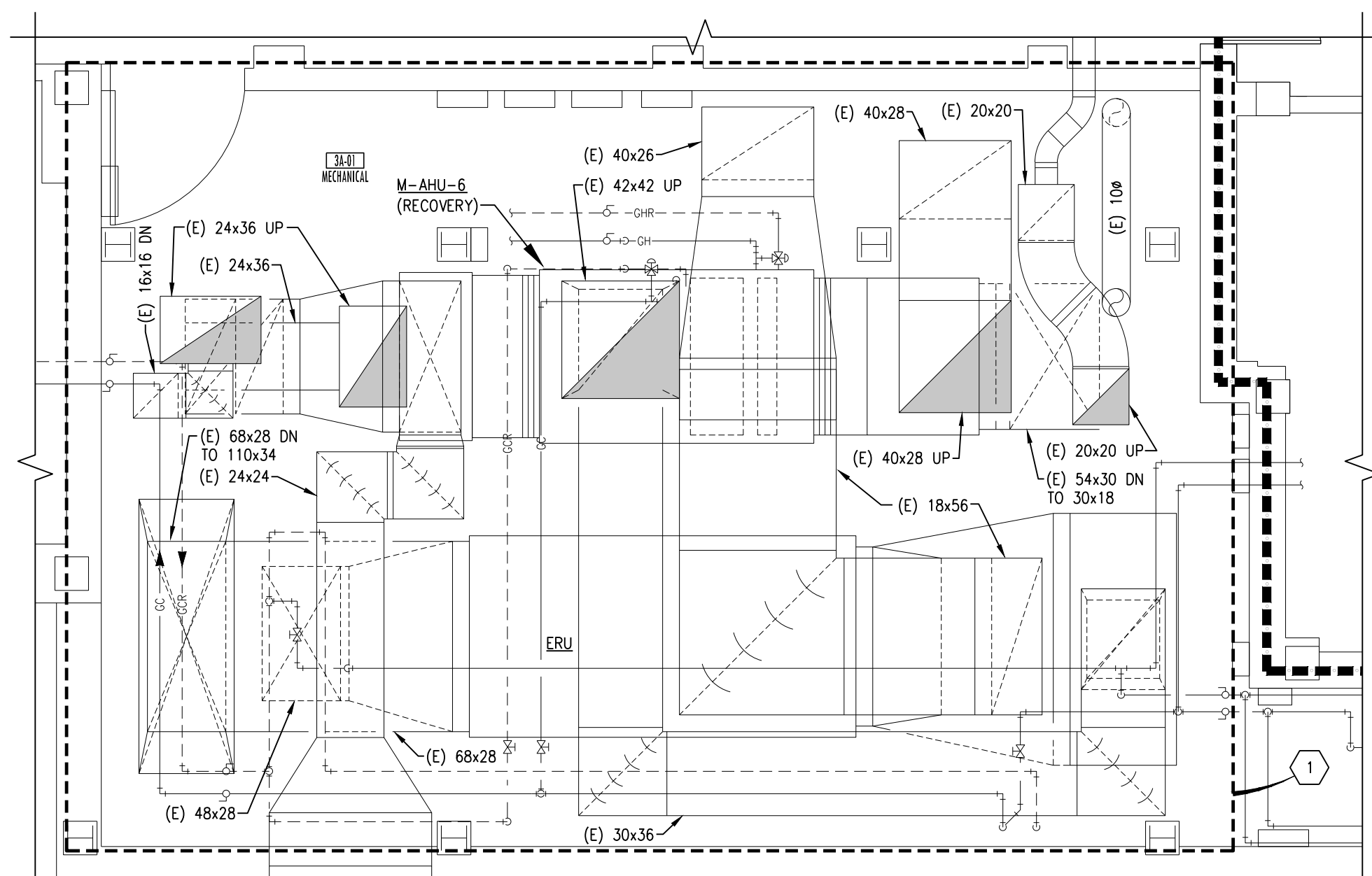


5 EXISTING LAYOUT PENTHOUSE REMODELING PLAN

N H3.3

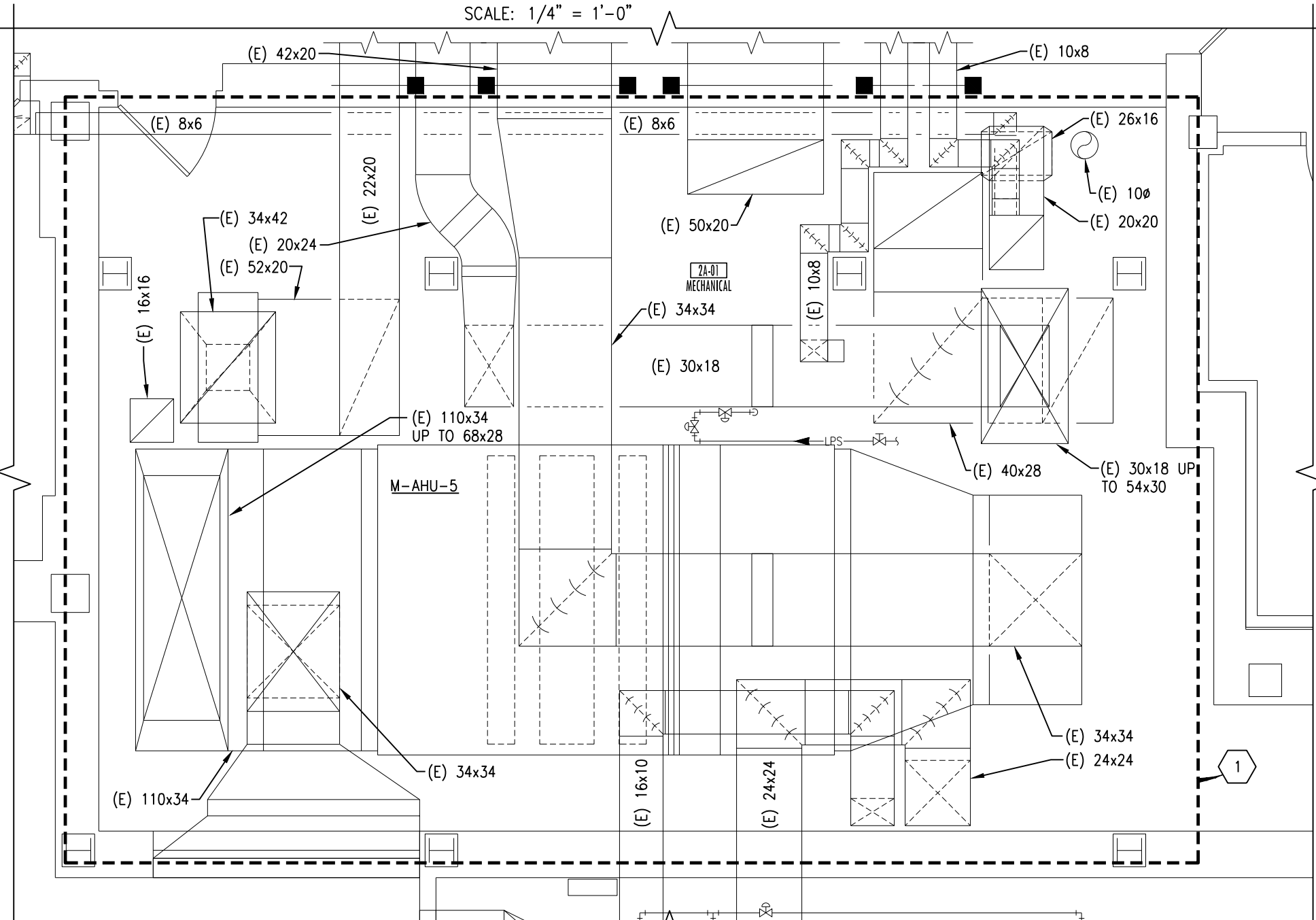
SCALE: 1/4" = 1'-0"



