS

CUB EAST

SECOND FLOOR MECHANICAL PLAN - HVAC - SECTOR B
 1/8" = 1'-0"

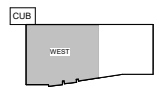


KEYNOTES:

- 1. REFER TO MECHANICAL SCHEDULES FOR EQUIPMENT SIZES AND SETTINGS.
- 2. REFER TO MECHANICAL SCHEDULES FOR EQUIPMENT SIZES AND SETTINGS.

FLOOR PLAN LEGEND

	1-HOUR FIRE BARRIER
	2-HOUR FIRE BARRIER
	3-HOUR FIRE BARRIER
	INDICATES SMOKE PARTITION
	INDICATES CAST CONCRETE
	INDICATES CONCRETE MASONRY UNITS
	INDICATES BRICK MASONRY
	INDICATES STEEL STUD FRAMED PARTITIONS



1 THIRD FLOOR MECHANICAL PLAN - HVAC - SECTOR A
1/8" = 1'-0"

O'BRIEN ATKINS

Architecture
Engineering
Interior Architecture
Planning
Process Design
2100 West 122nd Avenue, #A
Denver, Colorado 80231
303.440.0000 Fax
www.oba.com

Professional Engineer
No. 100000000
State of Colorado
Mechanical

Professional Engineer
No. 01472025
State of North Carolina
Mechanical

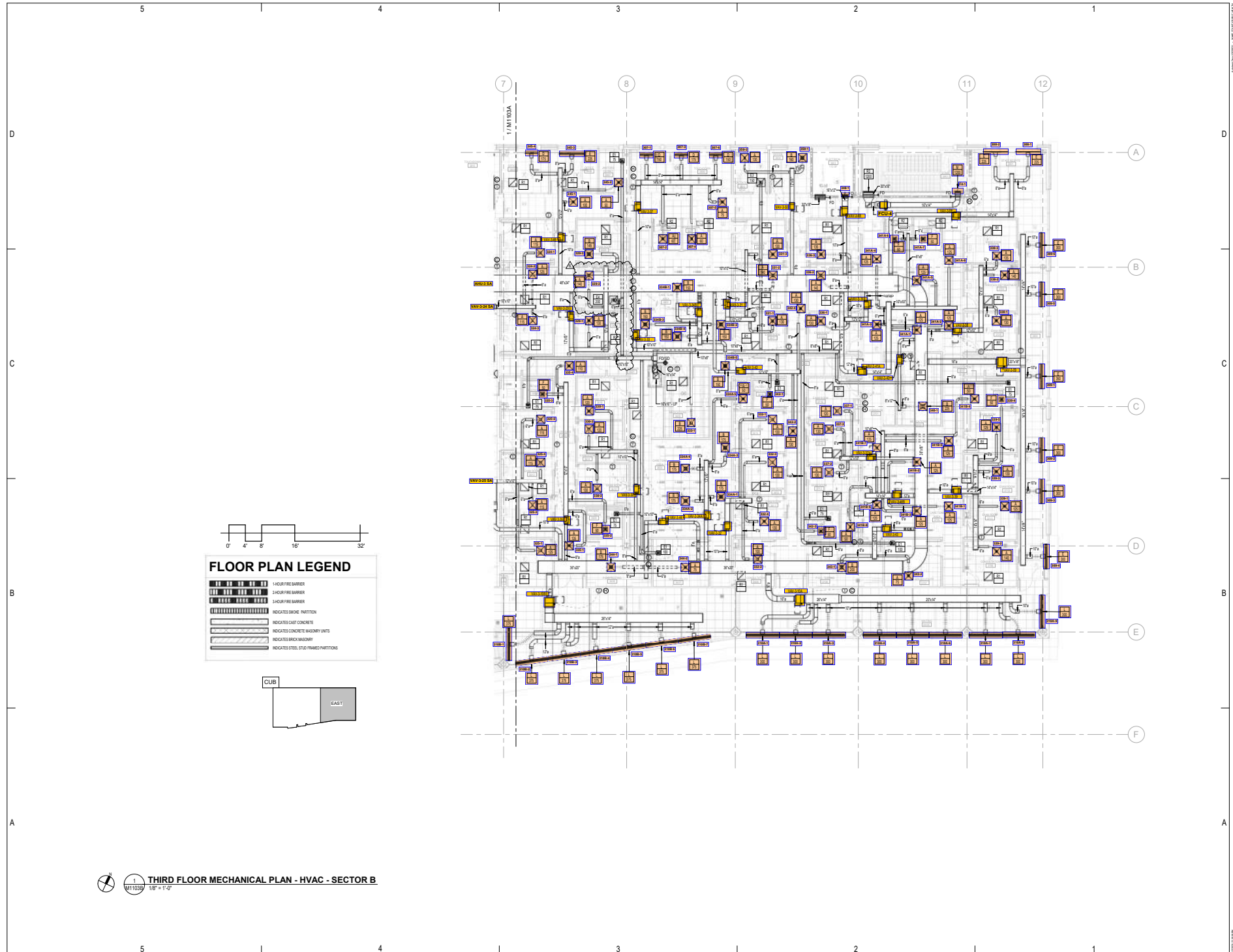
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1	SCHEMATIC 1	01/19/21
2	BLP-F1036	02/17/21
3	BLP-F1036	03/02/21
4	BLP-F1036	02/11/21
5	BLP-F1036	02/24/21
6	BLP-F1036 REV 1	05/04/21
7	BLP-F1036	07/16/21

