

**CODED NOTES**

1. MOUNT REMOTE TEMPERATURE SENSOR AT 54" ABOVE FINISHED FLOOR. COORDINATE MOUNTING LOCATION OF TEMPERATURE SENSOR WITH TENANT AND ARCHITECT PRIOR TO ROUGH-IN.
2. MOUNT 7-DAY PROGRAMMABLE THERMOSTATS FOR (E)AHU'S AT 48" AFF ON WALL IN MANAGER'S OFFICE. THERMOSTAT SHALL BE TOTALINE P374-2200 OR EQUIVALENT WITH 2-STAGE ELECTRIC HEAT CONTROL CAPABILITY AND LOCKOUT FUNCTION SET AT 71°F UNLESS DIRECTED OTHERWISE BY OWNER. COORDINATE WITH REMOTE TEMPERATURE SENSORS AS NOTED ON PLAN. ALL CONTROL WIRING SHALL BE IN CONDUIT PER N.E.C.
3. NOT USED.
4. UNDERCUT DOOR 1".
5. (E)18"x10" EXHAUST DUCT IN CHASE TO ROOF WITH (E) FIRE DAMPER.
6. DUCTWORK TO BE INSTALLED AS HIGH AS POSSIBLE. CONTRACTOR TO COORDINATE DUCTWORK WITH LIGHTING LAYOUT AND REFLECTED CEILING PLAN. TYPICAL.
7. INSTANTANEOUS HOT WATER HEATER INTAKE/EXHAUST LOCATED IN CHASE, REFER TO PLUMBING DRAWINGS.
8. DRYER VENT LOCATED IN CHASE, REFER TO DETAIL 2/P2.0. TERMINATE AT ROOF PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE DRYER VENT FAN PER DETAIL 2/P2.0.
9. MANUAL VOLUME DAMPER. TYPICAL.
10. MOUNT EXHAUST GRILLE IN OFFICE AREA BELOW OA DUCT.
11. PROVIDE ACCESS PANEL IN GYP CEILING FOR ACCESS TO EF-2. COORDINATE WITH LIGHT FIXTURES.
12. RETURN AIR DUCT FULL SIZE OF AHU CONNECTION, LINE WITH 1" ACOUSTICAL LINER.
13. EXISTING CONDENSING UNIT LINE SETS AND WIRING UP TO ROOF LOCATED IN CHASE.
14. MANUAL VOLUME DAMPER BALANCED TO AHU OA CFM AS INDICATED IN SCHEDULE ON SHEET M2.0.
15. NOT USED.
16. RETURN AIR DUCT MOUNTED SMOKE DETECTOR. INTERLOCK WIRING BETWEEN FIRE ALARM SYSTEM RELAY AND AIR HANDLER UNIT SHUTDOWN. CONTACT SHALL BE PROVIDED BY MECHANICAL CONTRACTOR. ALL OTHER WIRING BY FIRE ALARM CONTRACTOR. UPON DETECTION OF SMOKE, AIR HANDLER UNIT SHALL SHUT DOWN UPON SIGNAL FROM FIRE ALARM SYSTEM. THE CONTRACTOR SHALL VERIFY THE COMPATIBLE TYPE OF DETECTION DEVICE TO USE WITH THE BUILDING OPERATIONS MANAGER.
17. DISCHARGE 1-1/4" CONDENSATE LINE TO MOP BASIN WITH 6" AIR GAP.
18. MOUNT DIFFUSERS AT 45° ANGLE SO THAT AIRFLOW DISCHARGE IS NOT OBSTRUCTED BY OA DUCT.
19. TAP DUCT BRANCH OFF BOTTOM OF DUCT MAIN.
20. PROVIDE TWO (2) 45° ELBOWS IN ORDER TO ROUTE DUCT BELOW STRUCTURAL MEMBER.
21. SUPPLY GRILLE DEFLECTION BLADES SHALL ANGLE DOWN 45°.

EXISTING CONDENSATE CONNECTION (FULL SIZE OF EQUIPMENT CONNECTION) TO REMAIN FOR EACH AHU. MOUNT CONDENSATE PIPING AS HIGH AS POSSIBLE. PROVIDE CLEANOUT PLUGS IN ALL 90° TURNS.

