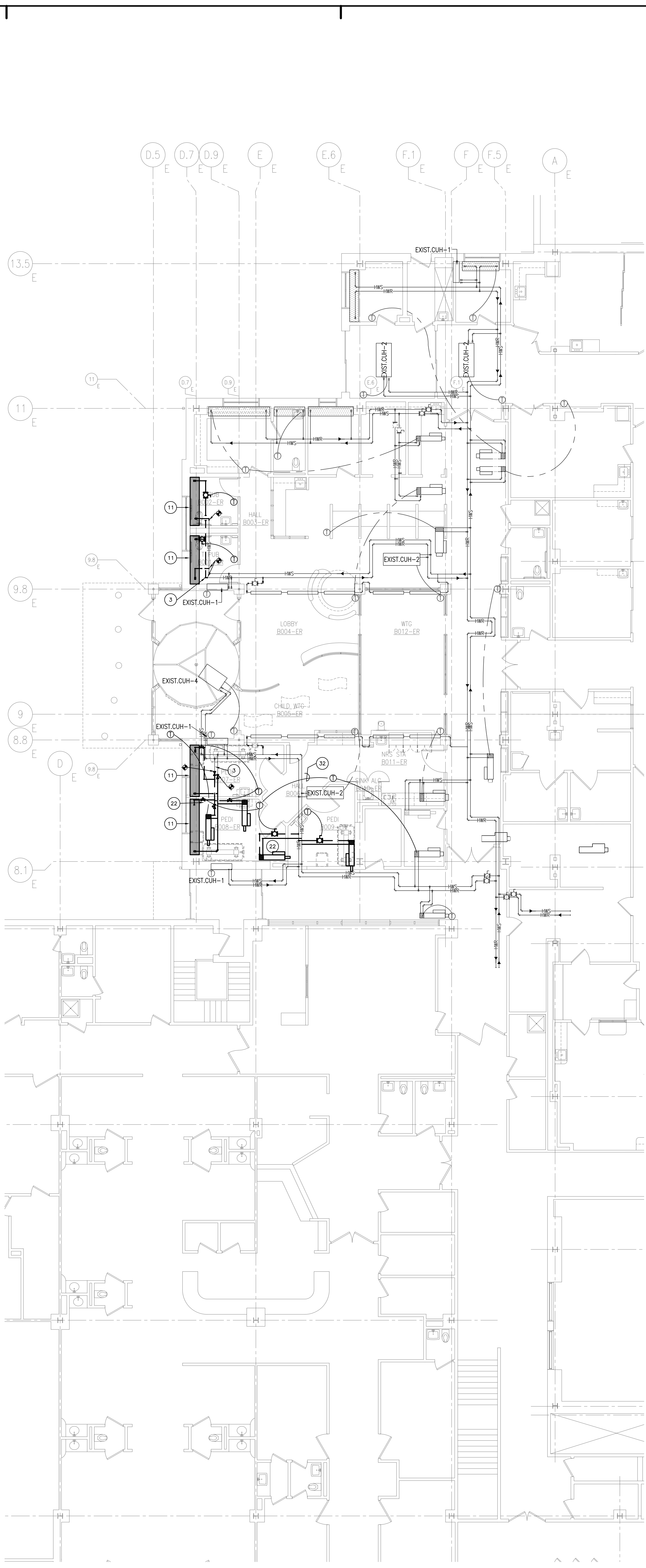
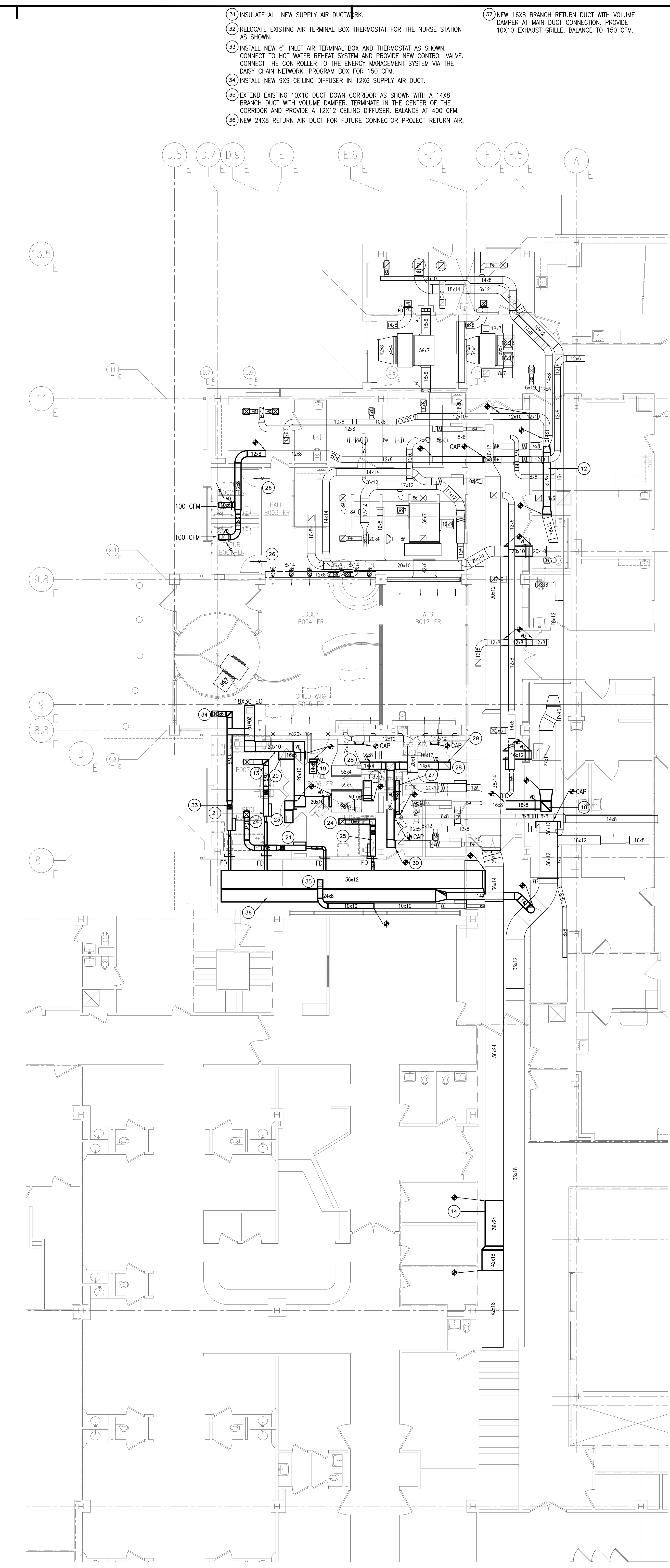


