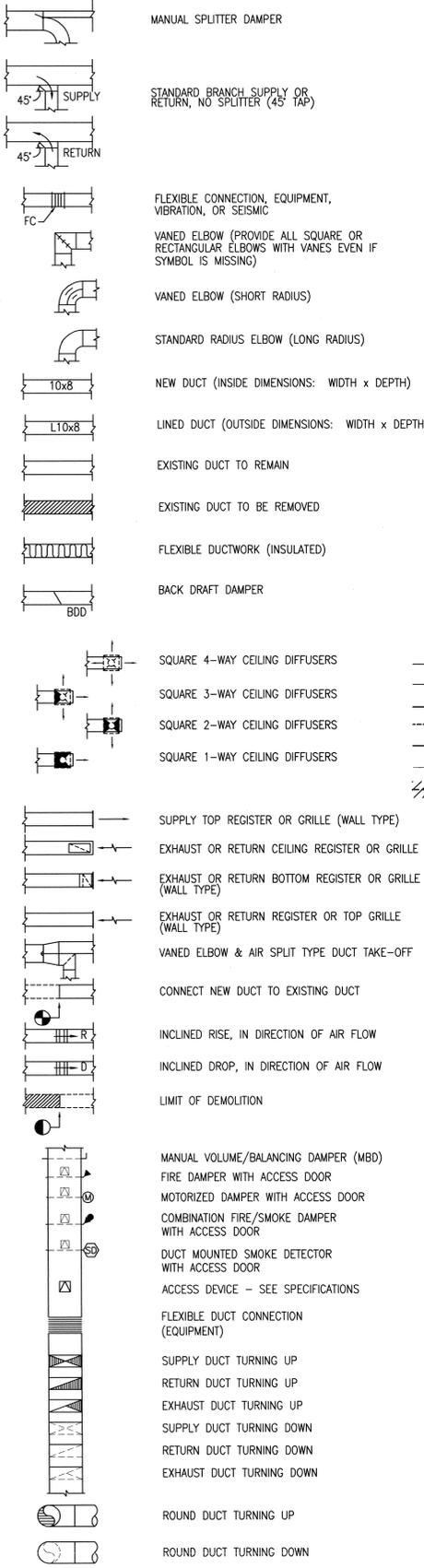


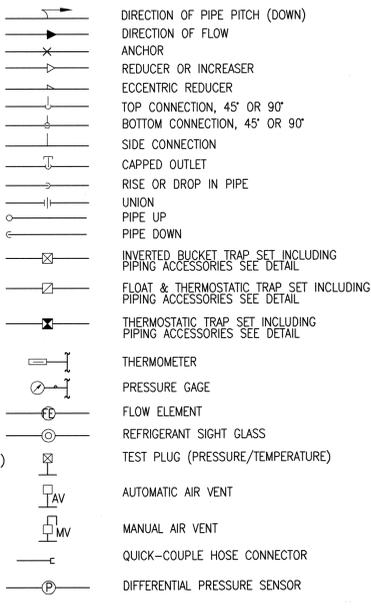
ABBREVIATIONS

Table of abbreviations including A/E, AD, AF, AFF, AFMD, AHU, AMP, AP, APD, API, AS, ASME, BDD, BHP, BTUH, C, CCD, CD, CFM, CHR, CHS, CV, DB, DDC, DEG, DF, DIA, DP, DPS, EA, EAT, ECC, EF, EG, ENT, ESP, ET, EWT, EX, F, F/SDPR, FA, FC, FD, FM, FPM, FPS, FS, FSTAT, FT, GA, GAL, GPM, GS, HAC, HC, HD, HOA, HP, HS, HVAC, HWP, HWR, HWS, HZ, I/O, ID, IN, IN-WG, IN-LB, KG, KPa, KW, KWh, LAT, LBS/HR, LF, LWT, M, MA, MAT, MAX, MBH, MCA, MERV, MIN.

