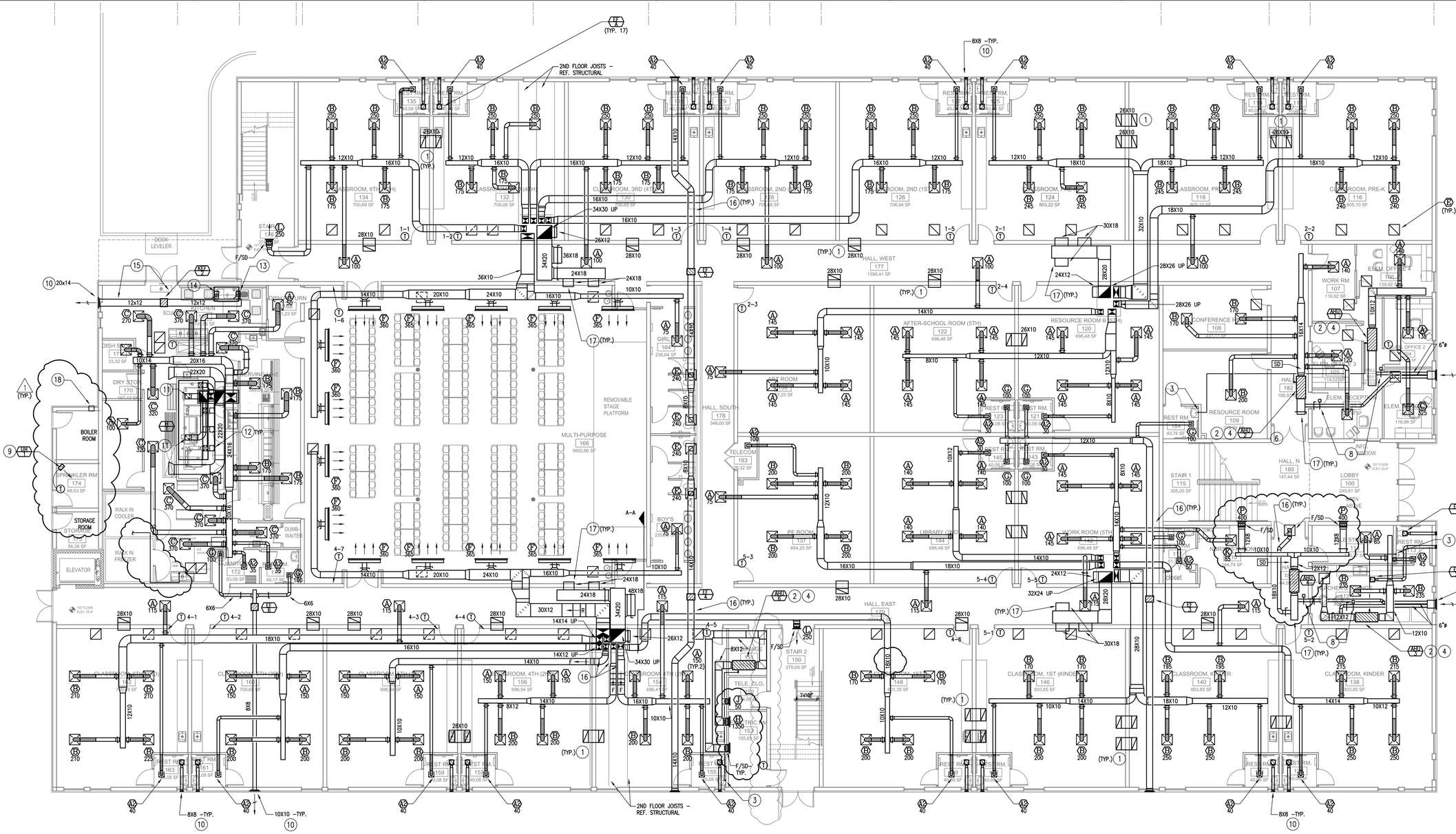


1 FIRST FLOOR PLAN - MECHANICAL

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

NORTH

GENERAL NOTES

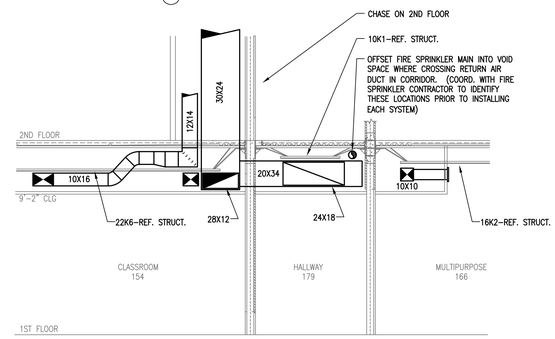
1. THESE PLANS ARE DIAGRAMMATIC IN NATURE, CONTRACTORS SHALL INCLUDE APPROPRIATE ALLOWANCES FOR OFFSETS AS REQUIRED TO ACCOMMODATE VERTICAL AND HORIZONTAL VARIATIONS IN THE LOCATIONS AND ELEVATIONS OF DUCTWORK, PIPING AND EXISTING CONDITIONS.
2. ROUTE REFRIGERANT LINES IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. UNITS ARE SHOWN IN APPROXIMATE LOCATIONS. UNITS MAY SHIFT DUE TO MAXIMUM REFRIGERANT LINE LENGTHS, STRUCTURE, ROOFING, ETC. CONTRACTOR TO COORDINATE WITH OTHER TRADES PRIOR TO INSTALLING.
3. MECHANICAL CONTRACTOR TO COORDINATE WITH LIGHTING LAYOUT ON ELECTRICAL AND ARCHITECTURAL LAYOUT AND FIRE SPRINKLER SYSTEM.
4. PENETRATIONS OF WALLS OR FLOORS FOR THE PASSAGE OF PIPING, DUCTWORK, OR OTHER EQUIPMENT SHALL BE PROPERLY SEALED AFTER INSTALLATION OF EQUIPMENT. FIELD VERIFY EXISTING WALL PENETRATIONS AND PROPERLY SEAL AS REQUIRED TO MAINTAIN WALL OR FLOOR RATING.
