

**MECHANICAL FIRST FLOOR PLAN DUCTWORK**  
 SCALE | 1/8" = 1'-0"  
 0 4'-0" 8'-0" 16'-0"  
 SCALE: 1/8" = 1'-0"

- M2.01 KEYED NOTES**
- 1 18x16 EXHAUST DUCT UP TO EF-01 TRANSITION DUCT AS REQUIRED TO CONNECT TO FAN. BALANCE TO 670 CFM.
  - 2 EXHAUST HOOD. REFER TO LAB DRAWINGS FOR DETAILS.
  - 3 ROUTE 4" DIAMETER INTAKE AND FLUE UP THROUGH ROOF.
  - 4 CONNECT 4" EA TO TASK HOOD. REFER TO LAB DRAWINGS FOR DETAILS. BALANCE TO 100 CFM.
  - 5 12" ROUND EXHAUST DUCT THROUGH SIDE WALL. REFER TO ROOF PLAN FOR CONTINUATION.
  - 6 CONNECT TO TASK HOOD. REFER TO LAB DRAWINGS FOR DETAILS.
  - 7 10x10 EA UP TO EF-06. TRANSITION DUCT AS REQUIRED TO CONNECT TO EXHAUST FAN.
  - 8 ROUTE 8x8 EA UP THROUGH ROOF.
  - 9 8x8 EA UP TO EXHAUST FAN ON ROOF. TRANSITION DUCT AS REQUIRED TO CONNECT TO EXHAUST FAN.
  - 10 14x10 EA DUCT UP TO EXHAUST FAN ON ROOF. TRANSITION DUCTS AS REQUIRED TO CONNECT TO EXHAUST FAN.
  - 11 ROUTE 4" EXHAUST DUCT THROUGH JOIST WEBBING.
  - 12 CONNECT 6" EXHAUST DUCT TO EXHAUST HOOD AND BALANCE FOR 100 CFM. TRANSITION DUCT AS REQUIRED TO CONNECT TO HOOD.
  - 13 ROUTE 3" EA & INTAKE COMBUSTION AIR UP THRU ROOF FROM DWH1 AND DWH2.
  - 14 ROUTE 12x4 EA DUCT DOWN THRU WALL TO EA GRILLE 6" AFF.
  - 15 ROUTE 14x10 EA DUCT DOWN THRU CHASE TO EA GRILLE 12" AFF.
  - 16 BALANCE TO 100 CFM.
  - 17 BALANCE TO 470 CFM.
  - 18 CONNECT TO BIOLOGICAL CABINET. REFER TO LAB DRAWINGS FOR DETAILS.

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**Jefferson County Crime Lab**  
 JEFFERSON COUNTY, MISSOURI  
 1177 MASON CIR, PEVELY, MO 63070

**HASTINGS + CHIVETTA**

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 DISCIPLINE: PROFESSIONAL ENGINEERING  
 EXPIRATION DATE: DECEMBER 31, 2024