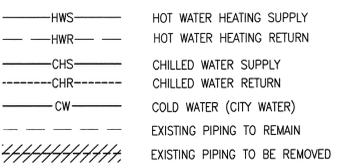
DUCTWORK SYMBOLS



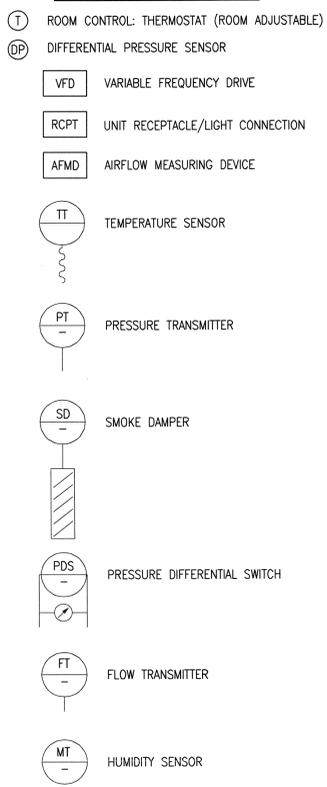
GENERAL PIPING SYMBOLS



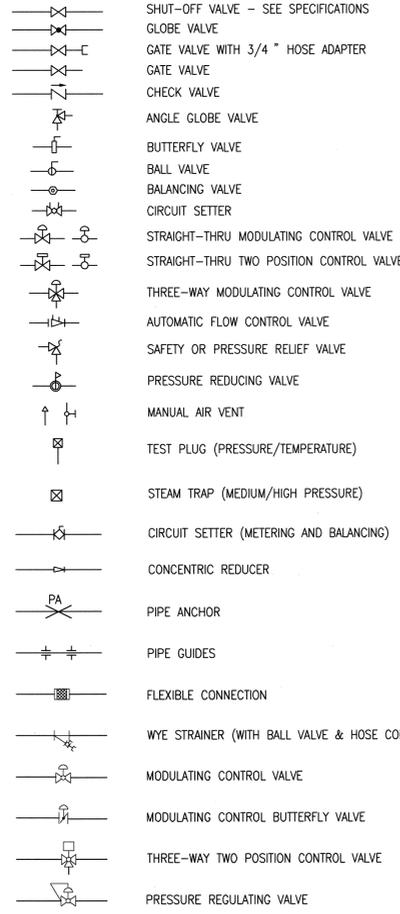
PIPING SYMBOLS



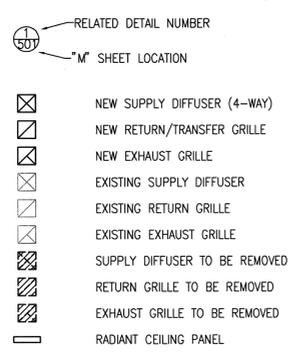
CONTROLS SYMBOLS



VALVE SYMBOLS



DRAWING SYMBOLS



GENERAL NOTES

- 1. COORDINATE ALL WORK WITH EXISTING CONDITIONS, ALL OTHER TRADES, AND IN ACCORDANCE WITH ALL STATE, LOCAL AND NATIONAL CODES, AS WELL AS WITH ALL FEDERAL HEALTHCARE REGULATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES, PERMITS AND LICENSES FOR THE COMPLETE INSTALLATION OF THEIR WORK.
3. CONTRACTOR SHALL VISIT AND EXAMINE THE SITE PRIOR TO SUBMITTING BID TO BECOME FAMILIAR WITH EXISTING CONDITIONS.
4. BEFORE ANY WORK IS STARTED, THE CONTRACTOR SHALL MAKE A THOROUGH SURVEY WITH THE COR OF THE AREAS IN WHICH ALTERATIONS OCCUR AND AREAS WHICH ARE ANTICIPATED ROUTES OF ACCESS, AND FURNISH A DETAILED REPORT. REPORT SHALL BE SIGNED BY BOTH COR AND THE CONTRACTOR, AND SHALL BE PROVIDED TO THE CONTRACTING OFFICER.
5. ALL NEW HVAC EQUIPMENT AND DDC CONTROLS SHALL BE TIED BACK INTO THE EXISTING DDC SYSTEM.
6. CARE SHOULD BE TAKEN BY ALL CONTRACTORS TO AVOID DAMAGING OR DISTURBING EXISTING CONSTRUCTION THAT IS TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ANY REPAIRS NECESSARY TO RECTIFY DAMAGE AND RESTORE EXISTING CONSTRUCTION TO UNDAMAGED STATE UPON COMPLETION OF WORK AT NO EXPENSE TO OWNER.
7. ALL NEW DEVICES, EQUIPMENT, CONTROLS, ETC. (INCLUDING, BUT NOT LIMITED TO: AHU'S, VAV'S, COILS, GRILLES, REGISTERS, DIFFUSERS, HOT WATER PIPING AND VALVES, ETC.) SHALL BE TESTED AND BALANCED AS PART OF THIS WORK. EXISTING EQUIPMENT TO REMAIN SHALL BE TESTED AND BALANCED AS NOTED ON DRAWINGS.
8. ALL DUCTWORK RUNS SHOWN ARE REPRESENTATIVE ONLY, CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONDITIONS IN THE FIELD (EXISTING, OR PREDICATED BY LOCATION OF NEW EQUIPMENT) THAT MAKE NECESSARY ALTERNATE ROUTING OF DUCTWORK. THE RENOVATED SPACE HAS HIGH ABOVE CEILING CLEARANCES AND DUCTWORK MAY BE STACKED VERTICALLY, AS REQUIRED, OR TO FACILITATE MAINTENANCE FOR COORDINATION WITH OTHER UTILITIES, (E.G., PATIENT LIFT SUPPORTS.)