5. PROVIDE CODE AND MANUFACTURER-REQUIRED ACCESS TO ALL CONCEALED EQUIPMENT. COORDINATE LOCATION OF ACCESS PANELS WITH ARCHITECT.
6. PROVIDE RECTANGULAR TO ROUND DUCT TRANSITIONS AS REQUIRED.
7. ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

SPECIAL COORDINATION NOTES

1. WALL CONSTRUCTION CONSISTS OF THERMAL BLOCK WHICH UTILIZES CONCRETE COLUMNS AT INTERVALS WITHIN THE WALL SYSTEM. REFERENCE ARCHITECTURAL DRAWINGS FOR THEMRMAL BLOCK WALL LOCATIONS. CONTRACTOR TO COORDINATE WITH THERMAL BLOCK MANUFACTURER FOR EXACT PENETRATION LOCATION PRIOR TO INSTALLING ALL MECHANICAL SYSTEMS INCLUDING DUCTWORK, REFRIGERANT PIPING, ETC. REFERENCE 15010 FOR ADDITIONAL COORDINATION INSTRUCTIONS AND SHOP DRAWING DEVELOPMENT.
2. ABOVE CEILING SPACE IS LIMITED. COORDINATE WITH ALL OTHER TRADES PRIOR TO INSTALLATION AND FABRICATION OF SYSTEMS, SUCH AS WASTE, ACID WASTE, FIRE PROTECTION, CABLE TRAY, ETC. (1 TYP.)