WAKE COUNTY PUBLIC
HEALTH BUILDING
BUILDING IFC PACKAGE
202001

ISSUED SETS
IFC PACKAGE 05/20/2021

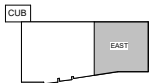
Drawn By: JEM
Project No: 2020051

M1103A
THIRD FLOOR MECHANICAL
PLAN - HVAC - SECTOR A



FLOOR PLAN LEGEND

- 1-HOUR FIRE BARRIER
- 2-HOUR FIRE BARRIER
- 3-HOUR FIRE BARRIER
- INDICATES SMOKE PARTITION
- INDICATES CAST CONCRETE
- INDICATES CONCRETE MASONRY UNITS
- INDICATES BRICK MASONRY
- INDICATES STEEL STUD FRAMED PARTITIONS



1/8" = 1'-0" **THIRD FLOOR MECHANICAL PLAN - HVAC - SECTOR B**

O'BRIEN ATKINS

Architecture
Engineering Architecture
Planning
Interior Design
Civil Mechanical Electrical
P.O. Box 12228 Raleigh, NC
919.848.0000 Fax
www.oba.com

REVISION SCHEDULE

REV#	DESCRIPTION	DATE
1	SCHEMATIC	01/19/21
2	SCHEMATIC	02/19/21
3	SCHEMATIC	03/22/21
4	SCHEMATIC	02/11/21
5	SCHEMATIC	02/24/21
6	SCHEMATIC	02/16/21

ISSUED SETS

FC PACKAGE	ISSUED DATE
FC PACKAGE	05/20/2021

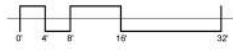
Drawn By: JEM
Project No: 2020051

M1103B

THIRD FLOOR MECHANICAL
PLAN - HVAC - SECTOR B

KEYNOTES:

- ① INSTALL AIR MONITORING STATION. REFERENCE SPECIFICATION AND AHU SCHEMATIC FOR MORE DETAIL.
- ② WHERE INDICATED PROVIDE SOUND ATTENUATORS AS CALLED OUT ON SCHEDULE SHEET M161.