9. ALL PIPING RUNS SHOWN ARE REPRESENTATIVE ONLY, CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONDITIONS IN THE FIELD (EXISTING, OR PREDICATED BY LOCATION OF NEW EQUIPMENT) THAT MAKE NECESSARY ALTERNATE ROUTING OF PIPING.
10. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL AND CONTROLS CONTRACTORS TO PROVIDE POWER CONNECTIONS AND DDC CONTROLS FOR ALL EQUIPMENT.
11. ALL DIFFUSERS NOT SHOWN AS A FULL CEILING GRID (24"x24") SHALL BE A MINIMUM OF 12"x12".
12. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING (PATCHING, SEALING, FIRE-STOPPING, ETC.) ALL ABANDONED WALL/FLOOR PENETRATIONS AND ANY NEW PENETRATIONS CREATED DURING THE COURSE OF WORK.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY ARCHITECTURAL WORK (INCLUDING, BUT NOT LIMITED TO: FLOORING, CEILING TILE AND GRID, SMOKE PARTITIONS ABOVE CEILING, GYPSUM WALL BOARD AND PAINTING, PLASTER, ETC.) THAT IS DAMAGED, DISTURBED, OR REMOVED INCIDENTAL TO THIS WORK.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SMOKE/FIRE DAMPERS AT ALL PENETRATIONS OF EXISTING AND/OR NEW SMOKE/FIRE RATED PARTITIONS. NEW SMOKE DAMPERS WITH AUTOMATIC CONTROLS SHALL BE INTEGRATED INTO THE EXISTING FIRE DETECTION AND ALARM SYSTEM. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER REQUIREMENTS.
15. ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN A FURRED CHASE OR ABOVE THE SUSPENDED CEILING.
16. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED.
17. ACCESS PANELS IN SUSPENDED CEILINGS ARE REQUIRED FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC. ACCESS PANELS SHALL BE FURNISHED AND INSTALLED UNDER THE ARCHITECTURAL SPECIFICATIONS.
18. TOTAL STATIC PRESSURE NOTED IN THE SCHEDULES INCLUDES DUCT SYSTEM, TERMINAL UNITS, FILTERS, COILS, ETC.
19. FOR TYPICAL WATER PIPING CONNECTIONS TO EQUIPMENT SEE STANDARD EQUIPMENT DETAILS.
20. DIFFUSER, REGISTER AND GRILLE SIZES SHOWN ON FLOOR PLANS ARE NECK SIZES.
21. PROVIDE INSULATED DIFFUSERS AND GRILLES. INSULATE ALL REUSED DIFFUSERS AND GRILLES IN ACCORDANCE WITH THE SPECIFICATIONS.
22. WATER PIPE CONNECTIONS TO AIR HEATING AND COOLING COILS SHALL BE MADE TO PROVIDE COUNTER FLOW BETWEEN WATER AND AIR.
23. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF CEILING DIFFUSERS, REGISTERS, AND GRILLES.