KEYED NOTES

1. RETURN AIR TRANSFER DUCT–REFERENCE DETAIL.
2. ROUTE REFRIGERANT LINES FROM INDOOR UNIT UP IN THERMAL BLOCK WALL TO FLOOR ABOVE. COORDINATE WITH THERMAL BLOCK MANUFACTURER FOR ROUTING CONSTRAINTS.
3. ROUTE NEW 3/4" CONDENSATE DRAIN LINE DOWN IN WALL TO BELOW LAVATORY AND CONNECT TO LAVATORY TAILPIECE. INSULATE ALL CONDENSATE PIPING WITH ARMAFLEX AND SEAL IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS.
4. ROUTE 3/4" CONDENSATE DRAIN LINE FROM COOLING COIL OF EACH AIR HANDLING UNIT TO LOCATION SHOWN. PROVIDE P-TRAP DIRECTLY ADJACENT TO UNIT AND POSITION AS NOT TO OBSTRUCT REQUIRED ACCESS TO EQUIPMENT COMPONENTS.
5. ROUTE 3/4" CONDENSATE DRAIN LINE DOWN TO FLOOR DRAIN IN SPRINKLER ROOM. PROVIDE AIR GAP PER CODE. INSULATE ALL CONDENSATE PIPING WITH ARMAFLEX AND SEAL IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS. ROUTE AS NOT TO OBSTRUCT SYSTEMS OR ACCESS WITHIN ROOM.
6. PROVIDE DUCT MOUNTED SMOKE DETECTOR IN SUPPLY DUCT PER CODE. INTERLOCK DETECTOR WITH FIRE ALARM SYSTEM, SUCH THAT UPON SMOKE DETECTION, UNIT WILL BE DISABLED. LOCATE RESET IN ACCESSIBLE LOCATION.
7. MOUNT WALL MOUNTED DUCTLESS FAN COIL HIGH AS POSSIBLE.
8. PROVIDE MOTORIZED VOLUME DAMPER (MVD) IN VERTICAL. MVD TO INTERLOCK WITH ASSOCIATED AIR HANDLER SUCH THAT MVD IS 100% OPEN WHEN FAN IS ENERGIZED AND MVD IS 100% CLOSED WHEN FAN IS DE-ENERGIZED.
9. MOUNT ELECTRIC UNIT HEATER IN CLOSET TO PREVENT FREEZING. THERMOSTAT TO CONTROL UNIT HEATER AND TO BE SET AT 50 DEGREES (ADJUSTABLE).
10. CONNECT DUCTWORK TO PLENUM ATTACHED TO LOUVER. PROVIDE INSULATED PLENUM SAME SIZE AS LOUVER AND 12" DEEP. SLOPE PLENUM TOWARD EXTERIOR FOR DRAINING PURPOSES. LOUVER TO BE SIMILAR TO RUSKIN ELF837, STATIONARY TYPE BLADES, 4" FRAME, BIRD SCREEN WITH REMOVABLE FRAME, WIND LOAD OF 20 PSF. MAXIMUM FLOW RATE OF 700 FPM. COORDINATE WITH ARCHITECT FOR COLOR AND FINISH.
11. ROUTE GREASE DUCT DOWN TO KITCHEN HOOD. GREASE DUCT SHALL COMPLY WITH 2006 FMC. GREASE DUCT SHALL BE FIRE WRAPPED. TRANSITION TO HOOD CONNECTION SIZE IN VERTICAL. REF. DETAIL FOR ADDITIONAL INFORMATION.
12. ROUTE MAKEUP AIR DUCT DOWN TO KITCHEN HOOD. TRANSITION TO HOOD CONNECTION SIZE IN VERTICAL. REF. DETAIL FOR ADDITIONAL INFORMATION.
13. ROUTE 8X8 EXHAUST DUCT DOWN TO LOAD END AND CONNECT TO DISH WASHING MACHINE CONNECTION POINT. TRANSITION AS REQUIRED TO MAKE PROPER CONNECTION. BALANCE TO 200 CFM PER MANUFACTURE'S AIRFLOW REQUIREMENTS.
14. ROUTE 10X10 EXHAUST DUCT DOWN TO UNLOAD END AND CONNECT TO DISH WASHING MACHINE CONNECTION POINT. TRANSITION AS REQUIRED TO MAKE PROPER CONNECTION. BALANCE TO 350 CFM PER MANUFACTURE'S AIRFLOW REQUIREMENTS.
15. DISHWASHER EXHAUST DUCTWORK TO BE 18 GAUGE, WELDED SEAM, STAINLESS STEAL DUCT. SLOPE TOWARD DISHWASHER.
16. ROUTE DUCTWORK WITHIN JOIST SPACE AS REQUIRED TO AVOID DUCTWORK. COORDINATE WITH STRUCTURAL DRAWINGS.
17. RETURN AIR DUCTWORK IS OPEN WITH 1/2 HARDWARE CLOTH IN REMOVABLE FRAME – TYP.
18. PROVIDE TWO 24"X12" (COMBUSTION LOUVERS, ONE LOCATED WITHIN 12" A.F.F. AND ONE WITHIN TOP 12" OF CEILING. LOUVER TO BE SIMILAR TO RUSKIN ELF837, STATIONARY TYPE BLADES, 4" FRAME, BIRD SCREEN WITH REMOVABLE FRAME, WIND LOAD OF 20 PSF MAXIMUM. COORDINATE WITH ARCHITECT FOR COLOR AND FINISH. COMBUSTION CALCULATION IS 199,000 BTUH / 2,000 PER SQUARE IN = 99 SQUARE INCHES REQUIRED FREE AREA. LOUVER PROVIDES 144 SQUARE INCHES FREE AREA.
19. ROUTE CONDENSATE DRAIN LINES FROM WALK-IN COOLER AND FREEZER IN WALL AND OVER TO FLOOR SINK AND TERMINATE WITH AIR GAP PER CODE. COORDINATE WITH MANUFACTURER FOR SIZE AND LOCATION. INSULATE ALL CONDENSATE PIPING WITH ARMAFLEX AND SEAL IN ACCORDANCE TO MANUFACTURERS RECOMMENDATIONS. (1 TYP.)



2 SECTION A-A

SCALE: 1/4" = 1'-0"

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STATE OF TEXAS
R. ROSS ALEMAN
98427
REGISTERED
PROFESSIONAL ENGINEER
08.21.09

PROJECT MGR:

DRAWN BY:	CHKD. BY:
AYS	AYS

ISSUE DATES:

△	date	issue
	06.5.09	Permit Set
△	08.21.09	COH REVIEW 1

FIRST FLOOR PLAN - MECHANICAL

M2.0