FLOOR PLAN LEGEND

	1 HOUR FIRE BARRIERS
	2 HOUR FIRE BARRIERS
	4 HOUR FIRE BARRIERS
	INDICATES BRICK PATTERNS
	INDICATES GOLF CONCRETE
	INDICATES CONCRETE MAJOR UNITS
	INDICATES BRICK MASONRY
	INDICATES STEEL STUD PARTITION



FOURTH FLOOR MECHANICAL PLAN - HVAC - SECTOR A
 M1104A 1/8" = 1'-0"

O'BRIEN ATKINS

Architect

Engineering

Mechanical

Planning

Interior Design

215 West 10th Street, Suite 100
Wilmington, NC 28401
www.obriens.com

NORTH CAROLINA
 REGISTERED PROFESSIONAL ENGINEER
 09-052004
 MOTLEY MANDUELL

REVISION	DESCRIPTION	DATE
1	ADDendum 1	09/03/2025
2	BLD-FLOOR	09/23/2025
3	BLD-FLOOR	10/03/2025
4	BLD-FLOOR	10/21/2025
5	BLD-FLOOR REV 1	10/23/2025

WAKE COUNTY PUBLIC HEALTH BUILDING PC PACKAGE

WAKE COUNTY HEALTH CARE AUTHORITY

ISSUED SETS

PC PACKAGE

09/23/2025

Drawn By

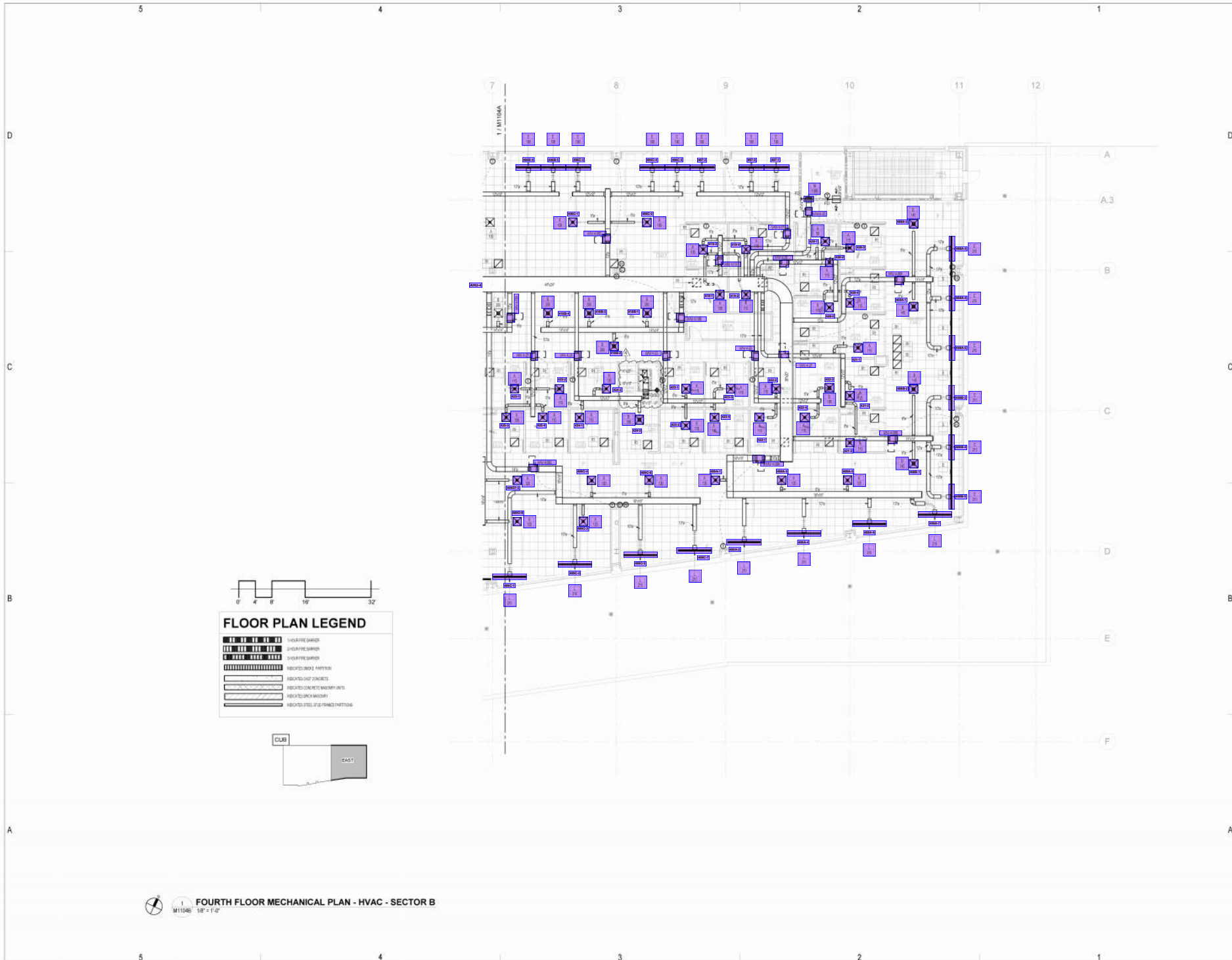
JEM

Project No

2025001

M1104A

FOURTH FLOOR MECHANICAL PLAN - HVAC - SECTOR A



FLOOR PLAN LEGEND

	1-HOUR FIRE BARRIER
	2-HOUR FIRE BARRIER
	3-HOUR FIRE BARRIER
	INDICATES SHAFT PARTITION
	INDICATES CAST-IN-PLACE CONCRETE
	INDICATES CONCRETE MASONRY UNITS
	INDICATES BRICK MASONRY
	INDICATES STEEL STUD/PARTITION INFILL



M1104B 1/4" = 1'-0" **FOURTH FLOOR MECHANICAL PLAN - HVAC - SECTOR B**

O'BRIEN ATKINS
 Architect
 Engineering
 Construction
 Planning
 Interior Design
 215 West 12th Street, 4th
 Floor, Charlotte, NC
 704.376.2200
 www.oba.com

