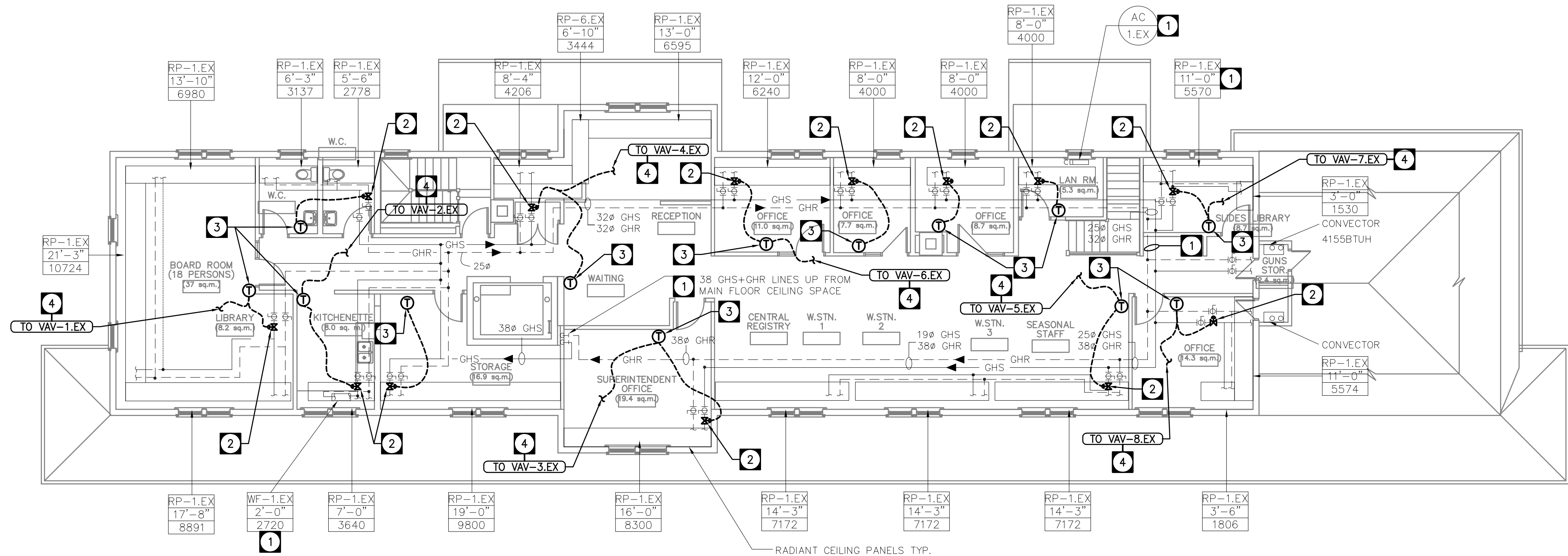


SECOND FLOOR PLAN - EXISTING VENTILATION LAYOUT WITH NEW CONTROLS

SCALE: 1:100



SECOND FLOOR PLAN - EXISTING HEATING PIPING LAYOUT WITH NEW CONTROLS

SCALE: 1:100

GENERAL NOTES:

1. EXAMINE THE COMPLETE SET OF CONTRACT DOCUMENTS TO ENSURE THAT THE WORK CAN BE CARRIED OUT WITHOUT SIGNIFICANT CHANGES TO THE INTENT OF THE DOCUMENTS. NO FUTURE ALLOWANCE SHALL BE MADE FOR CHANGES UNLESS THE DEPARTMENTAL REPRESENTATIVE HAS BEEN NOTIFIED IN WRITING OF ANY DISCREPANCIES OR INTERFERENCES, PRIOR TO THE CLOSE OF TENDER. REFER TO SPECIFICATION APPENDIXES FOR ADDITIONAL INFORMATION REGARDING THE CONTROLS.
2. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS, CONNECTIONS, SIZES, INVERTS, ETC. PRIOR TO COMMENCEMENT OF WORK.
3. AN ABC CERTIFIED (OR EQUIVALENT) BALANCE CONTRACTOR SHALL REBALANCE ALL OF THE AIR AND HYDRONIC SYSTEM FLOWS TO PROVIDE THE REQUIRED AIRFLOWS & FLUID FLOWS. NOTE THAT SOME DIFFUSER/GRILLE/REGISTER AIRFLOWS ARE NOT SHOWN ON THE DRAWINGS BUT ARE SHOWN IN THE ORIGINAL 2002 BALANCE REPORT WHICH IS IN SPECIFICATION APPENDIX 'E'. THE ORIGINAL 2002 BALANCE REPORT ALSO SHOWS FLUID FLOWS. REBALANCE ALL INLETS, OUTLETS, DIFFUSERS, GRILLES, HYDRONIC FLUID FLOWS, ETC. TO THE DESIGN FLOWS SHOWN IN THE ORIGINAL 2002 BALANCE REPORT.
4. NEW THERMOSTATS CONNECTED TO THE BUILDING AUTOMATION SYSTEM SHALL BE PROVIDED WITH USER SETTABLE LOCKOUT CODES (ADJUSTABLE) TO PREVENT TAMPERING BY UNAUTHORIZED PEOPLE.
5. THE CONTRACTOR SHALL EMPLOY SKILLED ARCHITECTURAL SUB-CONTRACTORS FOR ALL CUTTING AND PATCHING.
6. IT IS CRITICAL THAT THE CONTRACTOR MAINTAINS THE EXISTING HEATING AND VENTILATION SYSTEMS OPERATIONAL DURING THE UPGRADE TO THE CONTROL SYSTEMS. REFER TO THE SPECIFICATION FOR PROPOSED PHASING.
7. ALL EXISTING BRANCH TAKEOFFS ON THE EXISTING HEATING PIPING LAYOUT PLAN ARE 19MM UNLESS NOTED OTHERWISE.
8. NOTE THAT EXISTING EQUIPMENT TO REMAIN AND BE REUSED IS SHOWN WITH A LIGHT GRAYSCALE LINE, WHILE NEW AND REFURBISHED EQUIPMENT IS SHOWN WITH A 'NON GRAYSCALE' HEAVY BLACK LINE.
9. NOTE THAT THE EXISTING CEILING SPACES ARE USED AS RETURN AIR PLENUMS AND THE WIRING NEEDS TO BE PLENUM RATED TO THE LATEST EDITION OF THE BUILDING/ELECTRICAL CODES. EXISTING THERMOSTATS ARE INSTALLED WITH CONDUIT IN THE WALLS STUBBED UP/DOWN INTO THE CEILING SPACE AND THEN PLENUM RATED CABLE IS USED TO CONNECT TO THE LOW PRESSURE BY-PASS BOX'S CONTROL PANEL. EXISTING NON COMPLIANT PLENUM WIRING NEEDS TO BE REMOVED. NEW COMPLIANT WIRING IS PERMITTED TO BE INSTALLED IN A SIMILAR FASHION.
10. THE NEW NETWORK COMMUNICATION CABLE SERVING THE NEW CONTROL SYSTEM SHALL BE A DIFFERENT COLOUR (RED) THAN THE EXISTING NETWORK CABLES (BLUE) AND IT SHALL BE LABELED. IT SHALL BE INSTALLED EXPOSED IN THE CEILING SPACE AND PROPERLY SUPPORTED AT REGULAR INTERVALS.
11. NOTE THAT ALL CONDUIT, WIRING, DEVICES, EQUIPMENT AND PIPING THAT IS ABANDONED AS PART OF THIS PROJECT SHALL BE REMOVED.

