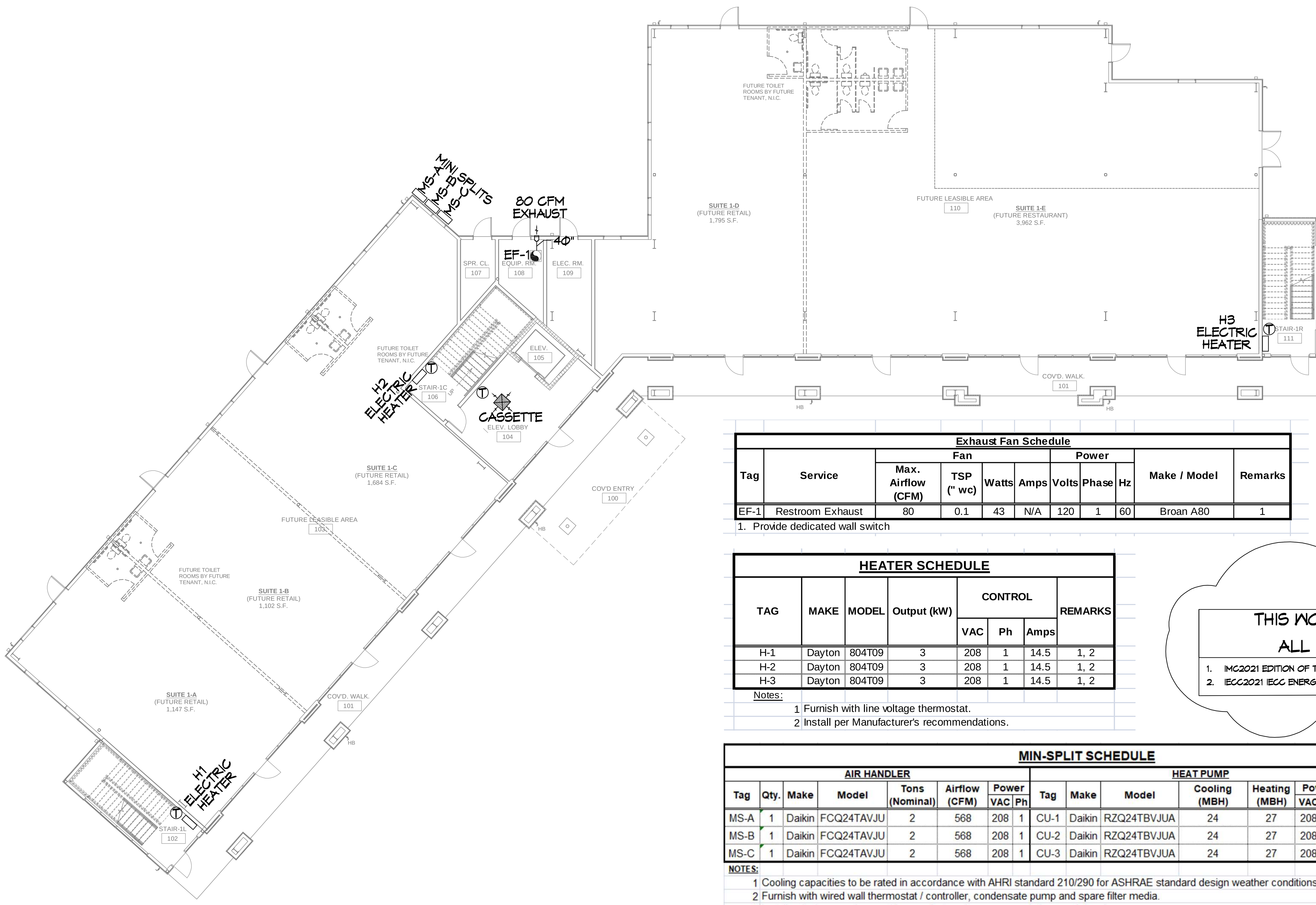

14 FIRST FLOOR MECHANICAL PLAN

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

MECHANICAL LEGEND

24"X24" 4-WAY SUPPLY AIR CASSETTE	(T) THERMOSTAT
MINI SPLIT	

GENERAL HVAC NOTES

1. CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL WRAPED WITH FIBROUS GLASS DUCT WRAP WITH FSK VAPOR BARRIER, MIN R-6. INSTALLED PER SMACNA STANDARDS. DUCT WORK IMMEDIATELY DOWNSTREAM FROM RTU SHALL BE LINED FOR SOUND ATTENUATION.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
3. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, AIR DUCT MATERIALS.
4. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
5. IN ALL SYSTEMS OVER 2000 CFM AND LESS THAN 15,000 CFM, SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72E IN THE RETURN DUCT DOWNSTREAM OF THE AIR HANDLING UNIT AND ALL FILTERS TO AUTOMATICALLY STOP THE FAN.
6. PROVIDE UL LISTED 125 'F' FIRESTAT IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
7. PROVIDE UL RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES AND EXHAUST FANS.
8. CONDENSATE DRAINS TO BE PVC PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
9. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
10. ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
11. EXHAUST FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCH(S). PROVIDE BACK DRAFT DAMPER.
12. PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
13. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS AT THE REGISTER.
14. LOCATE OUTDOOR UNITS AS SHOWN ON ARCHITECTURAL DRAWINGS.
15. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
16. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
17. ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS SHALL BE FIRE CAULKED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E8-14).
18. ALL MECHANICAL SYMBOLS ARE DRAWN DIAGRAMMATICALLY, CONTRACTOR TO VERIFY WITH OWNER LOCATIONS OF VENTS, DAMPERS, REGISTERS, ETC.