REVISION SCHEDULE

REV.	DESCRIPTION	DATE
1	ADDendum 1	8/19/20
2	BUILDING PERMITS	10/20/20
4	BUILDING PERMITS	11/18/24

WAKE COUNTY PUBLIC HEALTH BUILDING FC PACKAGE

WAKE COUNTY
 NORTH CAROLINA

ISSUED SETS

FC PACKAGE 10/20/2020

Drawn By: KEM
 Project No: 202001

M1104B
 FOURTH FLOOR MECHANICAL PLAN - HVAC - SECTOR B

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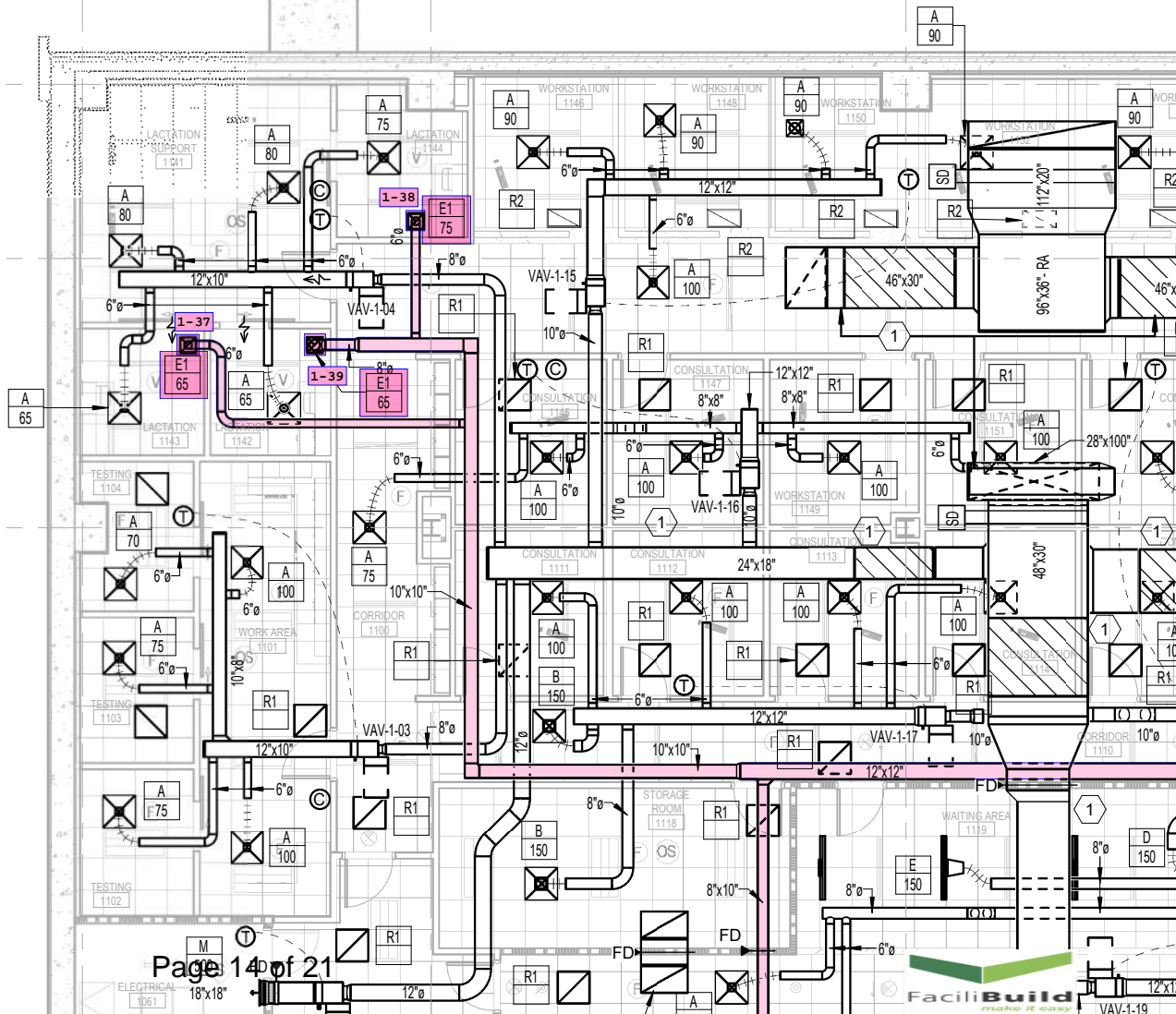
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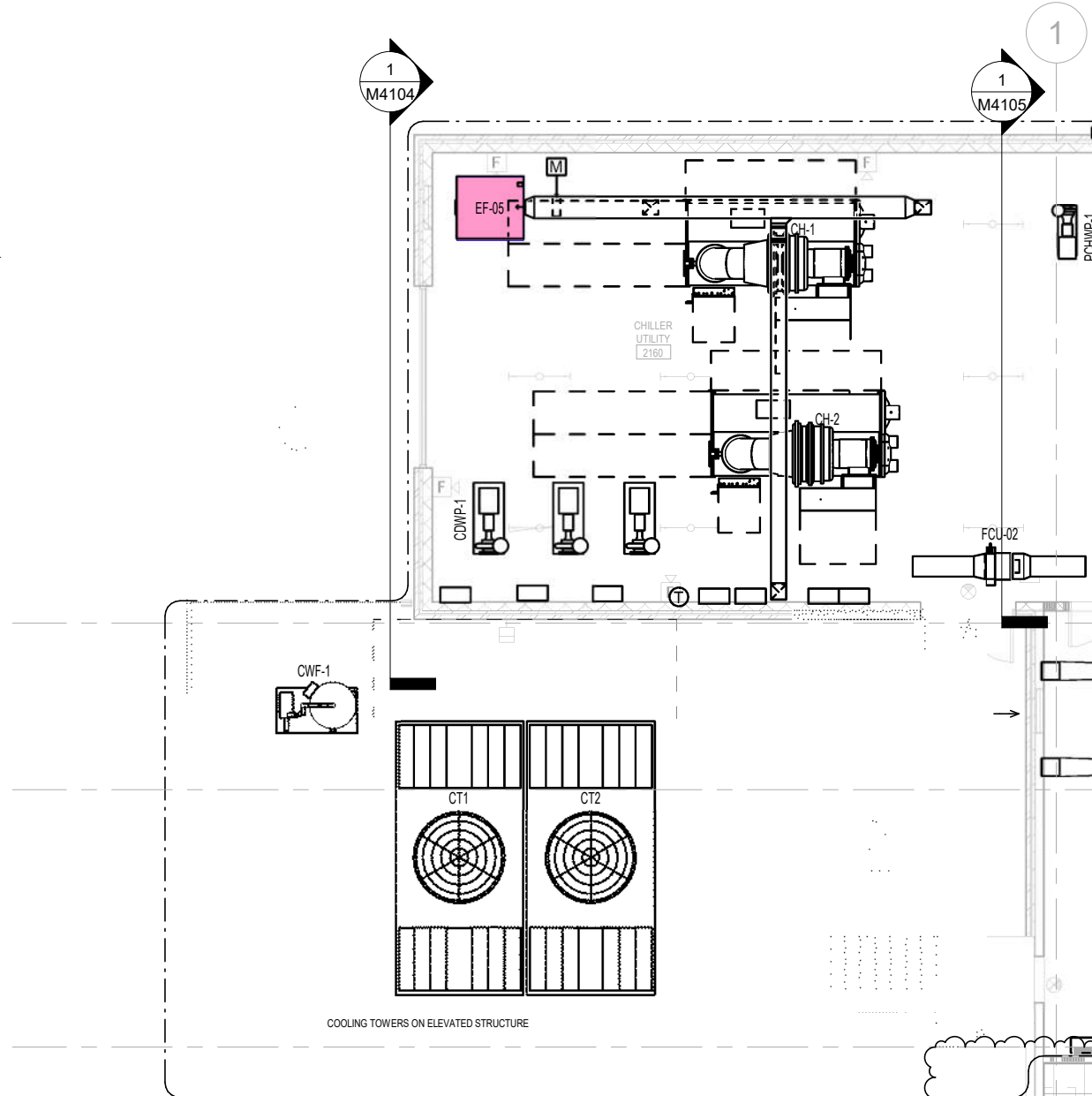
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KEYNOTES:

- ① INSTALL AIR MONITORING STATION. REFERENCE SPECIFICATION AND AHU SCHEMATIC FOR MORE DETAIL.
- ② ALL LOUVERS EXPOSED TO CHEMICALS SHOULD BE PROVIDED WITH Z-COAT 70% PVDF.
- ③ 3'-0" X 1'-0" EXHAUST LOUVER. SEE ARCHITECTURAL PLANS FOR EXACT LOCATION.
- ④ WHERE INDICATED PROVIDE SOUND ATTENUATORS AS CALLED OUT ON SCHEDULE SHEET M6101.
- ⑤ CONTRACTOR TO PROVIDE 5' KEWALINEE HIGH PERFORMANCE LABORATORY FUME HOOD, AND FRONT CABINET BLOWER ON/ OFF SWITCH.

D



KEYNOTES:

1 3" EA DUCT TO EXTERIOR WALL. MECHANICAL CONTRACTOR TO MAKE FINAL CONNECTION.

2 3" OA DUCT FROM EXTERIOR WALL. MECHANICAL CONTRACTOR TO MAKE FINAL CONNECTION.

3 PROVIDE BOTH OF THE FOLLOWING ROOM PRESSURE MONITORS BESIDE DOOR (6 LOCATIONS) AT A VISIBLE LOCATION/HEIGHT TO BE CONFIRMED BY OWNER, AND INSTALL PER ALL MANUFACTURER'S INSTRUCTIONS.
1. ADI "BALL-IN-THE-WALL"
2. DIGITAL ROOM PRESSURE MONITOR/CONTROLLER, SETRA FLEX-RC.
LOW-VOLTAGE CONTROL WIRING AND BACNET CONNECTION TO BE PROVIDED BY CONTROLS CONTRACTOR.

