

**MECHANICAL GENERAL NOTES:**

1. THESE DRAWINGS ARE DIAGRAMATIC. ALL OFFSETS, FITTINGS, TRANSITIONS AND ACCESSORIES ARE NOT SHOWN. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL ITEMS REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM. DO NOT SCALE DRAWINGS FOR INSTALLATION.
2. ALL WORK SHALL BE PERFORMED IN A FIRST CLASS WORKMANLIKE MANNER BY LICENSED CONTRACTORS.
3. THE CONTRACTOR SHALL OBTAIN AT HIS EXPENSE ALL NECESSARY FEES PERMITS, AND TESTS.
4. ALL WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES. NO CONTRACTOR SHALL BID UNLESS FAMILIAR WITH THESE CODES.
5. CORRECTION OF DEFECTS TO THIS WORK SHALL BE MADE PROMPTLY WITHOUT CHARGE TO THE OWNER. REPAIR AND REPLACEMENT FOR DAMAGE CAUSED BY THIS CONTRACTOR SHALL BE MADE PROMPTLY WITHOUT CHARGE TO THE OWNER.
6. ALL WORK OF THIS TRADE SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID ANY INTERFERENCES THAT MAY DELAY PROGRESS OF CONSTRUCTION.
7. THE CONTRACTOR SHALL INCLUDE THE WORK OF ALL REQUIRED SUB-CONTRACTORS, SUCH AS ELECTRICAL, INSULATING, TEST & BALANCE, ETC., AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
8. EQUIPMENT SHALL BEAR A U.L. OR OTHER RECOGNIZED LABEL, NAMEPLATES, WIRING DIAGRAMS, AND ENERGY RATINGS AS APPLICABLE.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND ACCESSORIES TO BE READY ACCESSIBLE FOR SERVICING, TESTING, BALANCING, AND REPLACEMENT.
10. THE CONTRACTOR SHALL PROVIDE A WRITTEN QUARANTEE AGAINST DEFECTS IN ALL MATERIALS AND WORKMANSHIP FOR ONE YEAR FROM ACCEPTANCE, WITH FOUR ADDITIONAL YEARS OF WARRANTY ON COMPRESSORS.
11. THE CONTRACTOR SHALL PROVIDE THREE COPIES OF SUBMITTAL DATA, SHOP DRAWINGS, AND FIELD NOTES TO THE OWNER. THE CONTRACTOR SHALL PROVIDE AND MAINTAINANCE MANUALS FOR ALL PROJECT ITEMS.
12. PROVIDE ALL CONTROLS, STARTERS, CONTROL WIRING, DISCONNECTS, AND OPERATIONAL SYSTEM.
13. THE HVAC CONTRACTOR IS RESPONSIBLE FOR MAINTAINING, ON SITE, A DETAILED AS-BUILT PLAN SHOWING ACTUAL INSTALLATIONS. THE CONTRACTOR SHALL PROVIDE THIS AS-BUILT PLAN TO THE OWNER UPON COMPLETION, WHICH ARE SUITABLE FOR SUBMISSION TO THE BUILDING DEPARTMENT AND TO THE OWNER.
14. PRIOR TO ACCEPTANCE BY THE OWNER, THE SYSTEM SHALL BE TESTED AND BALANCED. THE CONTRACTOR SHALL PROVIDE TEST REPORTS, TEST BALANCE FORM, AND A TYPED WRITTEN COMPREHENSIVE REPORT SUBMITTED.
15. SUPPLY AND INSTALL DUCT MOUNTED SMOKE DETECTORS AS REQUIRED.
16. COORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH LIGHTS AND ARCHITECTURAL ELEMENTS.
17. ALL GRILLES TO BE TITUS OR METALARE UNLESS OTHERWISE NOTED. SIZES AS SHOWN ON PLANS. ALUMINUM CONSTRUCTION.
18. ALL DUCT WORK SHALL BE BUILT AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS AND LOCAL BUILDING CODES.
19. ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
20. ALL OUTSIDE AIR DUCTWORK SHALL BE SHEETMETAL WITH EXTERIOR R-6 INSULATION. PROVIDE BLANKET TYPE INSULATION IN CONCEALED SPACES, AND BOARD TYPE IN EXPOSED AREAS.
21. ALL EXHAUST AIR DUCT SHALL BE GALVANIZED SHEET METAL CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.
22. FLEXIBLE DUCT, WHERE SHOWN, SHALL BE U.L. CLASS 1, R-6 INSULATION.