1 BASEMENT DEMOLITION PLAN
1/8" = 1'-0"



3 BASEMENT PIPING PLAN
1/8" = 1'-0"



2 BASEMENT DUCTWORK PLAN
1/8" = 1'-0"

- 17 INSULATE ALL NEW SUPPLY AIR DUCTWORK.
- 18 RELOCATE EXISTING AIR TERMINAL BOX THERMOSTAT FOR THE NURSE STATION AS SHOWN.
- 19 INSTALL NEW 4" INLET AIR TERMINAL BOX AND THERMOSTAT AS SHOWN. CONNECT TO HOT WATER REHEAT SYSTEM AND PROVIDE NEW CONTROL VALVE. CONNECT THE CONTROLLER TO THE ENERGY MANAGEMENT SYSTEM VIA THE DUSY CHAIN NETWORK. PROGRAM BOX FOR 150 CFM.
- 20 INSTALL NEW 9x9 CEILING DIFFUSER IN 12x6 SUPPLY AIR DUCT.
- 21 EXTEND EXISTING 10x10 DUCT DOWN CORRIDOR AS SHOWN WITH A 14x8 BRANCH DUCT WITH VOLUME DAMPER. TERMINATE IN THE CENTER OF THE CORRIDOR AND PROVIDE A 12x12 CEILING DIFFUSER. BALANCE AT 400 CFM.
- 22 NEW 24x8 RETURN AIR DUCT FOR FUTURE CONNECTOR PROJECT RETURN AIR.
- 23 NEW 16x8 BRANCH RETURN DUCT WITH VOLUME DAMPER AT MAIN DUCT CONNECTION. PROVIDE 10x10 EXHAUST GRILLE. BALANCE TO 150 CFM.

