



LITTLE ROCK A.F.B.  
ARKANSAS

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RECORD  
DRAWINGS  
MARCH 2007

REPAIR MEDICAL CENTER PH B  
LITTLE ROCK AFB, ARKANSAS

HVAC PLAN

PROJECT TITLE	REPAIR MEDICAL CENTER PH B LITTLE ROCK AFB, ARKANSAS	SHEET TITLE	
DRAWN BY	MJG	LEAD DESIGNER	AM
TECH REVIEWER	OD	PROJECT NUMBER	NKAK 05-8004A
DESIGNED BY	OD	SHEET	
DATE	1-21-08		M1.11
SCALE	1/8"=1'-0"		24 OF 39

#### NOTES:

1. ALL EXISTING DIFFUSERS AND REGISTERS SHALL BE REPLACED WITH NEW. REFER TO REFLECTED CEILING PLAN FOR THE EXACT LOCATION OF SUPPLY DIFFUSERS, EXHAUST AND RETURN REGISTERS.
2. EXISTING DROPS (BRANCHES) TO EXISTING DEFFUSERS AND REGISTERS SHALL BE THE SAME SIZE AS NECK SIZE OF DEFFUSER OR LISTED SIZE OF GRILLES. IF IT IS NOT POSSIBLE TO REUSE EXISTING DROPS TO EXISTING DIFFUSERS AND REGISTERS, REMOVE EXISTING DROPS TO MAIN BRANCH DUCT AND TIGHTLY PATCH OPENING IN MAIN BRANCH. CONNECT NEW DEFFUSERS AND REGISTERS FOR BALANCING OF AIR SYSTEM.
3. ALL BRANCHES TO DEFFUSERS AND REGISTERS SHALL HAVE VOLUME DAMPER FOR BALANCING OF AIR SYSTEM
4. WHERE NECESSARY, PROVIDE SECTOR BAFFLES IN NECK OF SUPPLY DIFFUSERS FOR 1-WAY, 2-WAY OR 3-WAY DISCHARGE PATTERNS.
5. PROVIDE NOMINAL 9,000 MBH COOLING CAPACITY, 340 CFM (ADJUSTABLE), DUCTLESS SPLIT AIR CONDITIONING SYSTEM FOR ROOM A210 (ENVIRONMENTAL INTERNATIONAL MODELS CAH 09 AND "SICRA" OR APPROVED EQUAL) AND WALL THERMOSTAT; THE CONDENSING UNIT SHALL BE LOCATED ON THE ROOF AND THE CASSETTE EVAPORATOR SHALL BE INSTALLED IN ROOM A210 ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REFRIGERANT PIPING BETWEEN THE OUTDOOR AND INDOOR SECTIONS SHALL BE COPPER TYPE L RUN IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. THE SUCTION PIPING SHALL BE COVERED WITH MINIMUM 3/4 IN. THICK CELLULAR ELASTOMER INSULATION OR APPROVED EQUAL. PIPING THROUGH THE SECOND FLOOR SHALL BE CONCEALED INSIDE THE WALLS AND CEILINGS, OR IN A PIPING CHASE WITH APPROVED FINISH. REFRIGERANT TYPE R22. CONDENSATE DRAIN PIPING SHALL BE 3/4 IN. O.D. COPPER TYPE L RUN ABOVE THE SUSPENDED CEILING, SLOPING DOWN AT 1/4 INCH IN 10 FEET TO ROOM A213, THEN DOWN INTO THE SERVICE SINK WHERE IT SHALL BE SECURELY FASTENED.
6. ALL ROOF PENETRATIONS MUST BE PERFORMED BY A TAMCO ROOFING SUBCONTRACTOR AS TO NOT VOID ROOF WARRANTY.