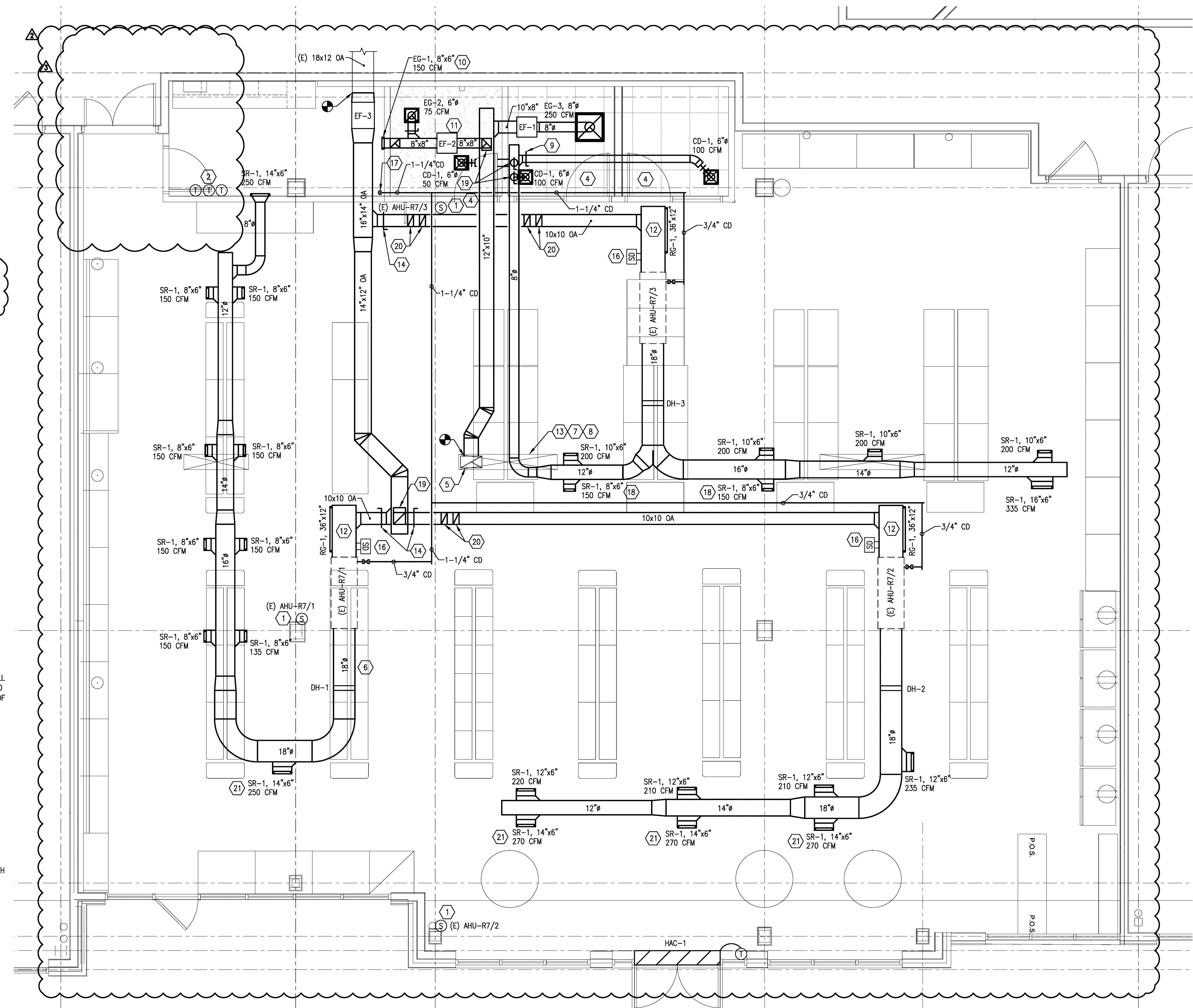
ALL EXPOSED SUPPLY DUCTWORK IN SALES FLOOR SHALL BE ROUND INSULATED DOUBLE WALL. ALL EXPOSED RECTANGULAR OA DUCTWORK SHALL HAVE 1" INTERNAL LINING. EXPOSED DUCTWORK AND GRILLES SHALL BE PAINTABLE. COORDINATE COLOR WITH ARCHITECT/OWNER.

EXISTING CORRESPONDING CONDENSING UNITS (CU-R7/1, CU-R7/2, CU-R7/3) LOCATED ON ROOF, REFER TO SHELL DRAWINGS FOR LOCATION.