- 24 DEMOLISH EXISTING E.R. WAITING RECOILATION FAN, SF-R-1 AND ALL CONNECTED DUCT DISTRIBUTION (EXCEPT VERTICAL DRIPS IN THE WALLS) AND ASSOCIATED EQUIPMENT. TERMINATE ELECTRICAL POWER AS REQUIRED BY ELECTRICAL DIV. 16.
- 25 REMOVE TWO (2) RETURN AIR GRILLES, LOCATED NEAR THE FLOOR. ABANDON THE VERTICAL DUCTWORK BURIED IN WALL. REFER TO ARCHITECTURAL PLANS FOR WALL COVERING OVER OLD RETURN AIR GRILLES OPENINGS.
- 26 REMOVE EXISTING RADIAN HEATING PANELS. PROVIDE BRANCH SHUT-OFF VALVES FOR CONVENIENCE IN ORDER TO RECONNECT TO NEW RADIANT PANELS ADDED IN THE NEW WORK PLAN.
- 27 REMOVE SIX (6) RETURN AIR TERMINAL BOXES AND RETURN TO OWNER INVENTORY.
- 28 EXISTING AIR CURTAIN TO REMAIN.
- 29 CUT AND CAP EXISTING 36x12 RETURN AIR DUCT AT LOCATION SHOWN. REDUCING THE RETURN AIR OF AHU-B.1 (LOCATED IN THE 4TH FLOOR MECHANICAL ROOM) BY 3725 CFM.
- 30 THE EXISTING RETURN AIR SYSTEM FOR THIS RENOVATION AREA WILL BE CONVERTED TO AN ALL EXHAUST AIR SYSTEM. THE NEW EXHAUST WILL BE ROUTED UP THROUGH THE EXISTING ROOF IN THIS LOCATION AND A NEW EXHAUST FAN WILL BE INSTALLED ON THE ROOF ABOVE. METAL DECK AND CONCRETE CUTTING DEMOLITION IS REQUIRED.
- 31 REPAIR EXISTING DUCT JOINTS WITH SCREWS AND CAULK. REINFORCE DUCT SECTIONS PER SMACNA STANDARDS FOR 3" W.C. PRESSURE. CLASSIFICATION WITH TOP AND BOTTOM ANGLE IRON. ASSEMBLED WITH THREADED ROOF INSULATE REPAIRED DUCTWORK. LABEL LOCATION OF DUCT TRANSVERSE. THIS WILL REQUIRE A SHUTDOWN OF THE AIR HANDLER WHICH MUST BE APPROVED AND COORDINATED WITH THE OWNER.
- 32 REMOVE TWO (2) EXISTING SUPPLY AIR DIFFUSERS, LOCATED IN THE TRAPEZOIDAL WAITING AND EMS AREA. EXISTING SUPPLY AIR DUCTWORK SERVING THESE AREAS WILL BE CONVERTED TO EXHAUST DUCT FOR THE NEW PUBLIC TOILET ROOMS.
- 33 REMOVE EXISTING 4" INLET SUPPLY AIR TERMINAL BOX S-8. CAP OFF 4" BRANCH DUCTWORK FROM MAIN SUPPLY DUCT IN CORRIDOR. CAP OFF HOT WATER REHEAT BRANCH PIPING AND REMOVE ASSOCIATED THERMOSTAT. TERMINATE ELECTRICAL CONNECTIONS PER DIVISION 16. THIS 12x9 SUPPLY AIR DUCT WILL BE UTILIZED AS AN EXHAUST AND CONNECTED TO THE NEW EXHAUST SYSTEM.
- 34 INSTALL NEW 18" DEEP, HOT WATER RADIAN PANEL (WALL TO WALL), RE-CONNECT TO EXISTING HOT WATER PIPING AND PROVIDE NEW INDIVIDUAL CONTROL VALVES AND SEPARATE BRANCH PIPING CIRCUITS AS SHOWN. INTERLOCK NEW RADIAN PANEL HOT WATER CONTROL VALVES WITH THE HOT WATER CONTROL VALVES FOR THE SUPPLY AIR TERMINAL BOXES FOR TWO PED ROOMS. THE TOILET ROOM RADIAN HEATING PANELS ARE NOT INTERLOCKED WITH THE SUPPLY AIR TERMINAL BOXES. PROVIDE NEW WALL THERMOSTATS FOR ALL 4 NEW RADIAN HEATING PANELS.
- 35 NEW SECTION OF 14x12 EXHAUST DUCT.
- 36 NEW 20x10 RETURN AIR DUCT TO EXISTING CUH-2.
- 37 REWORKED SECTION OF HIGH PRESSURE DUCTWORK. SEE NOTE 8 ABOVE.
- 38 DEMOLISH PART OF EXISTING CUH-2 RETURN AIR PLENUM AS SHOWN. REFORM OR REPLACE WITH NEW AND CONNECT NEW DUCTWORK AS SHOWN.