**GENERAL DEMOLITION NOTES**

1. UNLESS OTHERWISE NOTED, ALL EQUIPMENT AND DUCTWORK IN THE PROJECT AREA WHICH IS NOT INDICATED TO REMAIN, IS TO BE REMOVED. THE CONTRACTOR SHALL INVESTIGATE THE PROJECT AREA PRIOR TO BID TO DETERMINE ALL REQUIRED DEMOLITION.
2. EXISTING CONDITIONS SHOWN ON THIS DRAWING ARE TAKEN FROM ORIGINAL DRAWINGS AND FIELD INVESTIGATION. ALL EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO BID. FIELD CONDITIONS SHALL GOVERN.
3. DEMOLITION WORK IS NOT SPECIFICALLY IDENTIFIED ON THESE PLANS, AND MAY BE DESCRIBED ON THE ARCHITECT'S PLANS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED DEMOLITION WHETHER SHOWN ON THE PLANS OR NOT.
4. ALL MECHANICAL SYSTEMS SERVING OTHER SPACES OR FLOORS, THAT RUN THROUGH THE PROJECT AREA SHALL REMAIN ACTIVE DURING CONSTRUCTION, SO AS NOT TO CAUSE ANY DISRUPTION TO THESE OTHER SPACES.
5. ALL ITEMS REMOVED UNDER THIS PROJECT SHALL BE DISPOSED OF OR TURNED OVER TO THE OWNER AT THE OWNER'S DISCRETION.
6. PROPERLY REMOVE AND DISPOSE OF ALL HVAC DUCTWORK AND AIR DISTRIBUTION DEVICES WHICH ARE TO BE REMOVED. CONSULT WITH OWNER AND OBTAIN THE OWNER'S APPROVAL PRIOR TO DISPOSAL OF REMOVED MATERIAL.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL PIPING AND DUCTS, NEW OR EXISTING, WITHIN THE PROJECT AREA, ARE PROPERLY SUPPORTED.
8. ALL OCCUPIED SPACES ARE TO REMAIN OPERATIONAL DURING BUSINESS HOURS THROUGHOUT THE DEMOLITION AND CONSTRUCTION PERIOD. COORDINATE ALL WORK AS DESCRIBED IN THE ARCHITECT'S DOCUMENTS.