4 EXISTING LAYOUT BA-01 REMODELING PLAN

N H3.3

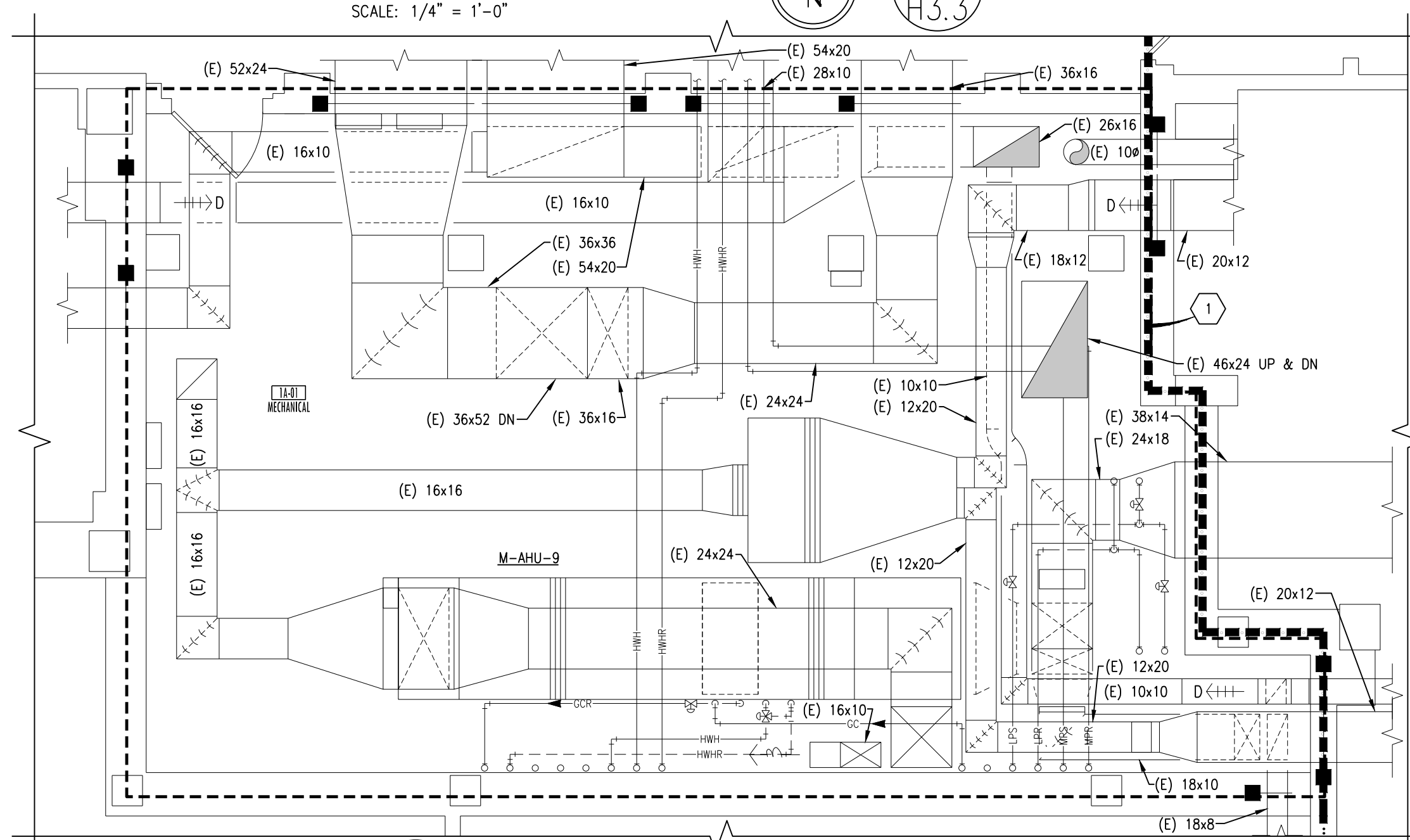
SCALE: 1/4" = 1'-0"



3 EXISTING LAYOUT 2A-01 REMODELING PLAN

N H3.3

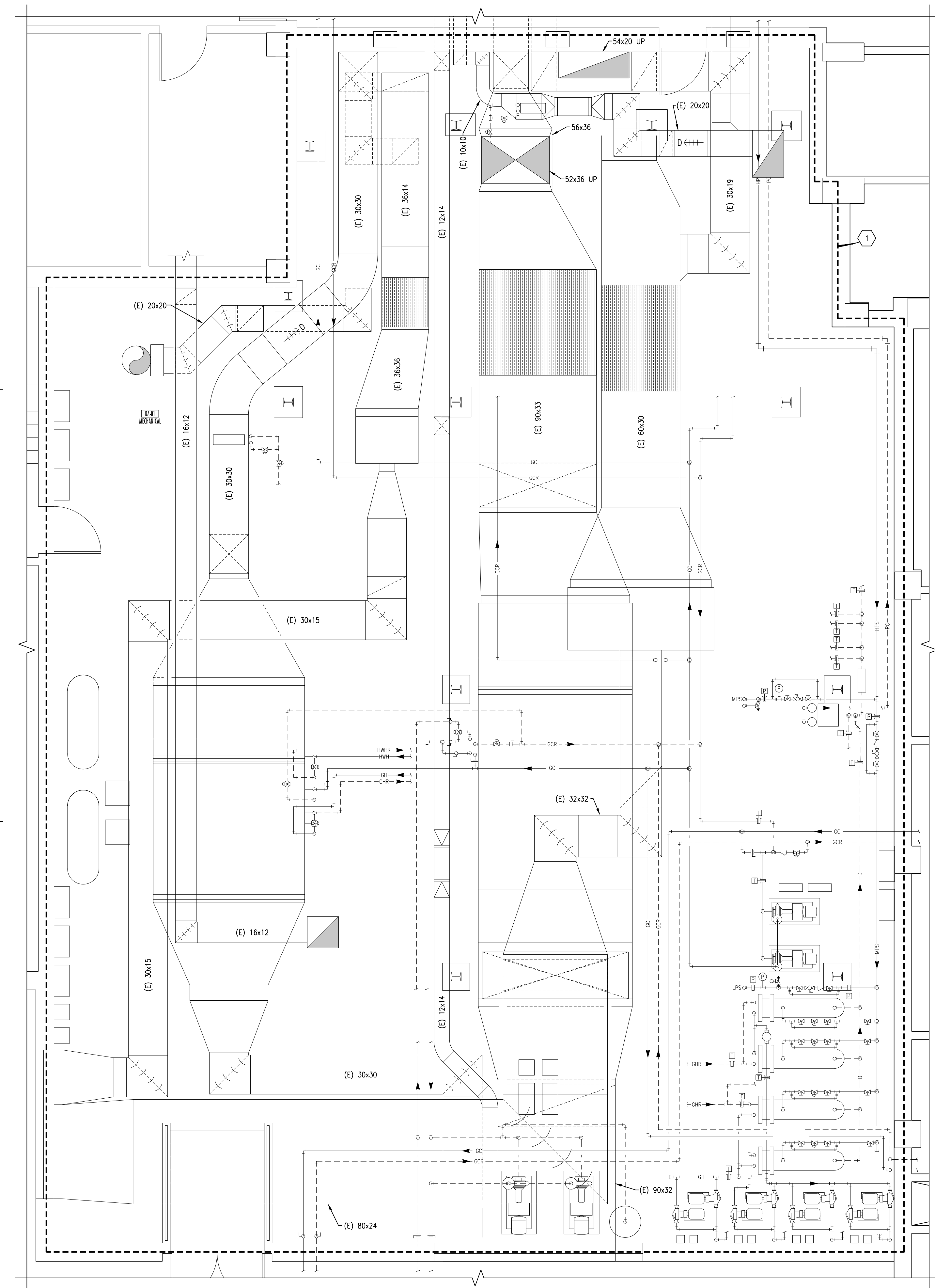
SCALE: 1/4" = 1'-0"



2 EXISTING LAYOUT IA-01 REMODELING PLAN

N H3.3

SCALE: 1/4" = 1'-0"



1 EXISTING LAYOUT BA-01 REMODELING PLAN

N H3.3

SCALE: 1/4" = 1'-0"

- AIR HANDLER PHASING NOTES:**
1. ALL AIR HANDLER REPLACEMENTS SHALL BE PERFORMED IN APRIL/MAY OR SEPTEMBER/OCTOBER MONTHS IN CAREFUL COORDINATION WITH THE OWNER. PROVIDE A MINIMUM OF 2 WEEKS NOTICE PRIOR TO BEGINNING WORK.
  2. FOR TEMPORARY AIR HANDLER OPERATION, PROVIDE A TEMPORARY FAN EQUAL TO THE UNIT AIRFLOW/HORSE POWER, AND HEPA FILTER TO BE MOUNTED TO THE SUPPLY DUCTWORK PRIOR TO REMOVING UNIT. REFER TO FLOOR PLANS FOR SUGGESTED TEMPORARY SUPPLY FAN LOCATION. FAN SHALL RUN CONTINUOUSLY. MAINTAIN THE MECHANICAL ROOM TEMPERATURE AT A MINIMUM OF 55 DEGREES AND MAXIMUM OF 70 DEGREES DURING AHU CHANGE OUT USING EXISTING HEATING UNITS OR TEMPORARY COOLING/HEATING UNITS. OUTSIDE AIR, RETURN AIR, RELIEF AIR, AND SUPPLY AIR DUCTS SHALL BE LEFT OPEN TO USE THE MECHANICAL ROOM AS A PLENUM.
  3. ALL UNIT SHUTDOWN WORK SHALL BE COMPLETED DURING WEEKEND AND EVENING HOURS. REPLACEMENT OF UNIT SHALL BE COMPLETED AS QUICKLY AS POSSIBLE WITH MULTIPLE SHIFTS REQUIRED TO EXPEDITE WORK. ALL CONTROLS WORK THAT CAN BE COMPLETED BEFORE AND SHALL BE COORDINATED. WORK SHALL BE COMPLETED DURING SPRING, FALL, OR WINTER MONTHS.
  4. DISASSEMBLE NEW AIR HANDLERS TO THEIR SMALLEST COMPONENTS AS REQUIRED TO FIT THROUGH EXISTING DOORS. TEMPORARILY REMOVE EXISTING MECHANICAL ROOM DOORS AS NECESSARY.
- MECHANICAL NOTES:**
- A. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES BETWEEN THE "AS-BUILT" CONDITIONS AND THESE DRAWINGS.
  - B. COORDINATE ALL HVAC PIPING AND DUCTWORK INSTALLATION WITH GENERAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL CONTRACTORS.
  - C. MAINTAIN 3'-0" CLEAR SPACE IN FRONT OF ALL ELECTRICAL, CONTROL, AND ACCESS PANELS FOR ACCESSIBILITY.
- 1 ALL EXISTING INSULATED DUCTWORK IN MECHANICAL ROOM SHALL BE RE-TAPED IN ORDER TO REPAIR LOOSE AND HANGING INSULATION PATCH AND TAPE ALL EXISTING DAMAGED AND MISSING INSULATION AS WELL AS ANY EXISTING HOLES/PUNCTURES. PROVIDE CORNER REINFORCEMENT ON ALL EXISTING BOARD INSULATION AND TAPE TO SEAL EXISTING DUCT SIZES ARE LISTED FOR REFERENCE.

