| MECHANICAL SYMBOLS | | | |
|--|------------------------------|--|--|
| o ⊢ → © □3 | PIPE UP | | |
| G ⊢ (TIII) | PIPE DOWN | | |
| | PIPE CAP | | |
| | 90° ELBOW | | |
| \ice € ECCI3 | RISE OR DROP IN ELEVATION | | |
| | TEE OR BRANCH CONNECTION | | |
| ├ —CHS— | CHILLED WATER SUPPLY | | |
| ├ —CHR—→ | CHILLED WATER RETURN | | |
| cws | CONDENSER WATER SUPPLY | | |
| ├ CWR── | CONDENSER WATER RETURN | | |
| ├ ─HWS── | HEATING WATER SUPPLY | | |
| ├ ──HWR── | HEATING WATER RETURN | | |
| ├ ──D | CONDENSATE DRAIN LINE | | |
| ₩ōH | BALL VALVE | | |
| ₩ | BUTTERFLY VALVE | | |
| ₩ | GLOBE VALVE | | |
| ₩ | 2 WAY CONTROL VALVE | | |
| <u></u> | 3 WAY CONTROL VALVE | | |
| | 2 WAY SOLENOID VALVE | | |
| | 3 WAY SOLENOID VALVE | | |
| ⊢- | PLUG VALVE | | |
| ₩ | PRESSURE REDUCING VALVE | | |
| ├├├ | CHECK VALVE | | |
| ⊢ ₩ → | LOCK SHIELD VALVE | | |
| ₹ — | SAFETY VALVE | | |
| ≱ → | ANGLE VALVE | | |
| \ | STRAINER | | |
| <u> </u> | STRAINER W/ BLOWDOWN | | |
| \ \ \ \ | PETE'S PLUG | | |
| ├── ₩ ─ | FLEXIBLE CONNECTION | | |
| | UNION | | |
| ├ | COMPANION FLANGE | | |
| | THERMOMETER | | |
| ♀ † | PRESSURE GAUGE W/ GAUGE COCK | | |
| NOTES: NOT ALL SYMBOLS MAY BE USED. | | | |

| 1 | 100 | SUPPLY GRILLE WITH AIR QUANTITY | |
|--|--|---------------------------------|----------|
| <u>\</u> | 100R/100E | | QUANTITY |
| | | LIGHT TROFFER WITH AIR QUANTITY | - |
| | <u></u> 100 | THERMOSTAT | |
| | Ð Ð | HUMIDISTAT | |
| <u> </u> | | MAGNEHELIC PRESSURE GAUGE. | |
| <u>`</u> | +==+ | MANUAL VOLUME DAMPER | |
| <u>_</u> <u>→</u> M | —————————————————————————————————————— | MOTORIZED VOLUME DAMPER | |
| $\overset{\mathcal{Z}}{\longrightarrow}$ BDD | BDD BDD | BACKDRAFT DAMPER | |
| $\overset{\sim}{\bigotimes}$ FD | FD | FIRE DAMPER | |
| $\overset{\sim}{\bigotimes}$ SD | SD | SMOKE DAMPER | |
| $\stackrel{\sim}{\widetilde{oldsymbol{oldsymbol{\otimes}}}}$ FSD | FSD | COMBINATION FIRE/SMOKE DAMPER | |
| $\frac{\mathbb{T}_{D}}{\mathbb{T}_{D}}$ | S _D | DUCT MOUNTED SMOKE DETECTOR | |
| | U U | FLEXIBLE DUCT CONNECTION | |
| | | RISE IN DUCT ELEVATION | |
| | | DROP IN DUCT ELEVATION | |
| <i>~</i> · · · · · · · · · · · · · · · · · · · | | SINGLE AND DOUBLE LINE DUCT WOI | RK |
| 36×24 | | RECTANGULAR DUCT WORK | |
| 7 3 | 6ø 8 | ROUND DUCT WORK | |
| | 24ø | FLAT OVAL DUCT WORK | |
| | | RADIUS ELBOW | |
| | | MITERED ELBOW WITH TURNING VANE | S |
| | ДŢ. | BRANCH CONNECTION TO MAIN | |
| HELO TOP | | DUCT CROSS OVER | |
| R = RISE | D = DROP | ELEVATION CHANGE | |
| <u>∳</u> м∨D A 100] ↓ W×D | MVD A 100 WxD | SIDEWALL REGISTER | |
| 0x12 6x12 0x12 | D-∯→ 18x12 MVD 16x14 SPLIT | 30x12 18x12 MAIN BRADUCT SPI | |
| 0x12 — 18x MVD 8x12 — UB-BRANCH AP — — | 8"ø 18 | 30x12 18x12 SUB-BRATAP AND | |
| \longleftarrow | | TRANSITIONS | |
| DUCT WITH INTERNAL LINER | | | |
| SUPPLY DUCT UP, DOWN | | | |
| | | RETURN/EXHAUST DUCT UP, DOWN | |
| | | | |