24. MECHANICAL CONTRACTOR SHALL PERFORM DUCT PRESSURE/LEAKAGE TEST(S) FOR ALL DUCTWORK IN THE PRESENCE OF DESIGN ENGINEER AND/OR COR PRIOR TO INSTALLING INSULATION. DUCTWORK SHALL MEET DUCT PRESSURE CLASS AND DUCT LEAKAGE CLASSIFICATION SPECIFIED ON SHEET M601.
25. PRIOR TO CONTROLS PROGRAMMING, MECHANICAL CONTRACTOR SHALL PROVIDE TO CONTROLS VENDOR THE ACTUAL ROOM NUMBER.
26. RELOCATE DIFFUSERS AS REQUIRED FOR ANY NEW LAY IN CEILING WORK. ALL FLEXIBLE DUCTWORK ON RUNOUTS TO DIFFUSERS SHALL NOT EXCEED 5' IN LENGTH. MECHANICAL CONTRACTOR SHALL ENSURE THAT THE FLEXIBLE DUCTWORK IS FREE OF BENDS THAT WOULD RESTRICT AIRFLOW. INSULATE BACK OF GRILLES.
27. MECHANICAL CONTRACTOR IS TO REMOVE ALL DUCTWORK, PIPING AND EQUIPMENT. NO ADDITIONAL WALLS, CEILING, ETC. BEYOND THOSE SHOWN IN THIS PROJECT ARE NECESSARY FOR REMOVAL OF EQUIPMENT, PIPING, CONDUIT AND WIRING.
28. PRIOR TO WORK, ALL AIR SYSTEMS SHALL BE TESTED FOR AIRFLOW AND STATIC PRESSURE. THE CONTRACTOR SHALL PROVIDE A REPORT THAT INCLUDES CFM QUANTITY TO THE COR.
29. ALL CAV/VAV AIR TERMINAL UNITS AND RADIANT CEILING PANELS SHALL BE PROVIDED WITH ISOLATION VALVES, UNIONS, AND DRAINS IN ORDER TO FACILITATE REMOVAL, REPAIR AND REPLACEMENT.
30. CONTRACTOR SHALL DEMOLISH, BACK TO RISER, ANY DUCT OR PIPING LINES NOT SHOWN ON DEMOLITION DRAWINGS, BUT THAT HAVE BEEN ABANDONED OR ARE NOT IN SERVICE. THIS WORK WILL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
31. WHERE CONFLICTS WITH OTHER UTILITIES OR CONSTRUCTION OCCUR, CONTRACTOR SHALL PROVIDE DUCT TRANSITIONS (AND CHANGES IN DIMENSIONS) AS REQUIRED TO AVOID CONFLICT. DUCT OF DIFFERING SIZE TO THAT SHOWN ON PLANS SHALL HAVE A MINIMUM FREE AREA EQUAL TO THE DUCT SIZE LISTED ON PLANS.
32. ALL DOORS SHALL BE UNDERCUT AS REQUIRED TO MAINTAIN AIR BALANCES.

Table with 2 columns: REVISION NO., REVISION DESCRIPTION



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Table for APPROVALS with columns for CHIEF OF ENGINEERING and other roles.

Table for Drawing Title: MECHANICAL LEGEND, ABBREVIATIONS & GENERAL NOTES

Table for Project Title: RENOVATE 3B CLINIC FOR STEP-DOWN, B1

Table for Date: 1/8/2015, Project Number: 564-14-102, Drawing No: M001