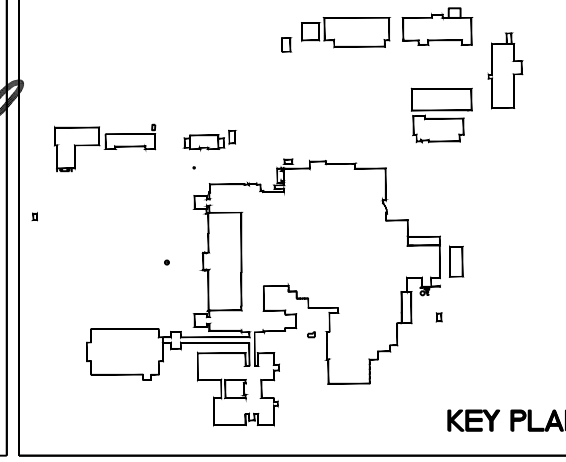
F:\Projects\2012213\DWG\2012213-PH3.3.dwg/14/2016 11:02 AM

Revisions	Date

**Dept. of Veterans Affairs**  
**Medical Center**  
 2101 Elm Street  
 Fargo, ND 58102

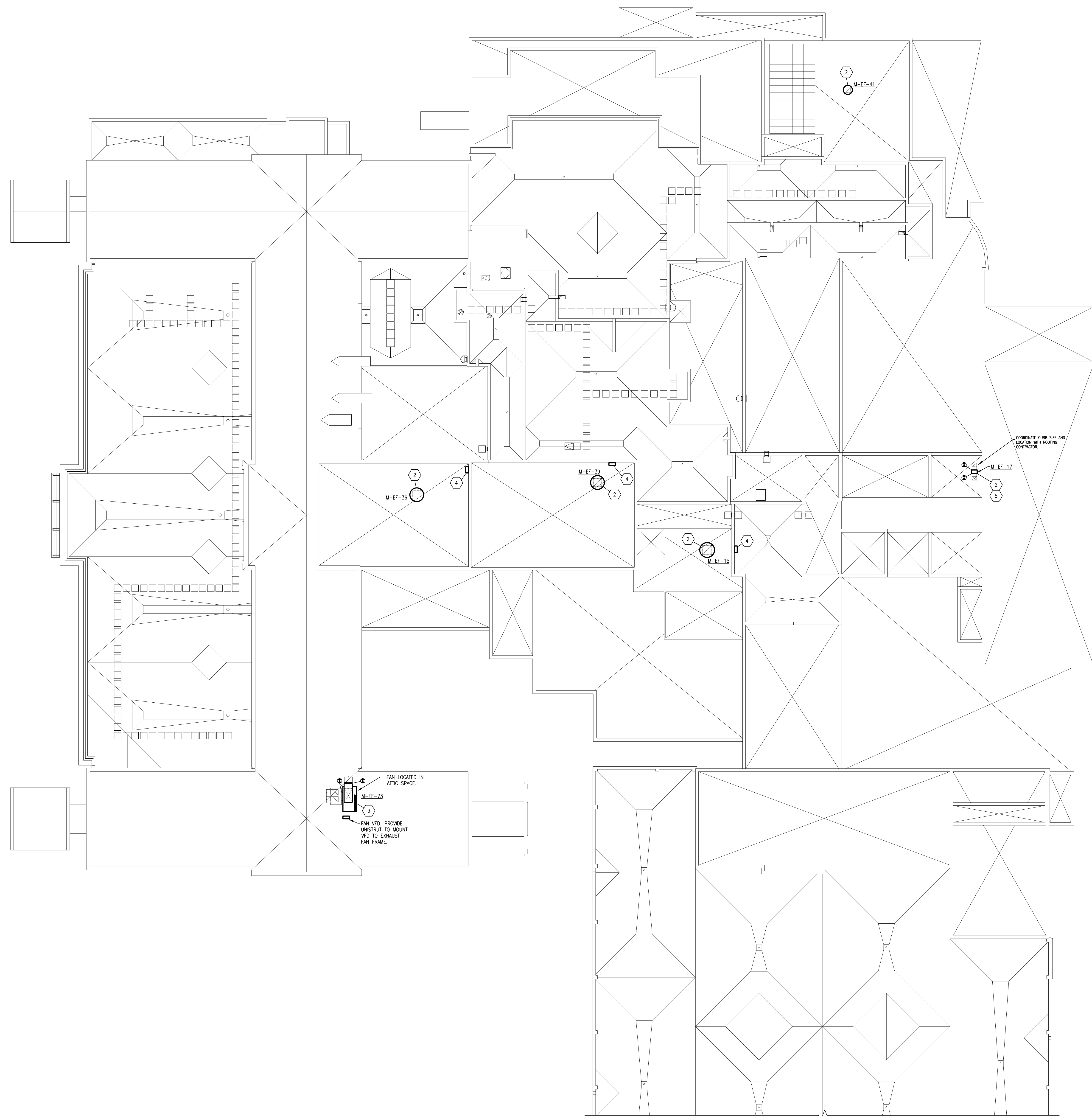
**ONE**  
 Fargo • Grand Forks • Bismarck  
 Alexandria • Minneapolis • 877.380.0501

REGISTERED PROFESSIONAL ENGINEER  
 JOEL C. PECK  
 PE - 6847  
 DATE 07/20/06  
 NORTH DAKOTA

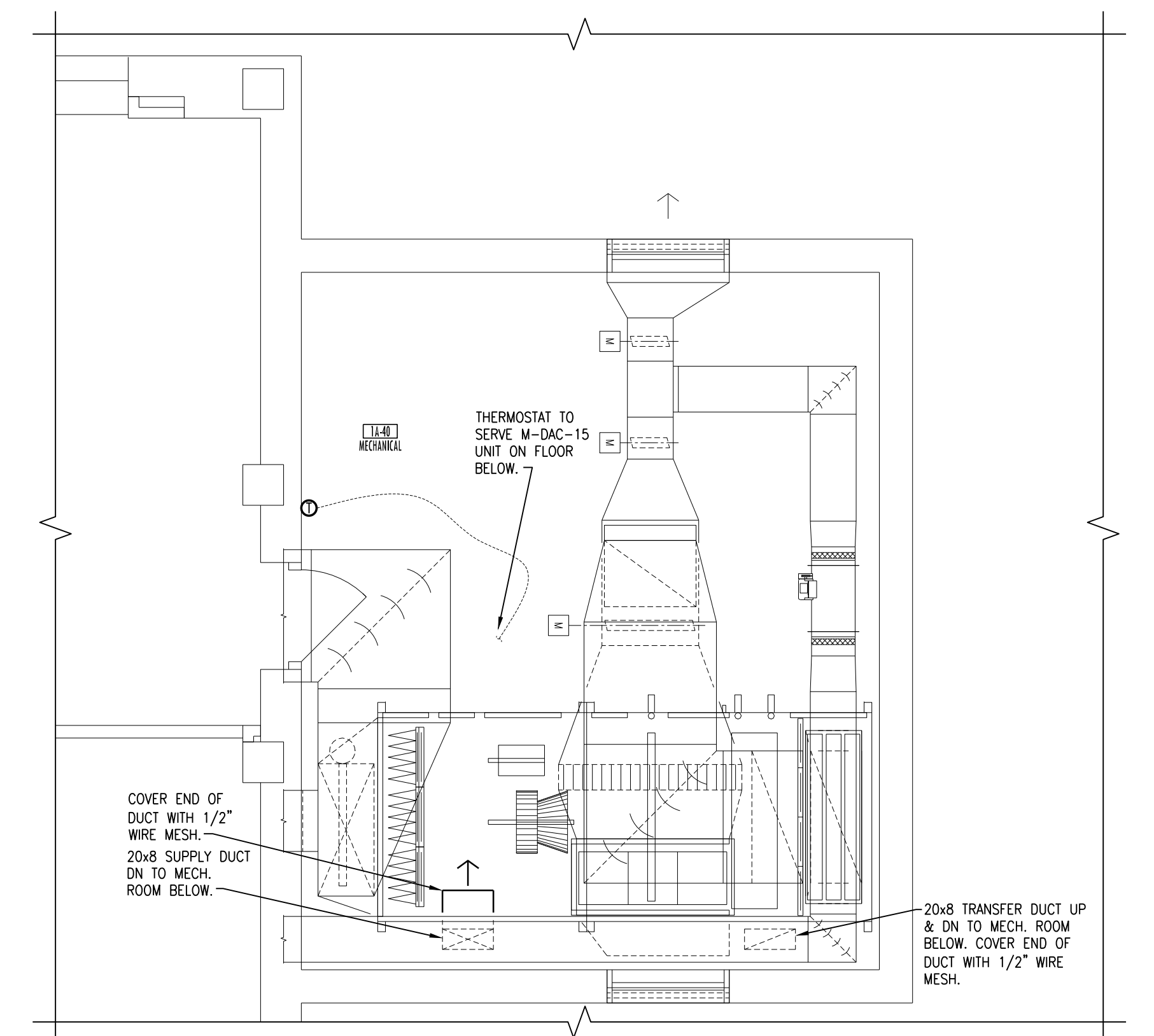


Drawing Title <b>BASEMENT, FIRST, SECOND, THIRD, FOURTH, AND ATTIC SPACE LARGE SCALE MECH. ROOM REMODELING PLANS</b>		Project Title <b>REPLACE OR UPGRADE HVAC SYSTEM COMPONENTS</b>		Date <b>SEPT. 14, 2016</b>
Project Phase <b>PHASE 3</b>		Contract No. <b>VA263-P-1218</b>		Scale: <b>AS SHOWN</b>
VA Project No. <b>437-19-111</b>	Contract No. <b>VA263-C-</b>	Designed By <b>JP</b>	Checked By <b>JP</b>	Drawn By <b>JF</b>
Building No. <b>VAMC CAMPUS</b>	AutoCAD File Name <b>202213-PH3.3.dwg</b>	Location <b>FARGO VA HEALTH CARE SYSTEM FARGO, NORTH DAKOTA</b>		Drawing No. <b>H3.3</b>
KEY PLAN				Dwg. 38 of 66