MECHANICAL GENERAL NOTES

- 1. ALL EQUIPMENT, MATERIALS AND INSTALLATION METHODS AS OUTLINED IN THE EXISTING SPECIFICATIONS SHALL APPLY TO THIS PROJECT UNLESS OTHERWISE NOTED ON THESE DRAWINGS.
- 2. STANDARD DETAILS ILLUSTRATED ON THE DRAWINGS SHALL BE APPLIED IN ALL CASES WHERE THE FEATURE OCCURS IN THE SYSTEM DESIGN.
- 3. PRIOR TO THE SUBMISSION OF BID, THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING BUILDING CONDITIONS, UTILITY CONNECTIONS, AND PERTINENT BUILDING SERVICES.
- 4. COORDINATE ALL PENETRATIONS OF BUILDING STRUCTURE PRIOR TO CORING OF SLAB, CUTTING OF WALLS, ETC.
- 5. DRAWINGS ARE SCHEMATIC IN NATURE AND SHALL NOT BE SCALED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL DUCTWORK AND PIPING WITH OTHER TRADES AND PROVIDING OFFSETS IN DUCTWORK AND PIPING AS REQUIRED. ALL DUCTWORK SHALL BE ROUTED AS CLOSE TO STRUCTURE AS POSSIBLE WITH MAIN TRUNK DUCTS ABOVE BRANCH DUCTS TO CEILING AIR DEVICES.
- 3. ALL DUCTWORK SIZES SHOWN ARE CLEAR INSIDE DIMENSION IN INCHES. SUPPLY, RETURN AND EXHAUST DUCTWORK IS EXTERNALLY INSULATED UNLESS OTHERWISE INDICATED. CONTRACTOR IS REQUIRED TO COORDINATE ACTUAL DUCT ROUTING AND SIZING AS NECESSARY FOR MAINTAINING REQUIRED CLEARANCES IN COORDINATION WITH OTHER TRADES. RESIZING OF DUCT, IF NECESSARY, SHALL BE BASED ON EQUAL FRICTION METHOD.
- 7. MAJOR EQUIPMENT SHOWN ON THE PLANS AND ELEVATIONS ILLUSTRATE THE GENERAL ARRANGEMENT AND SPACE ALLOCATIONS. THE CONTRACTOR SHALL VERIFY THE SPACE REQUIREMENTS FOR EACH SYSTEM COMPONENT USING MANUFACTURER CERTIFIED SHOP DRAWINGS AND MAKE THE NECESSARY ADJUSTMENTS IN EQUIPMENT PLACEMENT AND CONNECTION IN ORDER TO ACCOMMODATE THE EXACT EQUIPMENT INSTALLED.
- 8. COORDINATE MECHANICAL EQUIPMENT ABOVE CEILING WITH LIGHT FIXTURES, ELECTRICAL EQUIPMENT, AND PIPING TO CODE REQUIRED CLEARANCE AND MAINTAIN CLEARANCE FOR MAINTENANCE.
- 9. PROVIDE SMOKE DETECTORS AS INDICATED ON THE MECHANICAL PLANS AND AS REQUIRED BY NFPA 90A AND LOCAL CODES.
- 10. REFER TO THE ARCHITECTURAL PLANS FOR LOCATIONS OF ALL FIRE AND SMOKE RATED WALLS. PROVIDE DAMPERS IN ALL PENETRATIONS THROUGH RATED WALLS TO MATCH THE REQUIREMENTS OF THE RATED WALL. ALL FIRE, SMOKE, AND COMBINATION FIRE/SMOKE DAMPERS SHALL BE U.L. RATED.