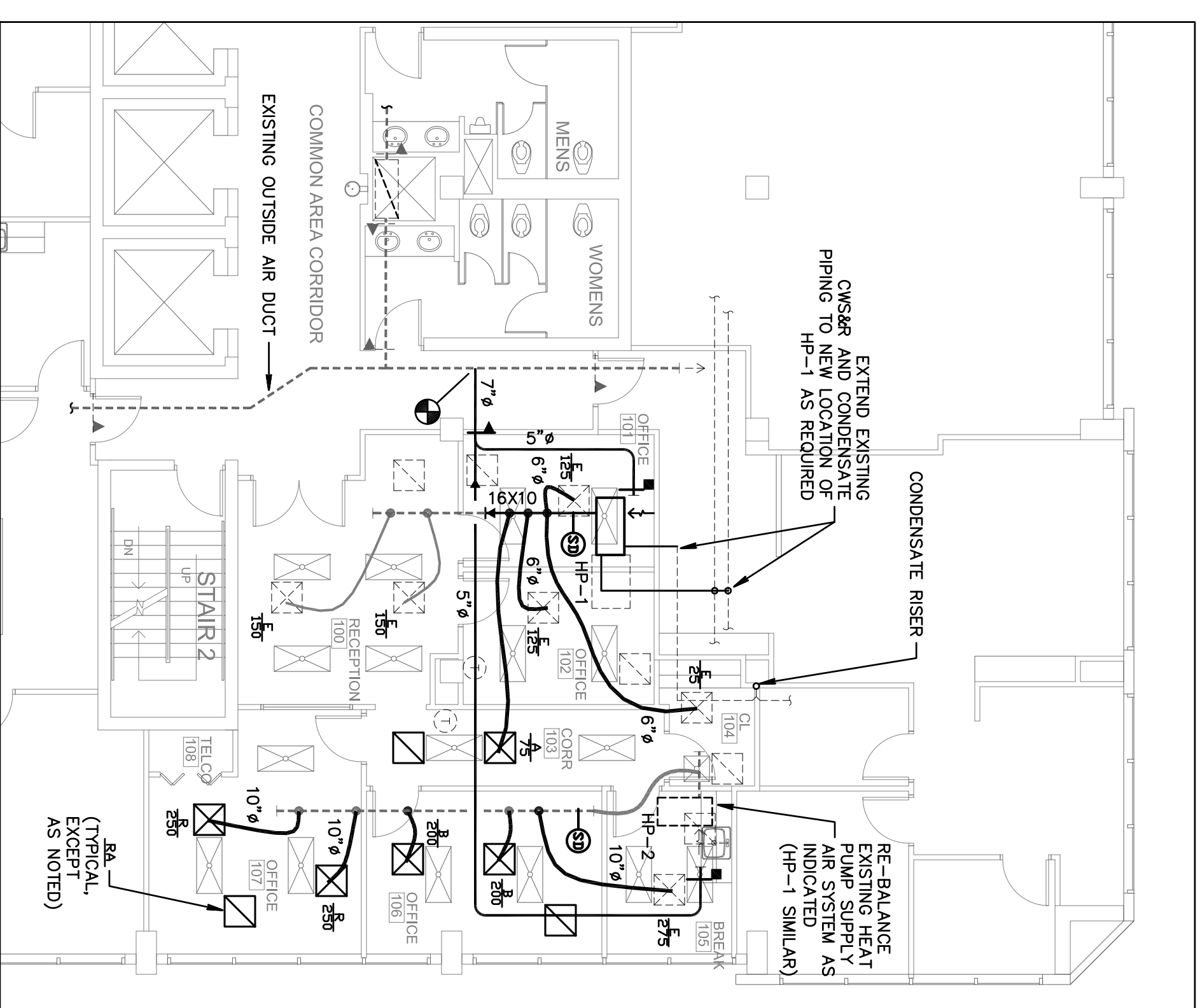
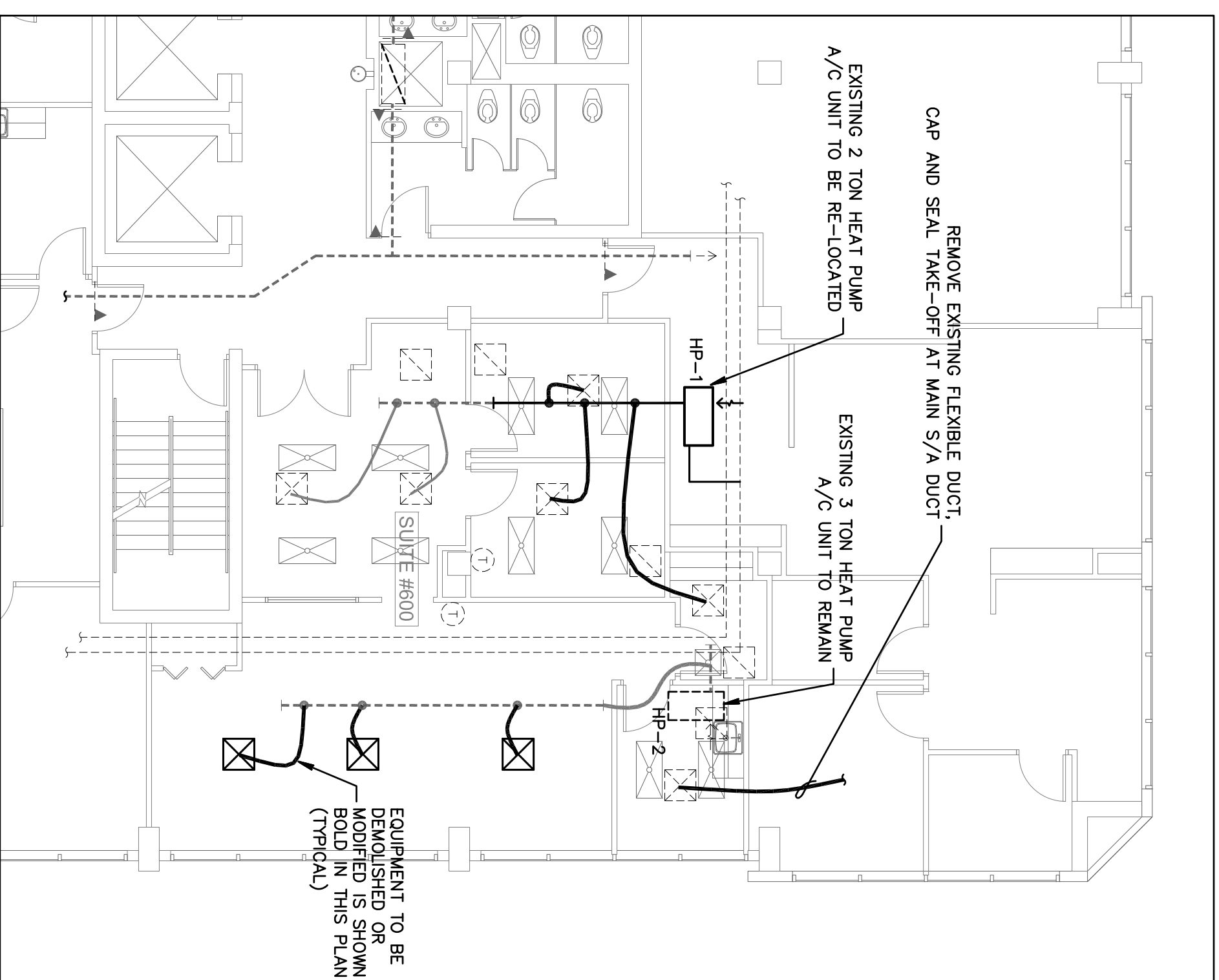