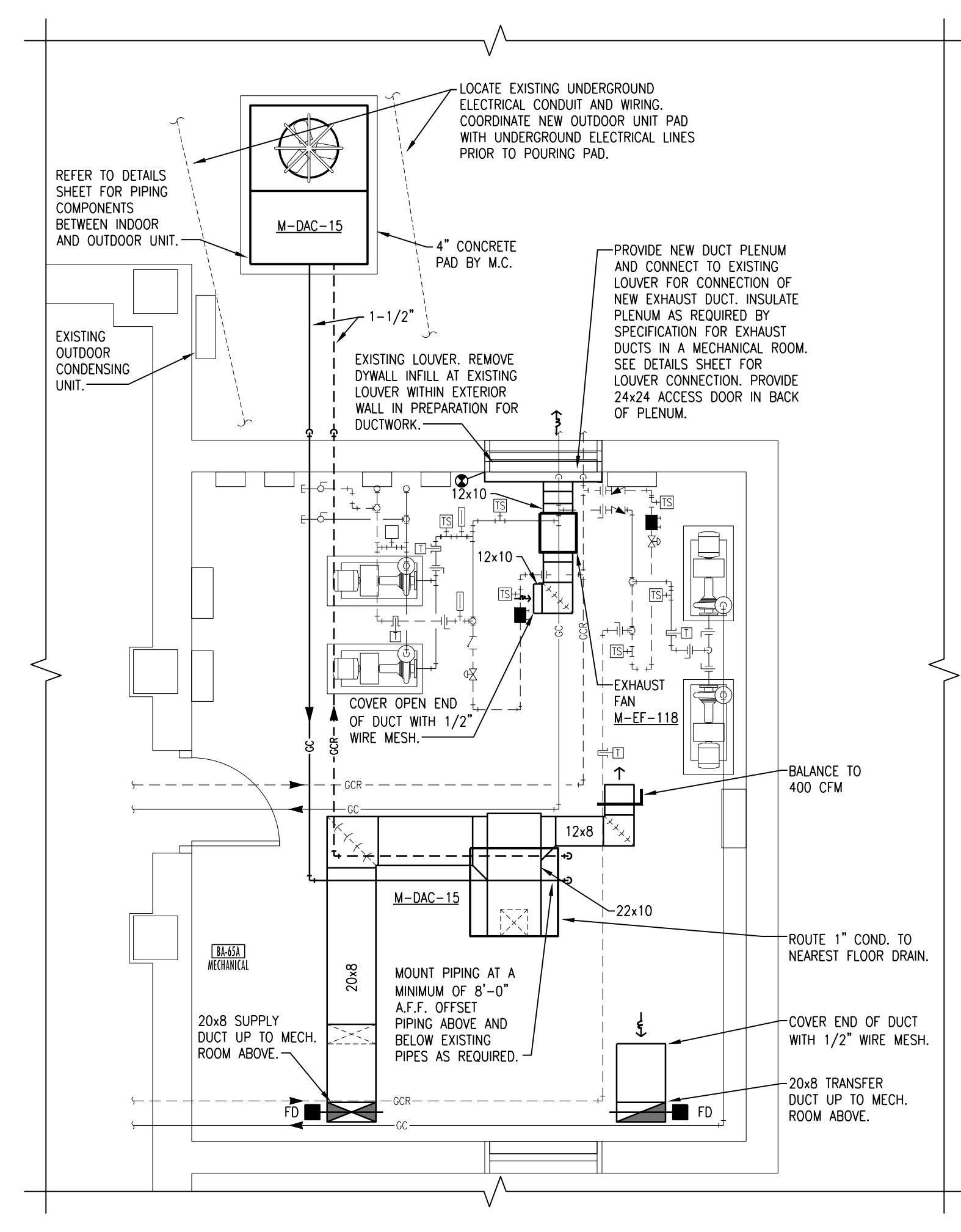
Department of Veterans Affairs



3 EXISTING MECHANICAL ROOF PLAN REMODELING PLAN  
SCALE: 1/16" = 1'-0"



2 EXISTING LAYOUT IA-40 REMODELING PLAN  
SCALE: 1/4" = 1'-0"

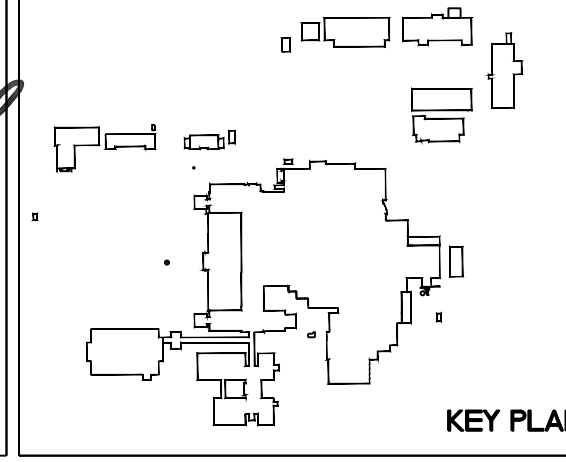


1 EXISTING LAYOUT BB-65A REMODELING PLAN  
SCALE: 1/4" = 1'-0"

- EXHAUST FAN PHASING NOTES:**
1. ALL WORK TO REPLACE EXISTING EXHAUST FANS SHALL TAKE PLACE DURING EVENING AND WEEKEND HOURS AND SHALL BE KEPT TO A MINIMUM AMOUNT OF TIME. THE WORK SHALL BE SCHEDULED A MINIMUM OF 2 WEEKS IN ADVANCE WITH THE OWNER PRIOR TO STARTING WORK. ALL CONTROLS OR ELECTRICAL WORK SHALL BE COMPLETED IN ADVANCE OF REPLACING THE FAN.
  2. THE CHEMO HOODS IN THE BASEMENT INPATIENT PHARMACY AREA WILL REQUIRE RECALIBRATION WHEN THE FANS (EF-30 & 37) SERVING THEM ARE MOVED. COORDINATE WITH THE GENERAL CONTRACTOR AND CSI TESTING IN ADVANCE WITH THE OWNER PRIOR TO MOVING THE FANS. COORDINATION IS KEY TO KEEPING THE DOWNTIME OF THE HOODS TO A MINIMUM. THE MAXIMUM DOWNTIME MUST BE LESS THAN 12 HOURS. THE SCHEDULE MUST BE APPROVED BY THE VA IN ADVANCE. CSI TESTING MUST TAKE PLACE AT THE SAME TIME THE FAN IS REPLACED. THIS CONTRACTOR SHALL PAY ALL REQUIRED FEES TO CERTIFY THE FANS. COORDINATE WITH THE VA BEFORE WORK IS DONE IN ORDER TO USE THE VA'S CURRENT TESTING COMPANY (WHETHER IT IS CSI OR SOMEONE ELSE).
  3. THE EXHAUST FAN IN THE SOUTH BUILDING 9 ATTIC SHALL BE PROVIDED WITH TEMPORARY DUCTWORK AND FAN TO MAINTAIN OPERATION OF THE EXHAUST PRIOR TO REPLACING THE EXISTING FAN.
  4. REFER TO EXHAUST FAN SCHEDULE FOR AREA SERVED BY EXHAUST FAN IN ORDER TO COORDINATE REPLACEMENT OF FANS.