12

D

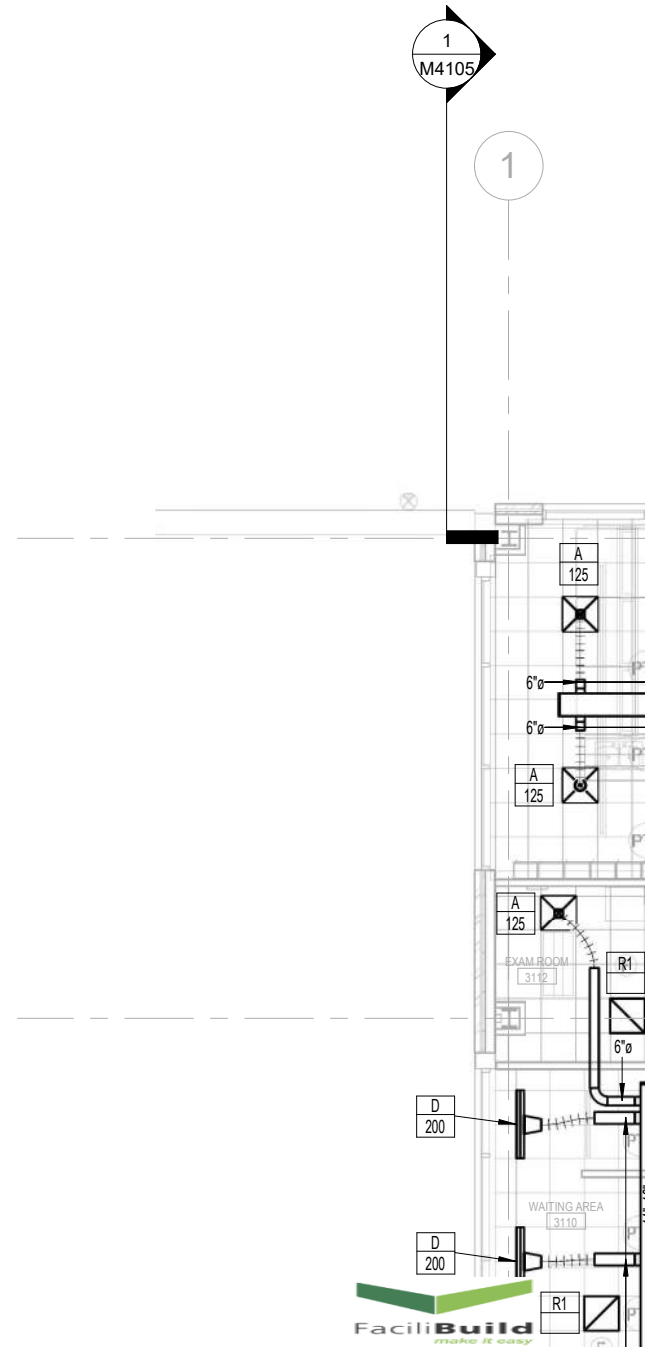
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KEYNOTES:

- 1 INSTALL AIR MONITORING STATION. REFERENCE SPECIFICATION AND AHU SCHEMATIC FOR MORE DETAIL.
- 2 WHERE INDICATED PROVIDE SOUND ATTENUATORS AS CALLED OUT ON SCHEDULE SHEET M6101.



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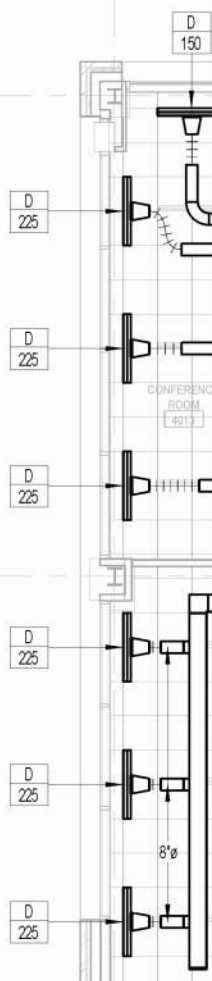
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KEYNOTES:

- ① INSTALL AIR MONITORING STATION. REFERENCE SPECIFICATION AND AHU SCHEMATIC FOR MORE DETAIL.
- ② WHERE INDICATED PROVIDE SOUND ATTENUATORS AS CALLED OUT ON SCHEDULE SHEET M6101.

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