**MECHANICAL GENERAL NOTES:**

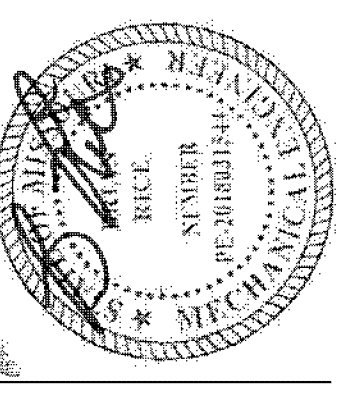
1. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT TO INSTALL A COMPLETE AND OPERATIONAL HEATING AND COOLING SYSTEM.
2. CONTRACTOR SHALL PROVIDE ALL REQUIRED HVAC PERMITS.
3. THE CONTRACTOR SHALL COMPLY WITH NFPA-90A AND ALL APPLICABLE CODES.
4. ALL HVAC WORK TO BE PERFORMED SHALL BE IN COMPLIANCE WITH ALL STATE AND LOCAL CODES.
5. FLEXIBLE DUCT SHALL COMPLY WITH SMACNA, ALL LOCAL CODES, U.L. RATING, AND NOT EXCEED FIVE FEET IN LENGTH, SHEET METAL DUCT, WHERE REQUIRED BY LOCAL CODES, SHALL BE LINED WITH 1" MATT FACED DUCTLINER IN THE FIRST 10 (TEN) FEET OF THE RETURN AND SUPPLY DUCT STARTING FROM THE HVAC UNIT. AFTER THE FIRST 10 (TEN) FEET THE USE OF 1" DUCT WRAP SHALL BE ACCEPTABLE WORK MATERIAL TO BE VERIFIED WITH CEILING ACCESSIBILITY RATING.
6. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL SWITCHES, DISCONNECTS, AND CONTROL WIRING.
7. ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS, ALLOW FOR DUCT INSULATION.
8. THE CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE THAT SHALL WARRANT ALL WORKMANSHIP AND MATERIALS FOR ONE (1) YEAR FROM THE FINAL WORK ACCEPTANCE BY THE OWNER AND A FIVE YEAR WARRANTY ON THE COMPRESSOR.
9. FILTERS SHALL BE OF THE DISPOSABLE TYPE AND SHALL BE MERV-8, PROVIDE TWO SETS, ONE DURING CONSTRUCTION AND ONE FOR USE AFTER OCCUPANCY.
10. CONTRACTORS SHALL INSTALL ALL NECESSARY OFFSETS, BENDS, AND TRANSITIONS REQUIRED TO PROVIDE A COMPLETE SYSTEM AT NO ADDITIONAL COST TO THE OWNER.
11. COORDINATE LOCATION OF ALL CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH THE ELECTRICIAN TO PREVENT CONFLICT WITH LIGHTS AND ARCHITECTURAL ELEMENTS.
12. ALL WORK OF THIS TRADE SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID ANY INTERFERENCES THAT MAY DELAY PROGRESS DURING CONSTRUCTION.
13. THE MECHANICAL CONTRACTOR SHALL TEST AND BALANCE TO THE AIR QUANTITIES ON THE PLAN AND PROVIDE A T&B REPORT.
14. CONTRACTOR SHALL INSTALL A THERMOSTAT IN ACCORDANCE WITH THERMOSTAT SPECS.
15. CONTRACTOR SHALL INSTALL MANUAL BALANCING DAMPERS AT ALL SUPPLY AIR BRANCH DUCTWORK RUN OUTS.
16. CONTRACTOR SHALL INSTALL TURNING VANES AT ALL DUCTWORK TEES AND 90 DEGREE ELBOWS.
17. CONTRACTOR SHALL INSTALL A DUCT-TYPE MOUNTED SMOKE DETECTOR FOR UNIT SHUTDOWN IN THE RETURN AIR DUCTWORK PLENUM AT AIR HANDLER UNITS. THE CONTRACTOR SHALL VERIFY THE COMPATIBLE TYPE OF DETECTION DEVICE TO USE WITH THE BUILDING OPERATIONS MANAGER.
18. ALL SHEET METAL DUCTWORK SHALL COMPLY WITH SMACNA STANDARDS. ALL DUCTWORK JOINTS SHALL BE TAPED AND SEALED.
19. CONTRACTOR SHALL PROVIDE EQUIPMENT OF THE SCHEDULED CAPACITIES DESIGNED.

EXISTING AHU AND DUCT HEATER CONTROL SEQUENCE:  
 STAGE 1 HEATING (EXISTING AIR HANDLING UNIT) SHALL BE ENABLED WHEN THE ZONE TEMPERATURE DROPS 1.5 DEGREE (ADJUSTABLE) BELOW SETPOINT. STAGE 2 (ELECTRIC DUCT HEATER) HEATING SHALL BE ENABLED WHEN THE ZONE TEMPERATURE DROPS 3 DEGREES (ADJUSTABLE) BELOW SETPOINT.



**MECHANICAL PLAN**  
 1/4" = 1'-0"

XREF-KansasCity\_M0.0.rvt  
 X19 KansasCity\_Mechanical.rvt  
 Drawn By: Andrew Wilson



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07/19/2021	Blk/Permit
08/27/2021	Revision 2
10/22/2021	Revision 3