#### DUCTLESS SPLIT SYSTEM ELECTRICAL DATA

UNIT	V	PH	HZ/FLA	MINIMUM CIR. AMPS	MAX. OVERCURRENT PROTECTOR AMPS
INDOOR CHA 09	115	1	60/0.8	9.9	15
OUTDOOR C2C-09AT	115	1	60/8.2	9.9	15

#### DUCTLESS SPLIT SYSTEM ELECTRICAL DATA (INCHES)

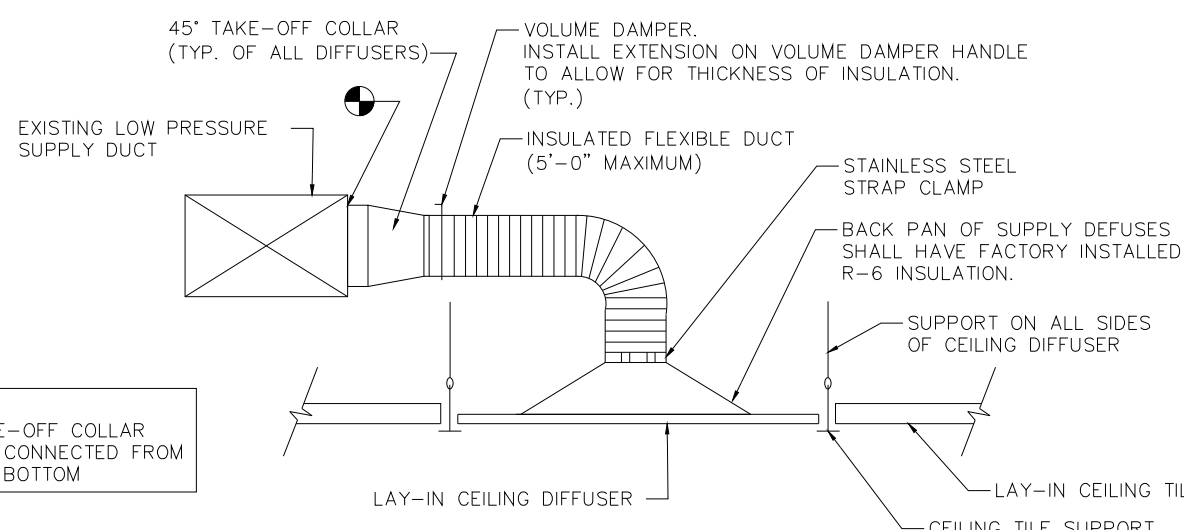
UNIT	HEIGHT	WIDTH	DEPTH	WEIGHT
INDOOR CHA 09	CABINET	10-3/4	22-1/2	40 LBS.
OUTDOOR C2C-09AT	FASCIA	2-1/4	25	5 LBS.
		36	24	15
				105 LBS.

#### DIFFUSER, REGISTER, AND GRILLE SCHEDULE

TAG. NO.	MANUF.	MODEL NO.	DESCRIPTION	MODULE SIZE	CFM RANGE	NOMINAL DUCT SIZE	MAX N.C.	MAX. TOTAL PRESSURE (in W.C.)	REMARKS
A	TITUS	350ZFL	RETURN/EXHAUST GRILLE AND REGISTERS		0-135	6"x6"	13	0.067	SEE NOTES
B	TITUS	350ZFL	RETURN/EXHAUST GRILLE AND REGISTERS		135-260	8"x8"	16	0.067	SEE NOTES
C	TITUS	350ZFL	RETURN/EXHAUST GRILLE AND REGISTERS		260-415	10"x10"	18	0.067	SEE NOTES
D	TITUS	350ZFL	RETURN/EXHAUST GRILLE AND REGISTERS		415-615	12"x12"	20	0.067	SEE NOTES
E	TITUS	350ZFL	RETURN/EXHAUST GRILLE AND REGISTERS		615-855	14"x14"	21	0.067	SEE NOTES
F	TITUS	TMSA-AA	SQUARE CEILING DIFFUSER	12"x12"	0-75	4" DIA.	18	0.053	SEE NOTES
G	TITUS	TMSA-AA	SQUARE CEILING DIFFUSER	12"x12"	75-110	5" DIA.	18	0.086	SEE NOTES
H	TITUS	TMSA-AA	SQUARE CEILING DIFFUSER	12"x12"	110-140	6" DIA.	20	0.097	SEE NOTES
I	TITUS	TMSA-AA	SQUARE CEILING DIFFUSER	12"x12"	140-210	8" DIA.	22	0.129	SEE NOTES
J	TITUS	TMSA-AA	SQUARE CEILING DIFFUSER	24"x24"	95-155	6" DIA.	18	0.076	SEE NOTES
K	TITUS	TMSA-AA	SQUARE CEILING DIFFUSER	24"x24"	155-280	8" DIA.	21	0.088	SEE NOTES
L	TITUS	TMSA-AA	SQUARE CEILING DIFFUSER	24"x24"	280-380	10" DIA.	22	0.092	SEE NOTES
M	TITUS	TMSA-AA	SQUARE CEILING DIFFUSER	24"x24"	380-470	10" DIA.	23	0.090	SEE NOTES
N	TITUS	TMSA-AA	SQUARE CEILING DIFFUSER	24"x24"	470-640	12" DIA.	23	0.098	SEE NOTES