- MECHANICAL NOTES:**
- A. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES BETWEEN THE "AS-BUILT" CONDITIONS AND THESE DRAWINGS.
  - B. COORDINATE ALL HVAC PIPING AND DUCTWORK INSTALLATION WITH GENERAL PLUMBING, FIRE PROTECTION, AND ELECTRICAL CONTRACTORS. INSTALL ALL HVAC PIPING AND DUCTWORK AS HIGH AS POSSIBLE. PROVIDE ALL NECESSARY OFFSETS (DROPS AND RISES) TO KEEP HVAC PIPING AND DUCTWORK TIGHT TO THE STRUCTURE ABOVE, AND INSTALLATION BY ALL TRADES. OFFSET HVAC PIPING AND DUCTWORK TO AVOID BEAMS.
  - C. THIS CONTRACTOR SHALL OPEN ALL EXISTING WALLS AND/OR CEILINGS FOR INSTALLATION OF NEW HVAC PIPING AND VENTILATION DUCTWORK, EQUIPMENT, ETC. AS REQUIRED. PATCH WALLS AND/OR CEILINGS TO MATCH EXISTING.
  - D. MAINTAIN 3'-0" CLEAR SPACE IN FRONT OF ALL ELECTRICAL, CONTROL, AND ACCESS PANELS FOR ACCESSIBILITY.
  - E. ALL SHUT-OFF VALVES, CONTROL VALVES, STRAINERS, DAMPERS, ETC. SHALL BE INSTALLED IN ACCESSIBLE CEILINGS. VALVES SHALL BE LOCATED NOT MORE THAN 2 FEET ABOVE ADJUSTABLE CEILINGS.
  - F. PROVIDE 1/2" DRAIN VALVE AT ALL LOW POINTS OF EACH SYSTEM TO ENABLE COMPLETE DRAINAGE. PROVIDE 1/2" VENT VALVES AT ALL HIGH POINTS OF EACH SYSTEM TO ENABLE COMPLETE VENTING.
  - G. ALL OPEN ENDS OF DUCTS SHALL BE CAPPED AT THE END OF CONSTRUCTION EACH DAY.
- 1) PROVIDE 18" CURB EXTENSION AND MOUNT TO EXISTING CURB. PRIOR TO INSTALLATION OF NEW FAN, VERIFY DIMENSIONS OF EXISTING CURB PRIOR TO SHOP DRAWINGS.
  - 2) PROVIDE NEW FAN FOR REPLACEMENT OF EXISTING EXHAUST FAN. VERIFY DIMENSIONS OF EXISTING CURBS PRIOR TO SHOP DRAWINGS FOR INCLUSION OF CURB ADAPTERS REQUIRED FOR NEW FAN INSTALLATION. PROVIDE LABEL FOR FAN SIMILAR TO LABEL ON EXISTING FANS BEING REPLACED.
  - 3) PROVIDE NEW FAN FOR REPLACEMENT OF EXISTING EXHAUST FAN. PROVIDE DUCTWORK FOR CONNECTION TO EXISTING DISCHARGE DUCTWORK AND INAKE PLENUM. PROVIDE LABEL FOR FAN SIMILAR TO LABEL ON EXISTING FANS BEING REPLACED.
  - 4) PROVIDE VFD FOR EXHAUST FAN ON WALL IN ROOM BELOW ROOF.
  - 5) PROVIDE VFD FOR EXHAUST FAN AND LOCATE NEXT TO EXPOSED EXHAUST DUCT IN STORAGE ROOM DIRECTLY BELOW THE ROOF.

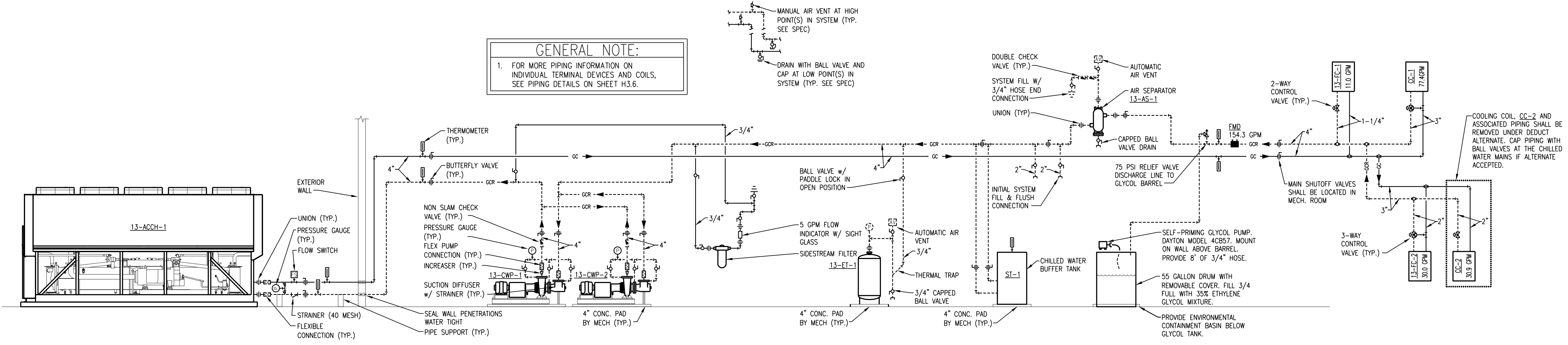
F:\Projects\2012213\DWG\2012213-PH3.4.dwg/1/4/2016 11:02 AM



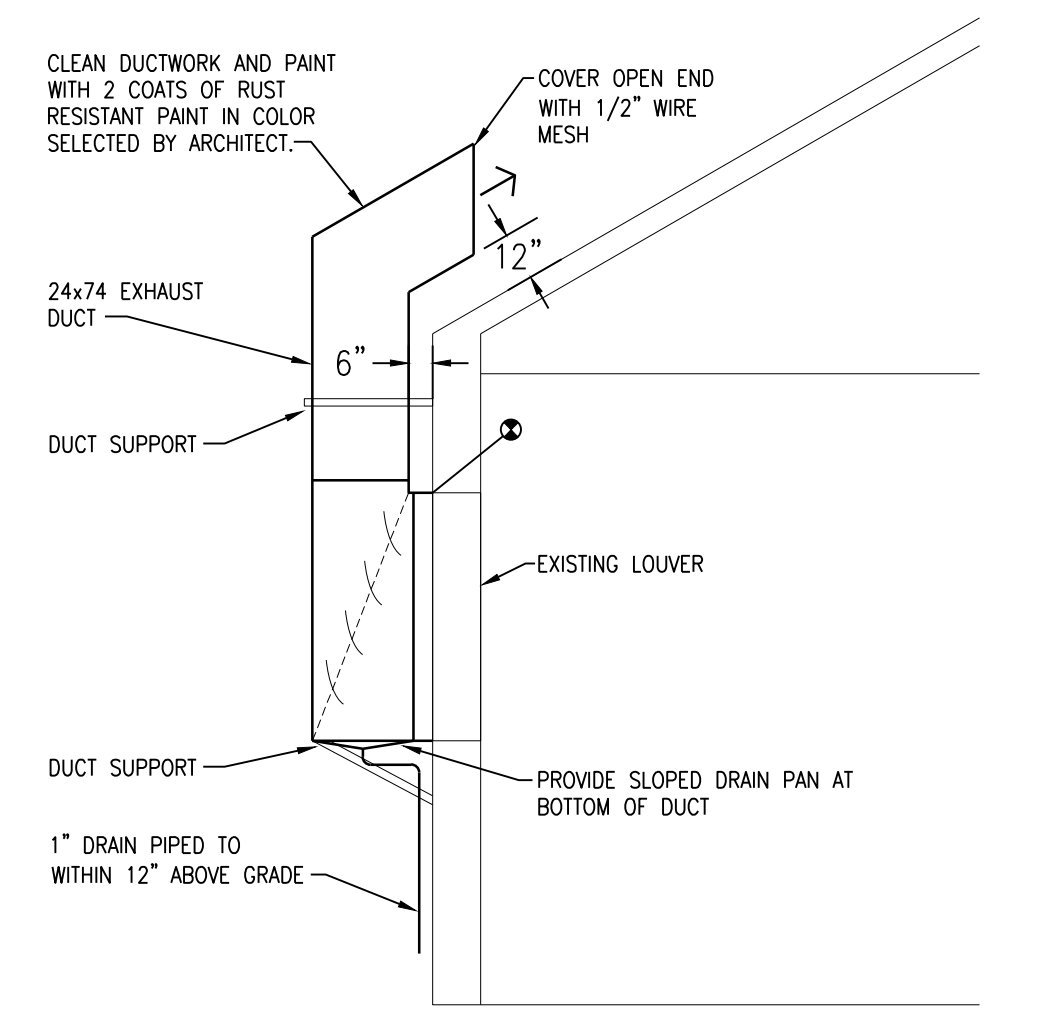
Drawing Title <b>BASEMENT &amp; FIRST LARGE SCALE MECH. REMODELING PLANS &amp; MECH. ROOF REMODELING PLAN</b>		Project Title <b>REPLACE OR UPGRADE HVAC SYSTEM COMPONENTS</b>		Date <b>SEPT. 14, 2016</b>
Project Phase <b>PHASE 3</b>		Scale <b>AS SHOWN</b>		Drawing No. <b>H3.4</b>
VA Project No. <b>437-13-111</b>	Contract No. <b>VA263-P-12B</b>	Designed By <b>JP</b>	Checked By <b>JP</b>	
Building No. <b>VAMC CAMPUS</b>	AutoCAD File Name <b>202213-PH3.4.dwg</b>	Location <b>FARGO VA HEALTH CARE SYSTEM FARGO, NORTH DAKOTA</b>	Drawn By <b>JF</b>	Dwg. 39 of 66