19. FLEXIBLE DUCTWORK LENGTH NOT TO EXCEED 12'-0". SUPPORT FLEX DUCT TO PREVENT SAGGING
20. REFER TO REFLECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
21. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
22. PROVIDE AND INSTALL SMOKE DETECTORS AS APPROVED BY LOCAL AHJ'S. PLACE NEAR R/A AND S/A OPENINGS OF AHU AND PROVIDE, WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR.
23. FRESH AIR INTAKES ARE REQUIRED TO HAVE MOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING.
24. PROVIDE BIRD SCREENS AT ALL EXTERIOR MECHANICAL PENETRATIONS.
25. COORDINATE WALL MOUNTED THERMOSTAT LOCATIONS WITH ALL OWNER FURNISHED ITEMS EITHER WALL MOUNTED OR FLOOR MOUNTED AGAINST PARTITIONS. REFER TO ARCHITECTURAL DRAWINGS.
26. SEE ROOF PLAN FOR ALL ROOF PENETRATIONS.
27. PROVIDE MIN 18 GA GALVANIZED SHEET METAL TO BLANK-OFF GABLE VENTS WHERE INTAKE/EXHAUST DUCTS OCCUR.
28. LONGITUDINAL AND TRANSVERSE JOINTS, SEAMS AND CONNECTIONS OF SUPPLY AND RETURN DUCTS OPERATING AT A STATIC PRESSURE LESS THAN OR EQUAL TO 2 INCHES WATER GAUGE SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS, MASTIC-PLUS-EMBEDDED FABRIC SYSTEMS OR TAPES INSTALLED IN ACCORDANCE WITH THE MANUFACTURES INSTRUCTIONS. PRESSURE CLASSIFICATIONS SPECIFIC TO THE DUCT SYSTEM SHALL BE CLEARLY INDICATED ON THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE.

Exhaust Fan Schedule

Tag	Service	Fan				Power			Make / Model	Remarks
		Max. Airflow (CFM)	TSP (" wc)	Watts	Amps	Volts	Phase	Hz		
EF-1	Restroom Exhaust	80	0.1	43	N/A	120	1	60	Broan A80	1

1. Provide dedicated wall switch

HEATER SCHEDULE

TAG	MAKE	MODEL	Output (kW)	CONTROL			REMARKS
				VAC	Ph	Amps	
H-1	Dayton	804T09	3	208	1	14.5	1, 2
H-2	Dayton	804T09	3	208	1	14.5	1, 2
H-3	Dayton	804T09	3	208	1	14.5	1, 2

Notes:
1 Furnish with line voltage thermostat.
2 Install per Manufacturer's recommendations.