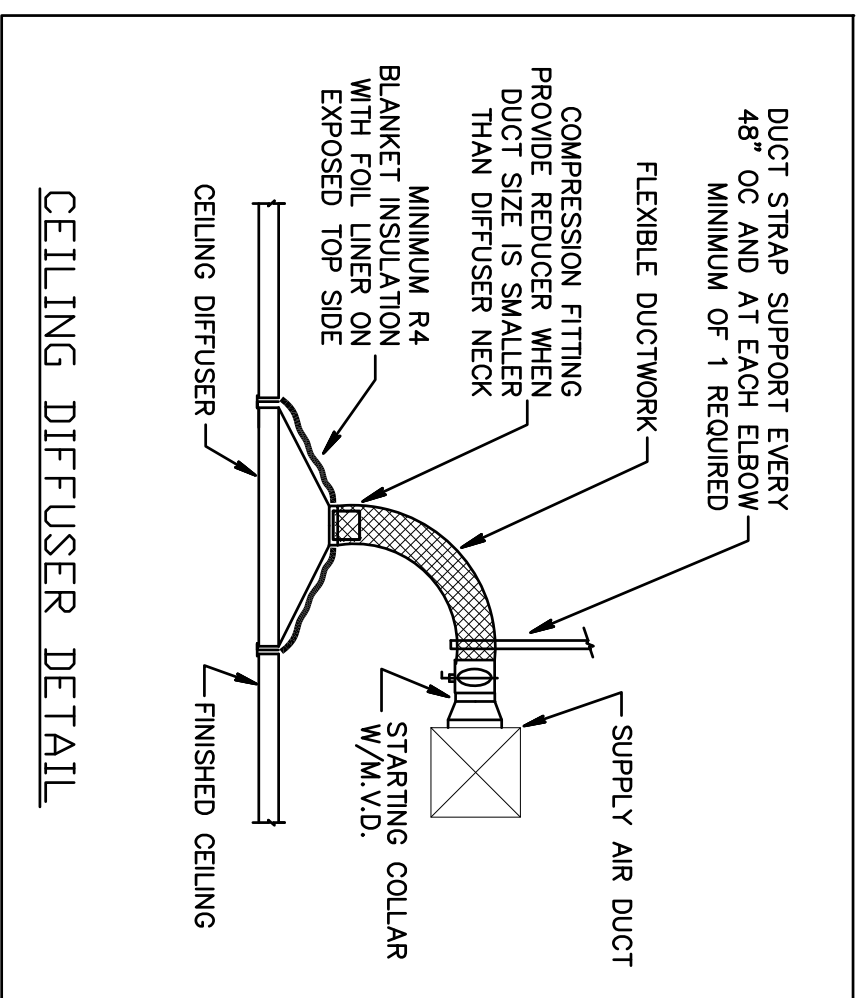