Department of Veterans Affairs

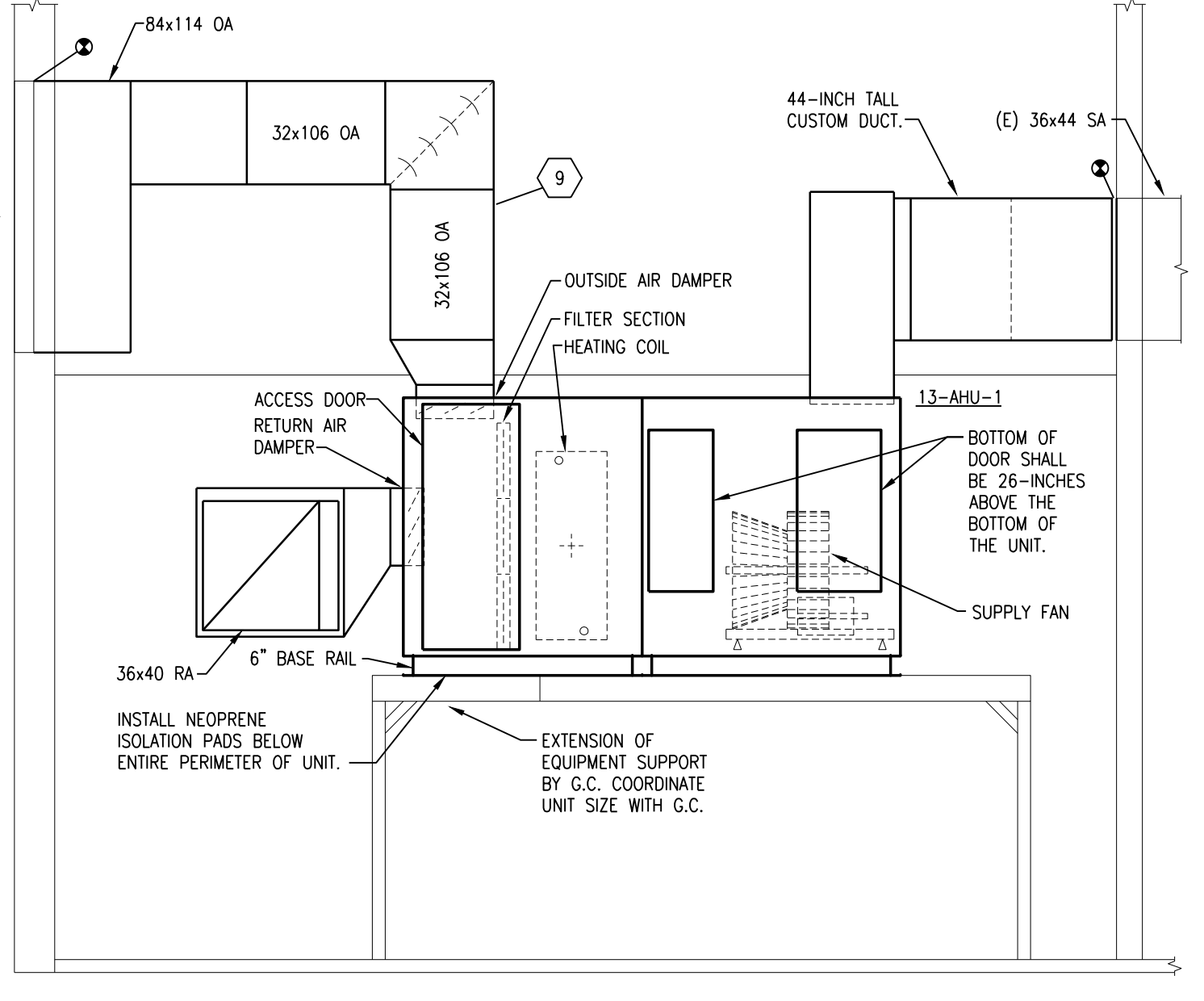
**GENERAL NOTE:**  
 1. FOR MORE PIPING INFORMATION ON INDIVIDUAL TERMINAL DEVICES AND COILS, SEE PIPING DETAILS ON SHEET H3.6.



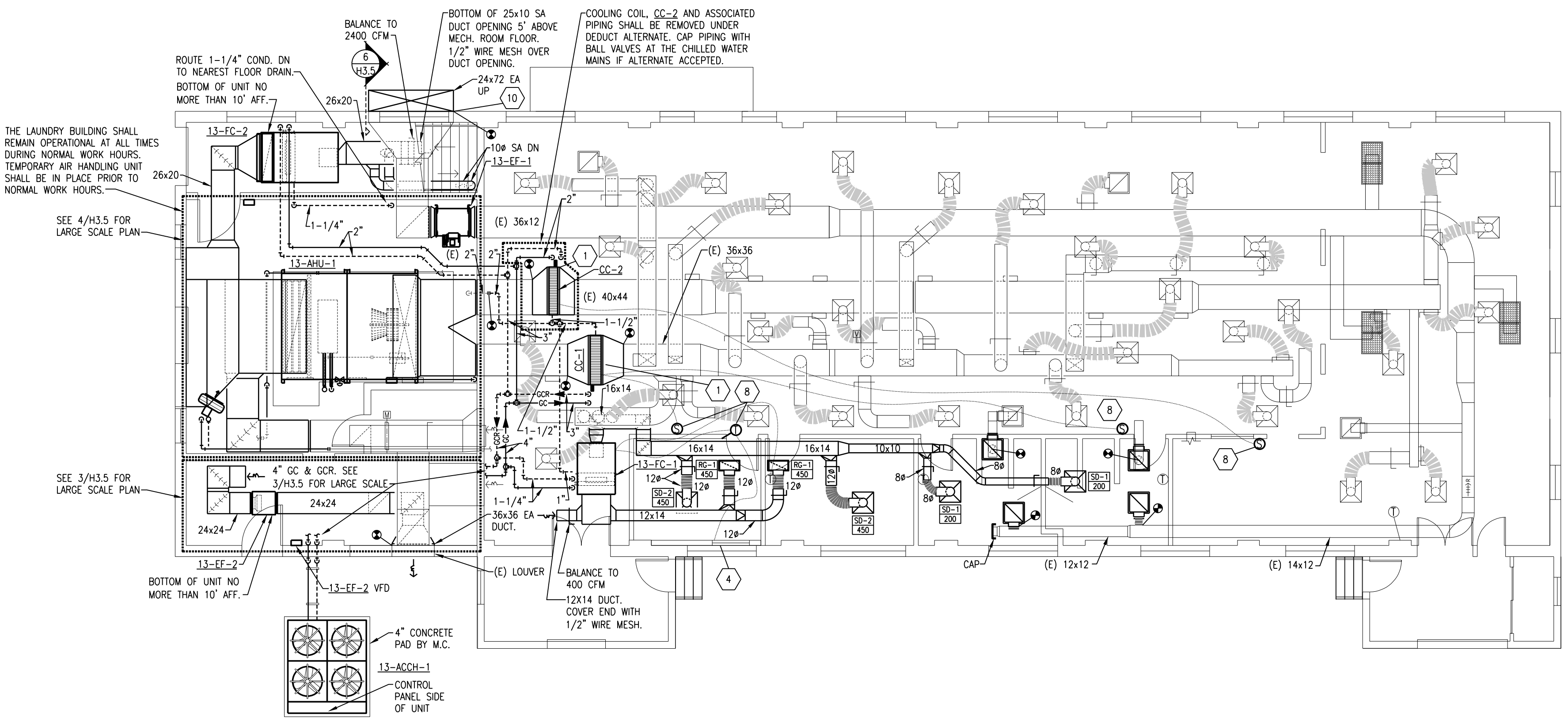
**7 CHILL WATER PIPING SCHEMATIC**  
 SCALE: 1/8" = 1'-0"



