



1/4"=1'-0"
HVAC PLAN M01

1. COORDINATE THE INSTALLATION OF THE MECHANICAL SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID REQUIRED DUE TO LACK OF COORDINATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.
2. DURING INSTALLATION OF NEW WORK, AVOID DAMAGING EXISTING SURFACES AND EQUIPMENT TO REMAIN. REPAIR DAMAGE CAUSED DURING CONSTRUCTION AT NO EXTRA COST TO THE OWNER.
3. PROVIDE TEMPORARY BARRIERS TO CONTAIN DUST AND DEBRIS RESULTING FROM THE PERFORMANCE OF THE WORK TO THE AREA WHERE WORK IS BEING PERFORMED.
4. ALL MECHANICAL EQUIPMENT SHOWN ON THE MECHANICAL PLANS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED.
5. NEW MECHANICAL EQUIPMENT AND DUCTWORK ARE SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED TO FIT THE DUCTWORK AND PIPING WITHIN THE AVAILABLE SPACE. VERIFY THAT FINAL EQUIPMENT LOCATIONS MEET MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AND PROPER AIRFLOW CLEARANCE AROUND EQUIPMENT.
6. REFER TO ARCHITECTURAL DRAWINGS FOR RELATED CONSTRUCTION DETAILS AS APPLICABLE TO THE HVAC SYSTEM. VERIFY CHASES AND PENETRATIONS SHOWN ON ARCHITECTURAL DRAWINGS THAT ARE INTENDED FOR DUCTWORK AND PIPING MEET REQUIREMENTS.
7. COORDINATE LOCATION OF ROOF MOUNTED HVAC EQUIPMENT AND ROOF PENETRATIONS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
8. INDOOR AIR QUALITY MEASURES: PROTECT INSIDE OF UNITS FROM EXPOSURE TO DIRT, PAINT AND MOISTURE. REPLACE INSULATION THAT HAS BEEN DAMAGED AT ANY TIME DURING CONSTRUCTION. DRYING THE INSULATION IS NOT ACCEPTABLE. SEAL ANY TEARS OR JOINTS OF INTERNAL FIBERGLASS INSULATION. REMOVE DEBRIS FROM CEILING/RETURN AIR PLENUMS INCLUDING DIRT. AN INDEPENDENT PROFESSIONAL DUCT CLEANING COMPANY SHALL VACUUM CLEAN ANY DUCTWORK CONNECTED TO HVAC UNITS THAT WERE OPERATED DURING THE CONSTRUCTION PERIOD AFTER NEW FILTERS ARE INSTALLED AND PRIOR TO TURNING THE SYSTEM OVER TO THE OWNER. THE INTERNAL SURFACES AND ASSOCIATED COILS OF HVAC UNITS THAT WERE OPERATED SHALL ALSO BE CLEANED.
9. DUCTWORK AND PIPING SHALL BE PARALLEL TO BUILDING COLUMN LINES UNLESS OTHERWISE SHOWN OR NOTED.
10. OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF EXCEPT WHERE CONCRETE INSERTS IN CONCRETE SLABS ARE ALLOWED BY THE SPECIFICATIONS.
11. COORDINATE LOCATION OF EQUIPMENT SUPPORTS WITH LOCATION OF EQUIPMENT ACCESS PANELS/DOORS TO ENABLE SERVICE OF EQUIPMENT AND/OR FILTER REPLACEMENT.
12. SEAL PENETRATIONS THROUGH THE BUILDING COMPONENTS IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. FIREPROOF PENETRATIONS THROUGH FIRE RATED COMPONENTS IN ACCORDANCE WITH U.L. REQUIREMENTS.