THIS WORK SHALL MEET ALL HVAC CODES

1. IMC2021 EDITION OF THE IMC
2. IECC2021 IECC ENERGY CODE

MIN-SPLIT SCHEDULE

AIR HANDLER								HEAT PUMP								MOP	Remarks
Tag	Qty.	Make	Model	Tons (Nominal)	Airflow (CFM)	Power VAC	Power Ph	Tag	Make	Model	Cooling (MBH)	Heating (MBH)	Power VAC	Power PH	MCA		
MS-A	1	Daikin	FCQ24TAVJU	2	568	208	1	CU-1	Daikin	RZQ24TBVJUA	24	27	208	1	17.2	20	1, 2, 3
MS-B	1	Daikin	FCQ24TAVJU	2	568	208	1	CU-2	Daikin	RZQ24TBVJUA	24	27	208	1	17.2	20	1, 2, 3
MS-C	1	Daikin	FCQ24TAVJU	2	568	208	1	CU-3	Daikin	RZQ24TBVJUA	24	27	208	1	17.2	20	1, 2, 3

NOTES:
1 Cooling capacities to be rated in accordance with AHRI standard 210/290 for ASHRAE standard design weather conditions in New Orleans, LA.
2 Furnish with wired wall thermostat / controller, condensate pump and spare filter media.
3 Install units in accordance with manufacturer's recommendations and drawings.

ELEVATOR LOBBY, RM # 104

Note: Treat as "Main Entry Lobby, Office"

$V_{bz} = R_p P_z + R_a A_z$

R_p = 5
P_z = 10 per 1000 ft^2 = 3.0
R_a = 0.06
A_z = 300.00 ft^2

V_{bz} = **15.00 cfm**

****

ELEVATOR LOBBY, RM # 203

Note: Treat as "Main Entry Lobby, Office"

$V_{bz} = R_p P_z + R_a A_z$

R_p = 5
P_z = 10 per 1000 ft^2 = 3.0
R_a = 0.06
A_z = 300.00 ft^2

V_{bz} = **15.00 cfm**

****

ELEVATOR LOBBY, RM # 304

Note: Treat as "Main Entry Lobby, Office"

$V_{bz} = R_p P_z + R_a A_z$

R_p = 5
P_z = 10 per 1000 ft^2 = 2.0
R_a = 0.06
A_z = 200.00 ft^2

V_{bz} = **10.00 cfm**

****

Infiltration

Manual N Table 13b

	Winter	Summer	
cfm Infiltration per door	**Winter**	**Summer**	
Single door no vestibule has an infiltration rate of	60	30	
Number of doors		3	
Therefore, total Door Infiltration in cfm	180	90	
Required cfm for ventilation (total) = Ref. **Vbz**, above:		40	cfm
Door infiltration		90	cfm
Total fresh air	**90 cfm >**	**40 cfm**	

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REVISIONS

#	DESCRIPTION	DATE
1	ADDED FRESH AIR AND CODE REQUIREMENT	06-26-25

SEAL: STATE OF LOUISIANA — BRIAN A. MISTICH — LICENSE No. 30187 — PROFESSIONAL ENGINEER IN MECHANICAL ENGINEERING

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MIXED USE DEVELOPMENT
I-10 SOUTH SERVICE ROAD
METAIRIE LOUISIANA

JOB No:
DATE: 01-27-2025
DRAWN BY: CKD
CHECKED BY: BAM

SHEET TITLE:
FIRST FLOOR MECHANICAL PLAN

DRAWING NUMBER:
M101

SHEET No: 4 of 15