- 11. REFER TO ARCHITECTURAL CEILING PLANS FOR CEILING TYPES AND EXACT LOCATIONS OF ALL CEILING MOUNTED DEVICES. COORDINATE AIR DEVICE MOUNTING FRAMES WITH CEILING TYPES.
- 12. CEILING SUPPLY AIR DIFFUSERS ARE FOUR WAY THROW UNLESS NOTED ON THE DRAWINGS WITH FLOW ARROWS. REFER TO AIR DEVICE SCHEDULE FOR ADDITIONAL INFORMATION
- 13. SIZE RIGID ROUND AND FLEX DUCT RUN-OUTS TO DIFFUSERS IN ACCORDANCE WITH THE AIR DEVICE RUNOUT SCHEDULE.
- 14. REFER TO ARCHITECTURAL INTERIOR ELEVATION DRAWINGS FOR EXACT LOCATION OF ALL WALL MOUNTED DEVICES WHERE THE ARCHITECT HAS INDICATED ITEMS.
- 15. THE MECHANICAL CONTRACTOR SHALL FURNISH ACCESS DOORS FOR INSTALLATION BY THE GENERAL CONTRACTOR IN WALLS AND CEILINGS WHERE ACCESS IS REQUIRED FOR CONCEALED VALVES, ADJUSTABLE EQUIPMENT, DAMPERS, AND CONTROL DEVICES.
- 16. THE CONTRACTOR SHALL COORDINATE WORK AFFECTING OCCUPIED AREAS OUTSIDE OF THE SCOPE OF WORK AREA WITH THE OWNER. EXISTING UTILITIES PASSING THROUGH THE SCOPE OF WORK AREA ARE TO REMAIN IN SERVICE THROUGHOUT THE PROJECT. RELOCATION AND INTERRUPTION OF EXISTING SERVICES ARE TO BE CLOSELY COORDINATED WITH THE BUILDING OWNER TO MEET THE REQUIREMENTS OF THE HOSPITAL AND BUILDING SCHEDULE. THE CONTRACTOR'S BID SHALL INCLUDE COST FOR OVERTIME WORK AS REQUIRED TO ACCOMMODATE THE OWNER'S OPERATING SCHEDULE.

TEMPORARY AHU NOTES

DURING RENOVATION OF AHU-2, TEMPORARY AIR SHALL BE PROVIDED FOR THE AREAS OUTSIDE OF THE SCOPE OF WORK FROM A TEMPORARY AIR HANDLING UNIT. REFER TO SHEET M6.01 AND THE SPECIFICATIONS FOR THE LOCATION AND SPECS FOR THE UNIT.

NUMBER DRAWING TITLE M0.00 INFORMATION SHEET - MECHANICAL M0.01 SCHEDULES - MECHANICAL M1.01 DEMOLITION PLAN - MECHANICAL M1.02 DEMOLITION PIPING PLAN - MECHANICAL M2.01 FLOOR PLAN - MECHANICAL M3.01 PIPING PLAN - MECHANICAL M4.01 ENLARGED PLAN - MECHANICAL M5.01 DETAILS - MECHANICAL M5.02 DETAILS - MECHANICAL MEP6.01 TEMPORARY AHU PLAN - MECHANICAL

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