13. COORDINATE THE EXACT MOUNTING SIZE AND FRAME TYPE OF DIFFUSERS, REGISTERS AND GRILLES WITH THE SUPPLIER TO MEET THE CEILING, WALL AND DUCT INSTALLATION REQUIREMENTS.
14. ADJUST LOCATION OF CEILING DIFFUSERS, REGISTERS AND GRILLES AS REQUIRED TO ACCOMMODATE FINAL CEILING GRID AND LIGHTING LOCATIONS.
15. DUCTWORK CROSSING FIRE RATED WALLS OR OTHER FIRE RATED ASSEMBLIES SHALL BE MINIMUM 26 GAUGE SHEET METAL.
16. PROVIDE FIRE AND SMOKE DAMPERS, AS APPLICABLE, IN DUCTWORK AT CEILINGS AND WALLS AT LOCATIONS SHOWN ON THE PLANS. FIRE AND SMOKE DAMPERS SHALL CONFORM TO NFPA AS APPLICABLE. COORDINATE SLEEVE LENGTH WITH REQUIREMENTS OF WALLS AT LOCATION.
17. PROVIDE WALL OR DUCT ACCESS PANELS OR DOORS FOR ACCESS TO FIRE AND SMOKE DAMPERS. ACCESS PANEL OR DOOR SHALL BE MINIMUM SIZE OF 10" BY 10" AND SHALL BE INSTALLED WITHIN 12" OF DAMPER. PROVIDE A REMOVABLE DUCT SECTION WHERE DUCT SIZE IS TOO SMALL FOR A 10" BY 10" ACCESS DOOR.
18. LOCATE AND SET THERMOSTATS AT LOCATIONS SHOWN ON PLANS. VERIFY EXACT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION. INSTALL DEVICES WITH TOP OF DEVICE AT MAXIMUM 48" AFF TO MEET ADA REQUIREMENTS UNLESS NOTED OTHERWISE ON PLANS. PROVIDE INSULATED BACKING FOR THERMOSTATS MOUNTED ON EXTERIOR BUILDING WALLS. INSTALL WIRING IN CONDUIT PROVIDED BY DIVISION 26. AT A MINIMUM, PROVIDE CONDUIT IN THE WALL FROM THE JUNCTION BOX TO 6" ABOVE THE CEILING.
19. COORDINATE THE LOCATION AND ELEVATION OF WALL-MOUNTED DEVICES WITH PRESENTATION BOARDS, DISPLAY CABINETS, SHELVES OR OTHER COMPONENTS SHOWN ON THE ARCHITECTURAL DRAWINGS THAT ARE TO BE INSTALLED UNDER OTHER DIVISIONS. CONTRACTOR WILL NOT BE REIMBURSED FOR RELOCATION OF WALL-MOUNTED DEVICES CAUSED BY A LACK OF COORDINATION.
20. PROVIDE A MANUAL BALANCING DAMPER IN EACH BRANCH DUCT TAKEOFF FROM MAIN SUPPLY, RETURN, OUTDOOR AND EXHAUST AIR DUCTS.
21. PROVIDE A PREFABRICATED 45 DEGREE, HIGH EFFICIENCY, RECTANGULAR/ROUND BRANCH DUCT TAKEOFF FITTING WITH MANUAL BALANCING DAMPER AND LOCKING QUADRANT FOR BRANCH DUCT CONNECTIONS AND TAKE-OFFS TO INDIVIDUAL DIFFUSERS, REGISTERS AND GRILLES.
22. BRANCH DUCTWORK TO AIR OUTLETS SHALL BE SAME SIZE AS OUTLET NECK SIZE UNLESS OTHERWISE NOTED.
23. REFER TO SPECIFICATIONS FOR DUCTWORK AND PIPING INSULATION REQUIREMENTS. DUCT SIZES ON MECHANICAL PLANS INDICATE CLEAR INSIDE AIRFLOW DIMENSIONS. INCREASE SHEET METAL SIZES ACCORDINGLY TO ACCOUNT FOR THICKNESS OF DUCT LINER.
24. FLEXIBLE DUCTWORK SHALL NOT EXCEED 5'-0" IN LENGTH AND SHALL BE INSTALLED AND SUPPORTED TO AVOID SHARP BENDS AND SAGGING. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
25. PROVIDE A NEW SET OF AIR FILTERS IN UNITS PRIOR TO TESTING, ADJUSTING AND BALANCING AND BEFORE TURNING SYSTEM(S) OVER TO OWNER.