DRAWING NOTES:

1. EXISTING EQUIPMENT (FANS, HEATERS, PIPING, DUCTWORK, ETC.) SHOWN WITH A "LIGHT GRAYSCALE LINE" TO REMAIN. TYPICAL
2. APPROXIMATE LOCATION OF EXISTING HYDRONIC HEATING SYSTEM CONTROL VALVE. REPLACE EXISTING HYDRONIC HEATING SYSTEM CONTROL VALVE WITH NEW HYDRONIC HEATING SYSTEM CONTROL VALVE. REBALANCE GLYCOL FLOW. TYPICAL
3. APPROXIMATE LOCATION OF EXISTING THERMOSTAT WIRED TO CONTROL THE INDICATED EQUIPMENT. REMOVE EXISTING THERMOSTAT AND THE ASSOCIATED HYDRONIC HEATING SYSTEM CONTROL VALVES. REPLACE THEM WITH NEW HYDRONIC HEATING SYSTEM CONTROL VALVES AND A NEW THERMOSTAT THAT IS CONNECTED TO THE NEW BUILDING AUTOMATION SYSTEM AND ABLE TO BE CONTROLLED/MONITORED THRU IT. WIRE NEW THERMOSTAT TO CONTROL THE SAME EQUIPMENT AS WAS PREVIOUSLY CONTROLLED BY THE REMOVED THERMOSTAT. TYPICAL
4. REFER TO THE SECOND FLOOR EXISTING VENTILATION PLAN FOR THE APPROXIMATE LOCATION OF THE LOW PRESSURE BYPASS BOX THAT IS CONTROLLED BY THIS THERMOSTAT. REMOVE THE EXISTING ANALOG CONTROLS SERVING THE EXISTING LOW PRESSURE BYPASS BOX AND REPLACE THEM WITH NEW DIGITAL CONTROLS THAT ARE CONNECTED TO THE NEW BUILDING AUTOMATION SYSTEM AND ABLE TO BE CONTROLLED/MONITORED THRU IT. TYPICAL
5. APPROXIMATE LOCATION OF EXISTING NAILOR LOW PRESSURE BYPASS BOX MODEL A3400 COMPLETE WITH NAILOR 'ES' 24 VAC ANALOG CONTROLS. REFER TO SPECIFICATION APPENDIXES FOR ADDITIONAL INFORMATION. NOTE THAT EACH BOX HAS 120V/1-PHASE POWER WIRED TO IT AND IS COMPLETE WITH A 40 V.A. RATED TRANSFORMER THAT IS PERMITTED TO BE REUSED TO POWER THE NEW CONTROLS IF SUITABLE. REFER TO SECOND FLOOR PLAN FOR LOCATION OF THERMOSTAT CONTROLLING THIS BYPASS BOX AND ANY ASSOCIATED HYDRONIC HEATING SYSTEM CONTROL VALVES SERVING THE ASSOCIATED HYDRONIC RADIATION/RADIANT PANELS. REMOVE EXISTING THERMOSTAT AND ANALOG CONTROLS SERVING THE LOW PRESSURE BYPASS BOX AND REPLACE THEM WITH NEW DIGITAL CONTROLS THAT ARE CONNECTED TO THE NEW BUILDING AUTOMATION SYSTEM AND ABLE TO BE CONTROLLED/MONITORED THRU IT. ALSO REPLACE THE ASSOCIATED EXISTING HYDRONIC HEATING SYSTEM CONTROL VALVES WITH NEW CONTROL VALVES. REBALANCE AIR & GLYCOL FLOWS. TYPICAL
6. CONTROL WIRING TO THE THERMOSTAT'S ASSOCIATED RADIANT PANEL'S CONTROL VALVE(S). REFER TO HEATING PIPING LAYOUT PLAN FOR APPROXIMATE LOCATION OF ASSOCIATED CONTROL VALVE(S). TYPICAL