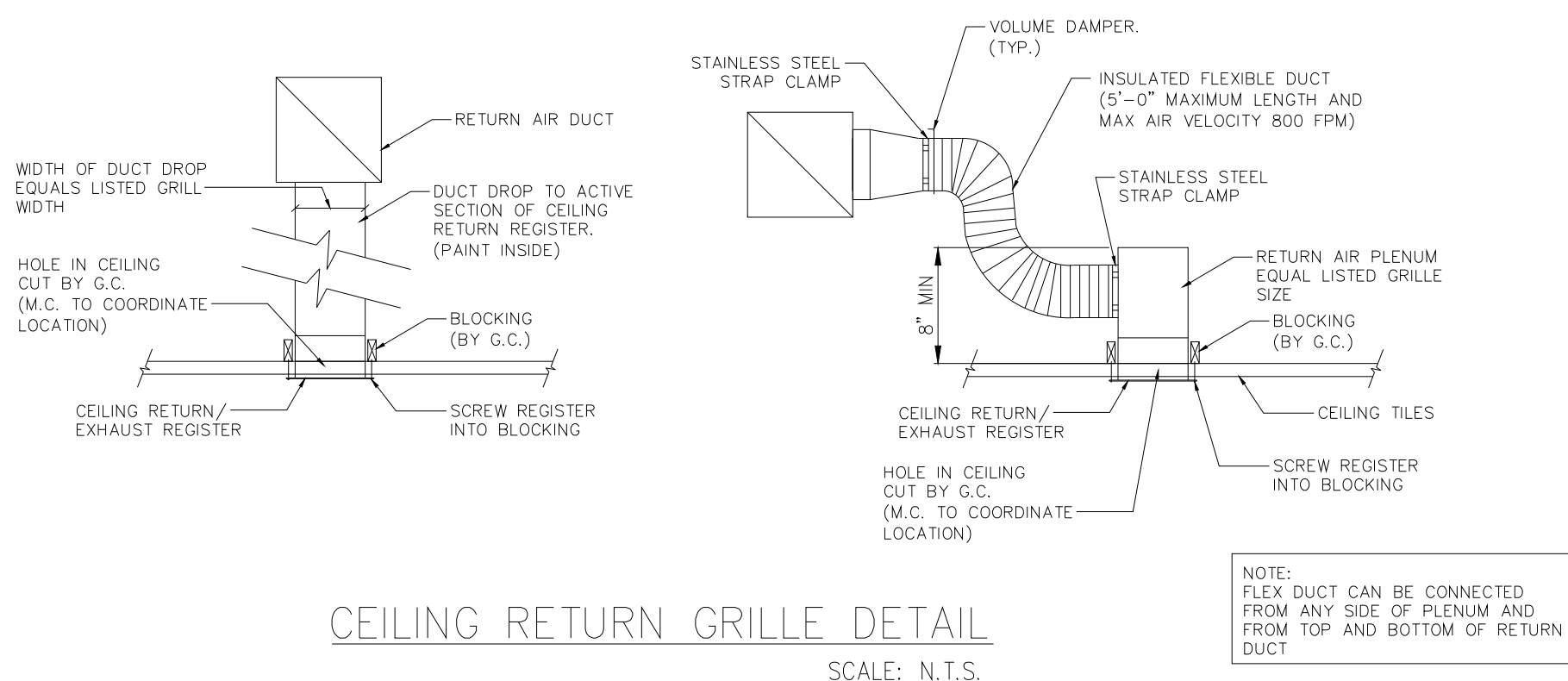
#### NOTES:

1. SEE REFLECTED CEILING PLAN FOR MOUNTING TYPE.
2. ALL DIFFUSERS, REGISTERS, AND GRILLES MOUNTED IN HARD CEILINGS, AND ROOMS A208 & A209, SHALL HAVE 12"x12" FACE SIZE AND SHALL BE FURNISHED WITH INTEGRAL DAMPERS. OPEN THAT ARE OPERABLE THROUGH THE FACE.
3. MANUFACTURER RECOMMENDATION IS BASIS OF DESIGN OR USE APPROVED EQUAL.
4. SEE HVAC DUCTWORK PLAN DRAWINGS FOR DIFFUSER THROW INDICATION AND DESIGN AIR FLOW CFM.
5. WHITE FINISH UNLESS OTHERWISE NOTED.
6. ALUMINUM CONSTRUCTION UNLESS OTHERWISE NOTED.
7. ALL DIFFUSERS SHALL BE PROVIDED WITH ROUND DAMPER. DAMPER SHALL BE OPERABLE FROM THE FACE OF THE DIFFUSER.
8. ALL EXHAUST / RETURN GRILLES SHALL BE PROVIDED WITH OPPOSED BLADE VOLUME DAMPER. DAMPER SHALL BE OPERABLE FROM THE FACE OF THE REGISTER.
9. REFER TO REFLECTED CEILING PLAN FOR EXACT LOCATION ON DEFFUSERS, RETURN AND EXHAUST REGISTERS.



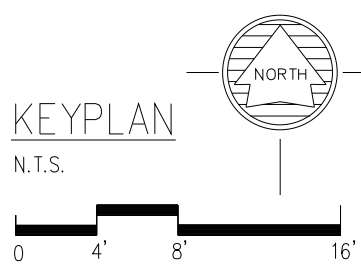
#### FLEXIBLE BRANCH DUCT DETAIL FOR SUPPLY DIFFUSER

SCALE: N.T.S.