MECHANICAL CONTRACTOR SHALL COORDINATE PURCHASE, INSTALLATION, AND TROUBLESHOOTING OF THE PROLIPHIX INTERNET MANAGED THERMOSTAT DIRECTLY WITH THE CBRE BAS MANAGEMENT TEAM.
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GENERAL CONTRACTOR SHALL INCLUDE IN THEIR BID A COST FOR A 3RD PARTY TEST AND BALANCE OF THE HVAC SYSTEM.

- 1 DO NOT ROUTE DUCTWORK, PIPING, ETC. OVER ELECTRICAL PANEL BOARDS. IN THE EVENT THAT ROUTING OVER AN ELECTRICAL PANEL IS INEVITABLE, ROUTING MUST OCCUR A MINIMUM OF 6" ABOVE PANEL. PROVIDE A DRIP PAN BENEATH DUCTWORK TO PREVENT ANY CONDENSATION FROM COMING IN CONTACT WITH ELECTRICAL PANEL. RELOCATE ANY EXISTING PIPING OR DUCTWORK WHICH IS ROUTED OVER THE PANELS (AS NECESSARY TO MEET CODE REQUIREMENTS).
- 2 EXISTING ROOFTOP UNIT TO REMAIN.
- 3 ROUTE SHEET METAL RETURN AIR AS SHOWN. RETURN SHALL BE SIZED FULL SIZE OF RETURN AIR INLET AND SHALL CONNECT TO UNIT. PROVIDE DUCT LINER IN RETURN AIR DUCTWORK FOR SOUND ATTENUATION ONLY.
- 4 LANDLORD APPROVED ROOFING CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL CUTS THROUGH THE EXISTING ROOF OR TO MAKE ALTERATIONS TO EXISTING OPENINGS, OR CURB FLASHING AT GENERAL CONTRACTOR'S EXPENSE. COORDINATE WITH GENERAL CONTRACTOR.
- 5 ROUTE DUCTWORK AS TIGHT TO STRUCTURE AS POSSIBLE.
- 6 DIVISION 23 CONTRACTOR SHALL FURNISH AND INSTALL AND DIVISION 26 CONTRACTOR SHALL WIRE SMOKE DETECTORS IN THE RETURN AND SUPPLY AIR DUCTWORK AT LOCATIONS SHOWN. COORDINATE WITH DIVISION 26 CONTRACTOR.
- 7 MECHANICAL CONTRACTOR SHALL PROVIDE TEMPERATURE SENSOR AND CO2 SENSOR (WHEN INCLUDED) IN INDICATED LOCATION. MOUNT SENSORS AT 54" A.F.F. COORDINATE FINAL LOCATION OF SENSORS WITH ARCHITECT PRIOR TO INSTALLATION OF BACKING OR WIRING. SENSORS SHALL BE COMPATIBLE WITH THE PROLIPHIX THERMOSTAT AND INTERLOCKED WITH PROLIPHIX EMS IN ACCORDANCE WITH SPRINT STANDARDS.
- 8 MECHANICAL CONTRACTOR SHALL PROVIDE A PROLIPHIX INTERNET MANAGED THERMOSTAT IN INDICATED LOCATION MOUNTED AT 48" AFF. COORDINATE FINAL LOCATION OF THERMOSTAT WITH ARCHITECT PRIOR TO INSTALLATION OF THERMOSTAT BACKING OR WIRING.
- 9 ROUTE NEW EXHAUST AIR DUCTWORK TO ROOF MOUNTED EXHAUST FAN. COORDINATE EXACT ROUTING WITH STRUCTURE AND OTHER OBSTACLES AND ADJUST ROUTING TO MATCH.
- 10 MECHANICAL CONTRACTOR SHALL PROVIDE DUCT MOUNTED TEMPERATURE SENSOR FOR MONITORING ONLY AT LOCATION INDICATED. TEMPERATURE SENSOR SHALL BE COMPATIBLE WITH THE PROLIPHIX THERMOSTAT. INTERLOCK SENSOR WITH PROLIPHIX EMS.
- 11 FOR TEMPORARY CONDITIONING OF THE SPACE PRIOR TO THE INSTALLATION OF SPRINT'S NETWORK SWITCH, THE MECHANICAL CONTRACTOR SHALL WIRE THE PROLIPHIX THERMOSTAT DIRECTLY TO THE ROOFTOP UNIT. ELECTRICAL CONTRACTOR SHALL PROVIDE AN ADDITIONAL PLENUM-RATED CATEGORY 5E CABLE FOR CONNECTION OF THERMOSTAT TO THE NETWORK SWITCH LOCATED AT THE LAN RACK. REFER TO SHEET E-3 FOR MORE INFORMATION.
- 12 LANDLORD SHALL PROVIDE A GAS METER AND GAS LINE FROM GAS MAIN TO NEW ROOFTOP UNITS. FIELD VERIFY ALL REQUIREMENTS AND INCLUDE ALL COST IN BID.
- 13 LANDLORD TO PROVIDE CONDENSATE LINE FROM NEW ROOFTOP UNIT.

MECHANICAL GENERAL NOTES A11

MECHANICAL KEY NOTES A01

Sprint

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MARK	DATE	DESCRIPTION

SHEET TITLE
HVAC PLAN

PROJECT NUMBER
SPR1408

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SHEET:
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