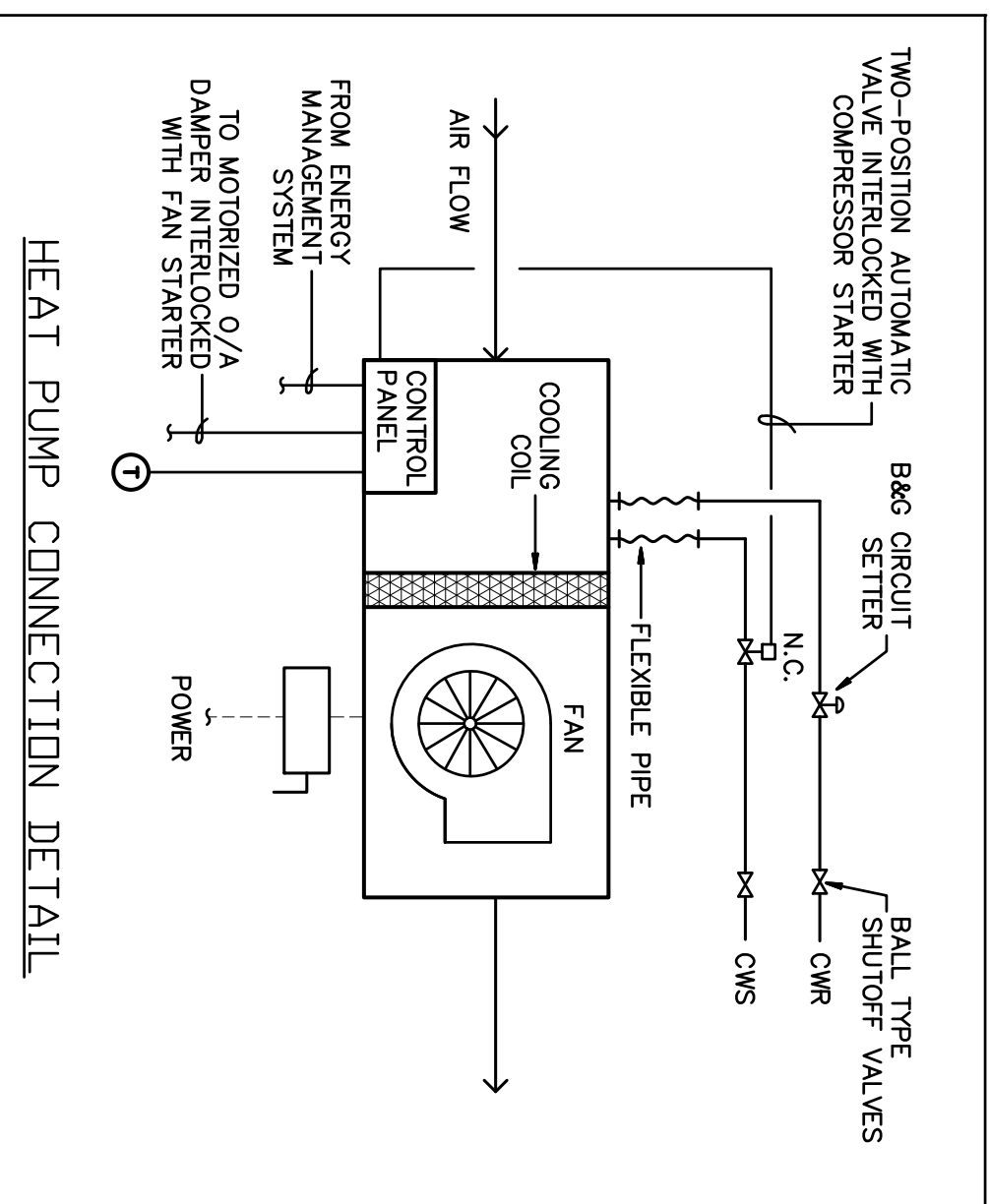
**AIR DISTRIBUTION SCHEDULE**