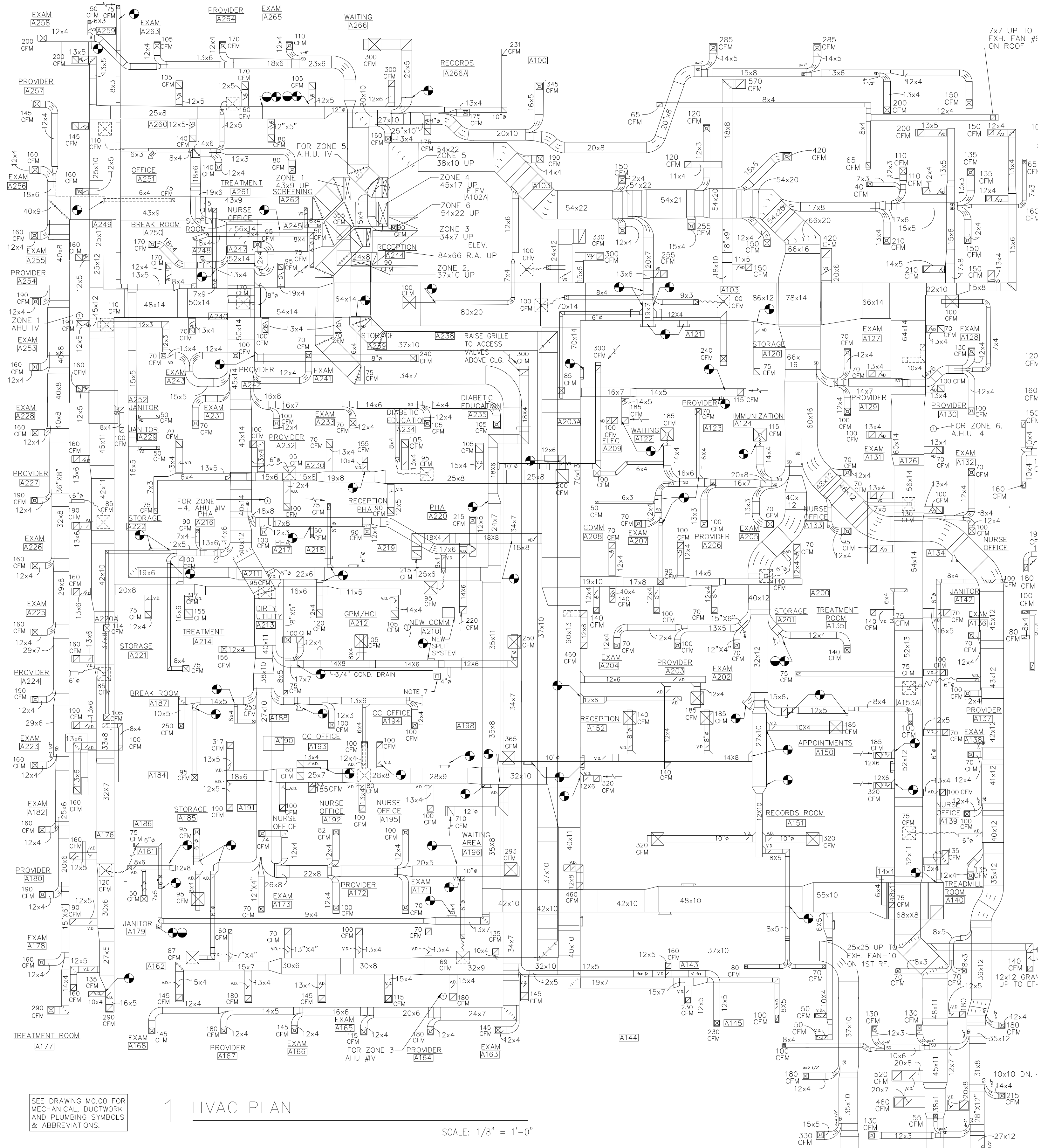
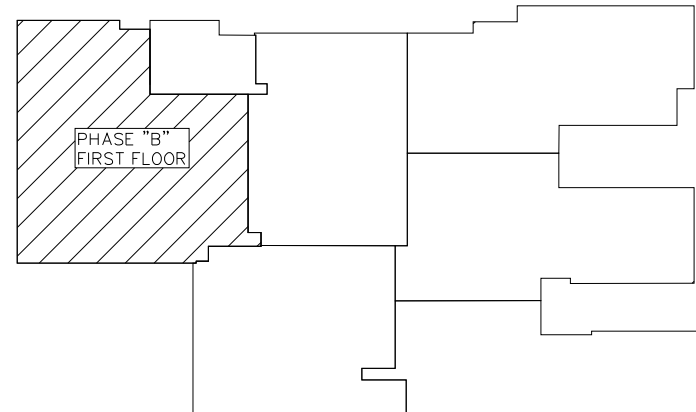


#### CEILING RETURN GRILLE DETAIL

SCALE: N.T.S.



SCALE



#### 1 HVAC PLAN

SCALE: 1/8" = 1'-0"

SEE DRAWING M000 FOR MECHANICAL DUCTWORK AND PLUMBING SYMBOLS & ABBREVIATIONS.