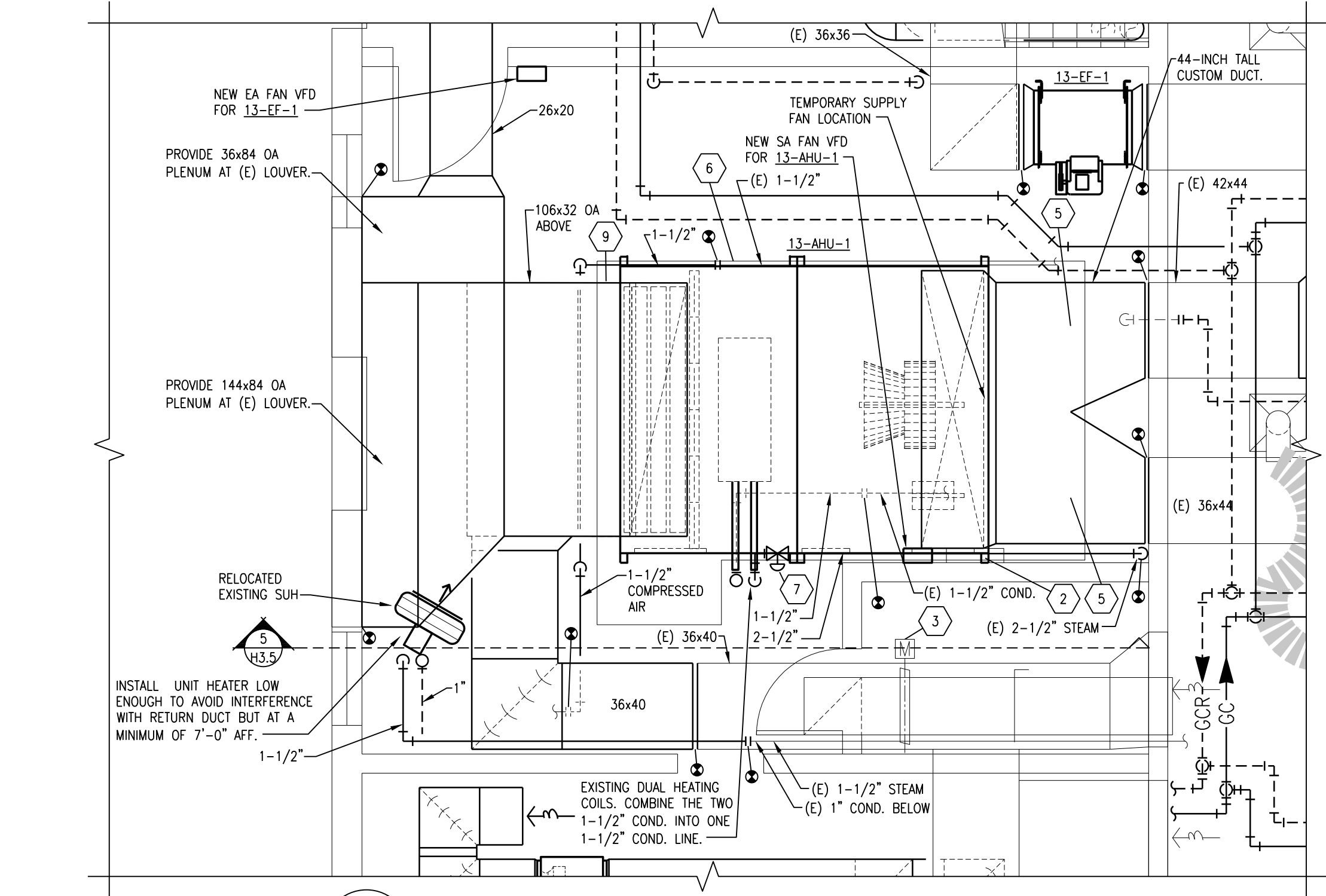
**6 LOUVER SECTION**  
 SCALE: 1/4" = 1'-0"



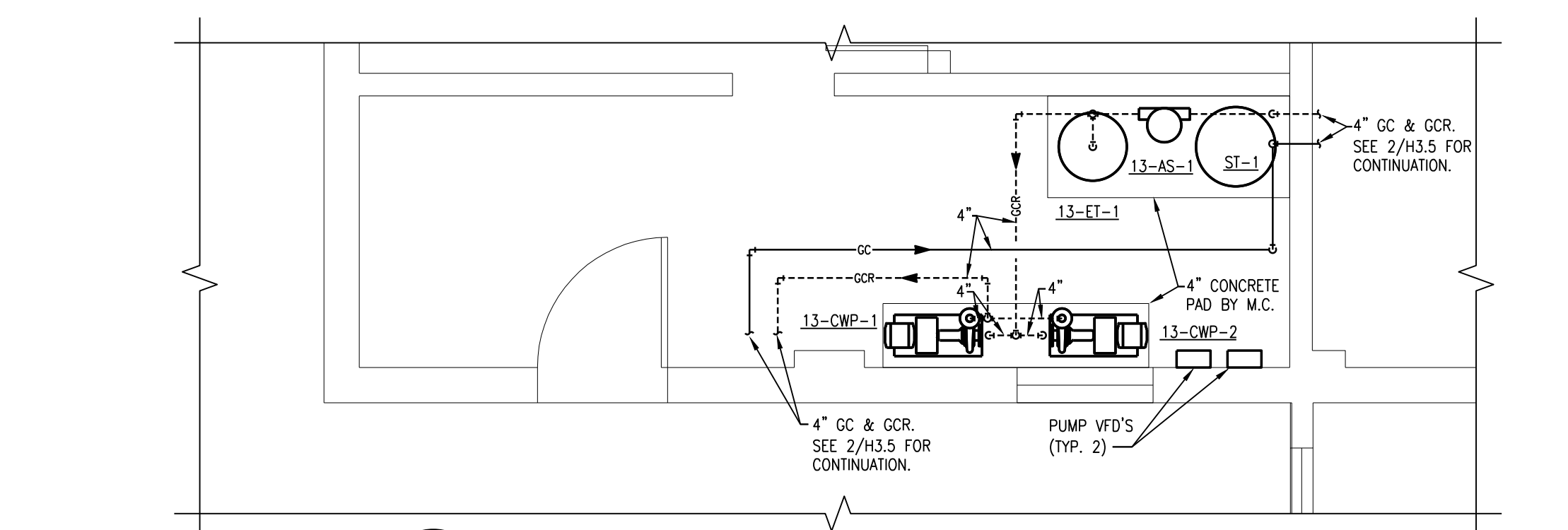
**5 13-AHU-1 MECHANICAL SECTION**  
 SCALE: 1/4" = 1'-0"



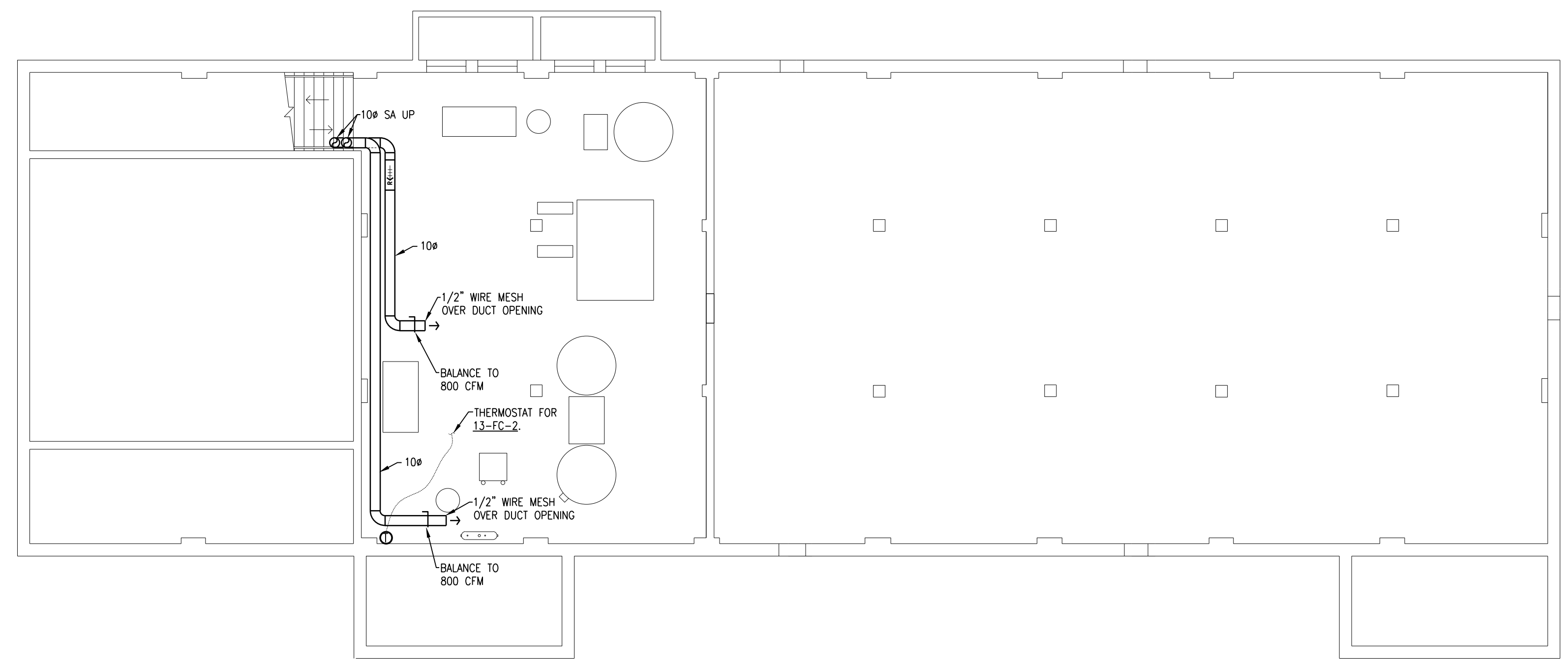
**2 EXISTING LAYOUT BUILDING 13 REMODELING MAIN FLOOR PLAN**  
 SCALE: 1/8" = 1'-0"



**4 LARGE SCALE MECHANICAL ROOM**  
 SCALE: 1/4" = 1'-0"



**3 LARGE SCALE MECHANICAL ROOM**  
 SCALE: 1/4" = 1'-0"



**1 EXISTING LAYOUT BUILDING 13 REMODELING BASEMENT PLAN**  
 SCALE: 1/8" = 1'-0"

**BUILDING 13 PHASING NOTES:**

1. COMPLETE ALL WORK IN BUILDING 13 DURING EVENING, OVERTIME, OR WEEKEND HOURS IN CAREFUL COORDINATION WITH THE OWNER. WORK SHALL BE COMPLETED DURING SPRING, FALL, OR WINTER MONTHS.
2. THE SPACES IN BUILDING 13 SHALL BE CLEANED AND READY FOR NORMAL OPERATION EACH MORNING AFTER EVENING WORK IS COMPLETE.
3. COORDINATE START OF WORK A MINIMUM OF 2 WEEKS AHEAD OF TIME WITH OWNER.