MARK	MAKE	MODEL	SIZE	NECK	MATERIAL	BORDER TYPE	MOUNTING TYPE	DAMPER	THROW	FINISH
A	TITUS	PA5-AA	24X24	6"φ	ALUMINUM		LAY-IN	AG-85	4 WAY	WHITE
B	TITUS	PA5-AA	24X24	8"φ	ALUMINUM		LAY-IN	AG-85	4 WAY	WHITE
C	TITUS	PA5-AA	24X24	10"φ	ALUMINUM		LAY-IN	AG-85	4 WAY	WHITE
RA	TITUS	PAR-AA	24X24	22X22	ALUMINUM		LAY-IN	-	-	WHITE
RB	TITUS	4F	6X6	6X6	ALUMINUM		SURFACE	-	-	WHITE

FOR ROUND NECK GRILLES, PROVIDE ROUND FLEXIBLE DUCT TO MATCH GRILLE NECK, UNLESS SHOWN OTHERWISE. PROVIDE INTEGRAL VOLUME DAMPERS WHERE SHOWN ON PLAN OR WHERE DAMPER IN S/A DUCTWORK IS NOT ACCESSIBLE ABOVE CEILING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO ORDERING ANY EQUIPMENT.

**VENTILATION CALCULATIONS**

SYSTEM	AREA TYPE	OFFICE	CORRIDOR	STORAGE	RECEPTION	BREAK	OFFICE	
ABOVE CALCULATIONS PER ASHRAE 62.1, 2007 RECEPTION AREA OCCUPANCY IS AVERAGED PER 62-6.2.6.2 DIVERSITY APPLIED TO BREAK ROOM PER 62-6.2.5.3	SQUARE FEET OF AREA	220	98	44	220	87	380	
	CFM/SQ.FT. REQUIRED	0.06	0.06	0.12	0.06	0.06	0.06	
	TOTAL OCCUPANTS	2	-	-	3	1	2	
	CFM/PERSON REQUIRED	5	-	-	5	5	5	
	ZONE CFM REQUIRED	23	6	5	28	10	33	
	TOTAL SYSTEM CFM							62
								43



**ABBREVIATIONS**

HP	HEAT PUMP
S/A	SUPPLY AIR
R/A	RETURN AIR
O/A	OUTSIDE AIR
E/A	EXHAUST AIR
CFM	CUBIC FEET PER MINUTE
MVD	MANUAL VOLUME DAMPER (PROPOSED BLADE TYPE)
FD	FIRE DAMPER
AHU	AIR HANDLING UNIT
CD	CONDENSATE DRAIN
CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
E	EXISTING
R	RE-LOCATED

**LEGEND**

	EXISTING EQUIPMENT TO REMAIN
	SUPPLY AIR DIFFUSER AS NOTED
	RETURN/TRANSFER GRILLE AS NOTED
	EXISTING SUPPLY AIR DIFFUSER
	EXISTING EXHAUST/RETURN GRILLE
	DUCTWORK AS NOTED
	EXISTING DUCTWORK TO REMAIN
	TYPE B FIRE DAMPER W/ACCESS DOOR
	MOTORIZED COMBINATION VOLUME & BACKDRAFT DAMPER
	MANUAL VOLUME DAMPER
	PROGRAMMABLE THERMOSTAT
	FLEXIBLE DUCT, U.L. CLASS 1
	DUCT TRANSITION
	FLEXIBLE DUCT TAKE-OFF WITH MVD
	CONNECTION TO EXISTING DUCT SMOKE DETECTOR WITH AUDIBLE AND VISUAL ALARM

THE CEILING SPACE THROUGHOUT THIS PROJECT IS A RETURN AIR PLENUM. NO COMBUSTIBLE OR TOXIC MATERIALS ARE ALLOWED ABOVE THE CEILING.

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**Bo**

**ALAN GOULD**

CENTURION TOWER  
1601 FORUM PLACE #600  
WEST PALM BEACH, FL  
PROJECT NUMBER CT29

**REVISIONS**

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DRAWN BY GD

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10/16/2012

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