- 39 RE-USE EXISTING 8" INLET SUPPLY AIR TERMINAL BOX S-2 FOR THE NEW NURSE STATION, B011-ER. RELOCATE THERMOSTAT. BALANCE AND ADJUST SET POINTS PER NEW DUCTWORK PLAN.
- 40 DEMOLISH TWO (2) EXISTING 9x9 SUPPLY AIR DIFFUSERS AND CAP BRANCH DUCTS THAT SUPPLY THEM.
- 41 TRANSFER EXISTING 27x17 TO NEW 20x20 EXHAUST DUCT UP TOWARDS ROOF. TRANSITION 20x20 TO A 22" ROUND DUCT THROUGH NEW ROOF CURB FOR NEW EXHAUST FAN EF-1.
- 42 NEW 14x8 BRANCH DUCT WITH BRANCH VOLUME DAMPER CONNECTED TO EXISTING 16x8 DUCT. NEW 12x12 RETURN GRILLE. 400 CFM.
- 43 EXTEND EXISTING 16x8 DUCT INTO PEDI ROOM B007-ER. PROVIDE BRANCH VOLUME DAMPER IN DUCT ABOVE HALL 5206-ER (I.E. OUTSIDE OF PEDI ROOM B007-ER) AND INSTALL NEW 10x10 EXHAUST GRILLE IN PEDI ROOM B007-ER. 150 CFM.
- 44 NEW 4" ROUND INLET AIR TERMINAL BOX WITH HOT WATER REHEAT COIL AND SOUND ATTENUATOR. PROVIDE WITH HONEYWELL PROGRAMMABLE DIRECT DIGITAL CONTROLS TO MATCH EXISTING TERMINAL BOXES ALREADY ON THIS DISTRIBUTION SYSTEM. CONNECT THE CONTROLLER TO THE ENERGY MANAGEMENT SYSTEM VIA THE DUSY CHAIN NETWORK. PROGRAM BOX FOR 150 CFM. THIS ARRANGEMENT WILL BE TYPICAL FOR PEDI ROOMS B007-ER & ROOM B008-ER. THE SUPPLY AIR TERMINAL BOX FOR PEDI ROOM B008-ER WILL HAVE CFM SETPOINT OF 180 RESPECTIVELY. AIR TERMINAL BOX PERFORMANCE BASED ON ENVIROTECH MODEL SDR-SA WITH HOT WATER REHEAT COIL.
- 45 INTERLOCK HOT WATER REHEAT COIL CONTROL VALVES WITH RADIANT PANEL CONTROL VALVES TO STAGE ROOM HEATING CONTROL VIA THE ROOM WALL MOUNTED THERMOSTAT.
- 46 INSTALL NEW 12x12 EXHAUST GRILLE IN EXISTING 16x8 DUCT. PROVIDE MANUAL VOLUME DAMPER IN DUCT AND LOCATE DAMPER IN HALL B006-ER OUTSIDE OF PEDI ROOM. BALANCE TO 180 CFM.
- 47 9x9 CEILING DIFFUSER.
- 48 NEW 4" ROUND INLET AIR TERMINAL BOX WITH HOT WATER REHEAT COIL AND SOUND ATTENUATOR. PROVIDE WITH HONEYWELL PROGRAMMABLE DIRECT DIGITAL CONTROLS TO MATCH EXISTING TERMINAL BOXES ALREADY ON THIS DISTRIBUTION SYSTEM. CONNECT THE CONTROLLER TO THE ENERGY MANAGEMENT SYSTEM VIA THE DUSY CHAIN NETWORK. PROGRAM BOX FOR 150 CFM. AIR TERMINAL BOX PERFORMANCE BASED ON ENVIROTECH MODEL SDR-SA WITH HOT WATER REHEAT COIL.
- 49 UNDERCUT TOILET ROOM DOORS 1/2".
- 50 CONNECT NEW 8x4 DUCT TO EXISTING 8x8 EXHAUST DUCT. INSTALL A NEW 8x4 EXHAUST GRILLE IN NEW 8x4 DUCT FOR SINK ALC B010-ER. BALANCE TO 50 CFM.
- 51 TWO (2) NEW 9x9 SUPPLY DIFFUSERS LOCATED IN NURSE STATION B011-ER. BALANCE TO 200 CFM EACH.
- 52 NEW 14x8 BRANCH DUCT.
- 53 CONNECT NEW 14x8 TO EXISTING 14x8 SUPPLY AIR DUCT.

MARK	ISSUE DATE	DESCRIPTION

Issue Log

Key Plan

TRO
ARCHITECTURAL
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Maine Medical Center
ED Pediatric Exam Renovation
Portland, Maine

Drawing Title
**HVAC
BASEMENT LEVEL
DEMOLITION AND NEW WORK**

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