**AIR HANDLER PHASING NOTES:**

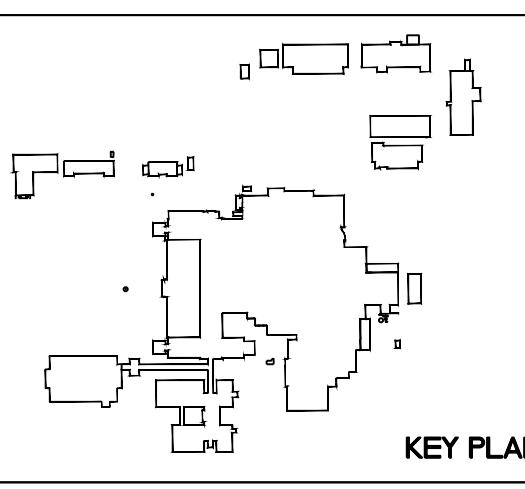
1. ALL AIR HANDLER REPLACEMENTS SHALL BE PERFORMED IN APRIL/MAY OR SEPTEMBER/OCTOBER MONTHS IN CAREFUL COORDINATION WITH THE OWNER. PROVIDE A MINIMUM OF 2 WEEKS NOTICE PRIOR TO BEGINNING WORK.
2. FOR TEMPORARY AIR HANDLER OPERATION, PROVIDE A TEMPORARY FAN EQUAL TO THE UNIT AIRFLOW/HORSEPOWER AND HEPA FILTER TO BE MOUNTED TO THE SUPPLY DUCTWORK PRIOR TO REMOVING UNIT. REFER TO FLOOR PLANS FOR SUGGESTED TEMPORARY SUPPLY FAN LOCATION. FAN SHALL RUN CONTINUOUSLY. MAINTAIN THE MECHANICAL ROOM TEMPERATURE AT A MINIMUM OF 55 DEGREES AND MAXIMUM OF 70 DEGREES DURING AHU CHANGE OUT USING EXISTING HEATING UNITS OR TEMPORARY COOLING/HEATING UNITS. OUTSIDE AIR, RETURN AIR, RELIEF AIR, AND SUPPLY AIR DUCTS SHALL BE LEFT OPEN TO USE THE MECHANICAL ROOM AS A PLENUM.
3. ALL UNIT SHUTDOWN WORK SHALL BE COMPLETED DURING WEEKEND AND EVENING HOURS. REPLACEMENT OF UNIT SHALL BE COMPLETED AS QUICKLY AS POSSIBLE WITH MULTIPLE SHIFTS REQUIRED TO EXPEDITE WORK. ALL CONTROLS WORK THAT CAN BE COMPLETED BEFORE AND SHALL BE COORDINATED. WORK SHALL BE COMPLETED DURING SPRING, FALL, OR WINTER MONTHS.
4. DISASSEMBLE NEW AIR HANDLERS TO THEIR SMALLEST COMPONENTS AS REQUIRED TO FIT THROUGH EXISTING DOORS. TEMPORARILY REMOVE EXISTING MECHANICAL ROOM DOORS AS NECESSARY.

**MECHANICAL NOTES:**

- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES BETWEEN THE "AS-BUILT" CONDITIONS AND THESE DRAWINGS.
- COORDINATE ALL HVAC PIPING AND DUCTWORK INSTALLATION WITH GENERAL PLUMBING, FIRE PROTECTION, AND ELECTRICAL CONTRACTORS. INSTALL ALL HVAC PIPING AND DUCTWORK AS HIGH AS POSSIBLE. PROVIDE ALL NECESSARY OFFSETS (DROPS AND RISERS) TO KEEP HVAC PIPING AND DUCTWORK RIGHT TO THE STRUCTURE ABOVE AND INSTALLATION BY ALL TRADES. OFFSET HVAC PIPING AND DUCTWORK TO AVOID BEAMS.
- THIS CONTRACTOR SHALL OPEN ALL EXISTING WALLS AND/OR CEILINGS FOR INSTALLATION OF NEW HVAC PIPING AND VENTILATION DUCTWORK, EQUIPMENT, ETC. AS REQUIRED. PATCH WALLS AND/OR CEILINGS TO MATCH EXISTING.
- MAINTAIN 3'-0" CLEAR SPACE IN FRONT OF ALL ELECTRICAL, CONTROL, AND ACCESS PANELS FOR ACCESSIBILITY.
- ALL SHUT-OFF VALVES, CONTROL VALVES, STRAINERS, DAMPERS, ETC., SHALL BE INSTALLED IN ACCESSIBLE CEILING. VALVES SHALL BE LOCATED NOT MORE THAN 2 FEET ABOVE ACoustICAL CEILINGS.
- PROVIDE 1/2" DRAIN VALVE AT ALL LOW POINTS OF EACH SYSTEM TO ENABLE COMPLETE DRAINAGE. PROVIDE 1/2" VENT VALVES AT ALL HIGH POINTS OF EACH SYSTEM TO ENABLE COMPLETE VENTING.
- ALL OPEN ENDS OF DUCTS SHALL BE CAPPED AT THE END OF CONSTRUCTION EACH DAY.
- ALL NEW PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE TO AVOID TRIPPING HAZARDS IN WALKWAYS BUT AT A HEIGHT TO REMAIN ACCESSIBLE. KEEP ALL EQUIPMENT ACCESS PATHS CLEAR.
- ALL EXISTING DIFFUSERS, GRILLES, AND FLEX DUCTS AFFECTED BY CEILING REMOVAL AND RE-INSTALLATION SHALL BE TEMPORARILY SUPPORTED DURING CONSTRUCTION AND RE-INSTALLED AFTER CEILING WORK IS COMPLETE. ALL SPRINKLER ESCUTCHEONS SHALL BE REMOVED AND REINSTALLED AS REQUIRED FOR CEILING WORK.
- PROVIDE DUCT MOUNTED DX COOLING COIL. ALL DUCTWORK MOUNTED 3' UPSTREAM AND DOWNSTREAM OF COIL SHALL BE STAINLESS STEEL INCLUDING INTEGRAL DRAIN PAN BELOW THE COIL.
- EXISTING DDC CONTROL PANEL. RETAIN EXISTING PNEUMATIC CONTROLS FOR EXISTING RADIATION AND OTHER DEVICES NOT BEING REPLACED. PROVIDE NEW WIRING TO ALL NEW DEVICES AND PROVIDE ADDITIONAL PANEL AS REQUIRED.
- REMOVE EXISTING DAMPER ACTUATOR AND LOCK DAMPER IN OPEN POSITION.
- REPLACE EXISTING STEAM CONTROL VALVE FOR EXISTING RADIATION WITH NEW CONTROL VALVE AND THERMOSTAT. CUT AND PATCH EXISTING WALL AS REQUIRED TO INSTALL NEW WIRING AND THERMOSTAT. SIZE VALVE FOR 40 #5/HR AT 7 PSI INLET PRESSURE.
- RE-INSTALL EXISTING LADDERS AND PLATFORMS ON OUTWALKS UP AGAINST NEW AIR HANDLER. PROVIDE UNI-STREET SUPPORT AS REQUIRED.
- COORDINATE WITH G.C. FOR EXTENDING AIR HANDLER SUPPORTS FOR LARGER UNIT. EXISTING 1-1/2" COMPRESSED AIR LINE AROUND NEW UNIT SUPPORT.
- RE-INSTALL EXISTING 1/3 AND 2/3 STEAM VALVES AND CONNECT STEAM AND CONDENSATE PIPING TO NEW AIR HANDLER.
- PROVIDE NEW SPACE SENSOR AND ALL ASSOCIATED WIRING REQUIRED. CUT AND PATCH WALL AS REQUIRED TO MATCH EXISTING.
- STRUCTURAL CROSS BRACING IS LOCATED BETWEEN THE ROOF TRUSSES. PROVIDE A SHEET METAL SLEEVE AROUND EACH STRUCTURAL BRACE THAT PENETRATES THE OUTSIDE AIR DUCT. SEAL EACH DUCT/BRACE PENETRATION AIR TIGHT.
- PROVIDE DUCTWORK CONNECTED TO EXISTING LOUVER IN ORDER TO DISCHARGE EXHAUST AIR OVER ROOF. SEE SECTION FOR MORE INFORMATION.

**Dept. of Veterans Affairs**  
**Medical Center**  
 2101 Elm Street  
 Fargo, ND 58102

**ONE**  
 Fargo • Grand Forks • Bismarck  
 Alexandria • Minneapolis • 877.380.0501



Drawing Title <b>BUILDING 13 REMODELING PLANS</b>		Project Title <b>REPLACE OR UPGRADE HVAC SYSTEM COMPONENTS</b>		Date <b>SEPT. 14, 2016</b>
Project Phase <b>PHASE 3</b>		Scale: <b>AS SHOWN</b>		
VA Project No. <b>437-13-111</b>	Contract No. <b>VA263-P-1218</b>	Designed By <b>JP</b>	Checked By <b>JP</b>	Drawn By <b>JF</b>
Building No. <b>VAMC CAMPUS</b>	AutoCAD File Name <b>202227-11-13-111.dwg</b>	Location <b>FARGO VA HEALTH CARE SYSTEM FARGO, NORTH DAKOTA</b>	Drawing No. <b>H3.5</b>	
Revisions		Date		Dwg. 40 of 66

Department of Veterans Affairs