STATE OF MISSOURI  
 DAVID E. LAUVER  
 NUMBER  
 PE-2007002812  
 PROFESSIONAL ENGINEER

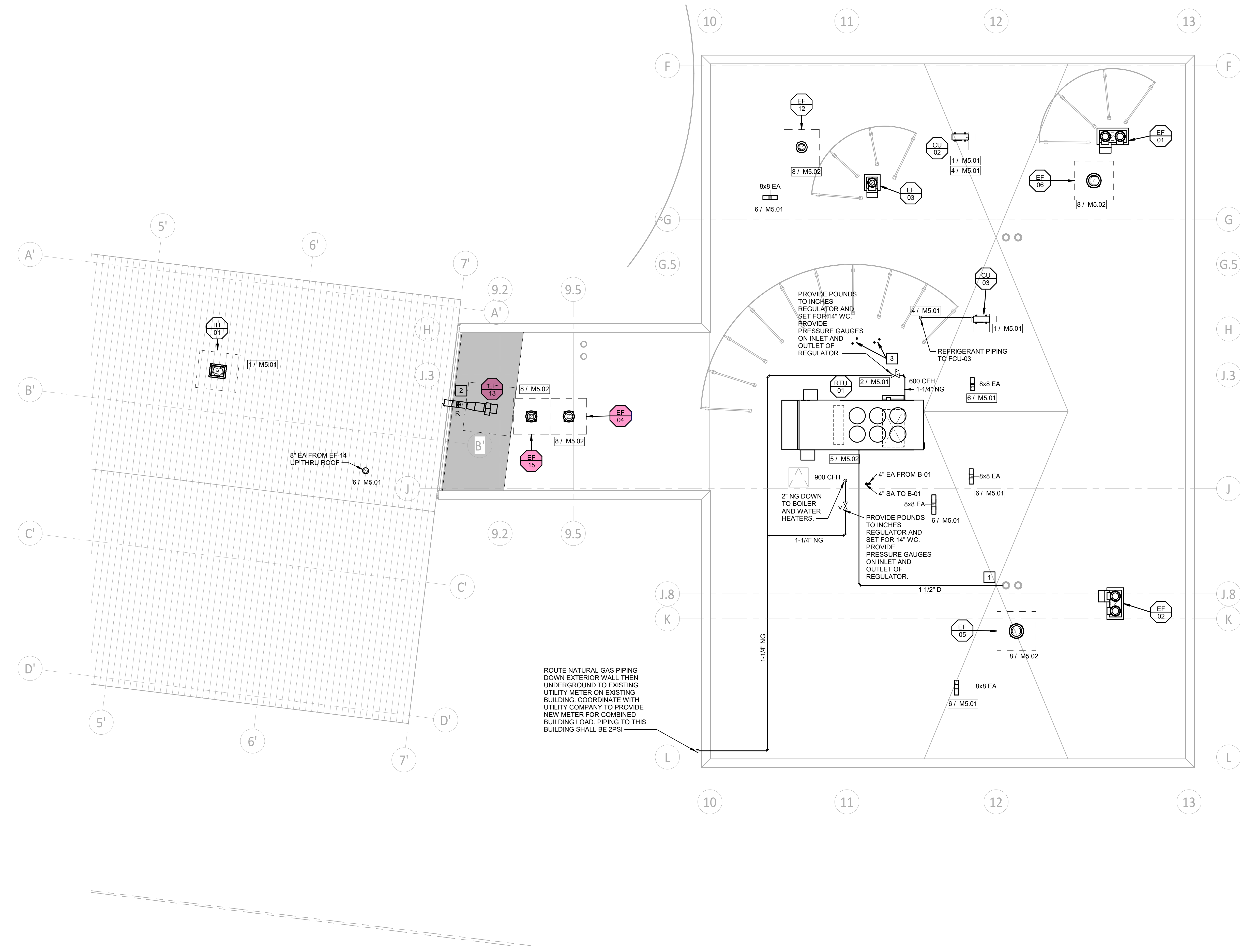
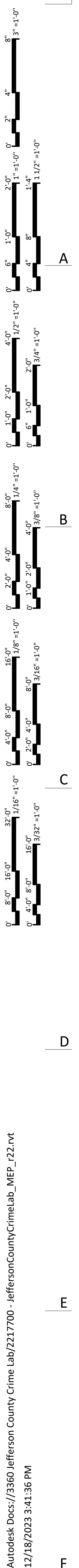
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REVISIONS	Date	Project Number	Sheet Name
	01-02-2024	3360	MECHANICAL FIRST FLOOR PLAN - DUCTWORK

**M2.01**

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**MECHANICAL ROOF PLAN**  
 SCALE: 1/8" = 1'-0"  
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- M2.02 KEYED NOTES**
1. TERMINATE 1-1/4" CONDENSATE DRAIN OVER PRIMARY ROOF DRAIN.
  2. PROVIDE FLEXIBLE CONNECTION AT DUCT PENETRATION INTO EXISTING BUILDING.
  3. ROUTE 3" EA & INTAKE COMBUSTION AIR UP THRU ROOF FROM DWH1 AND DWH2.

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NO.	REVISIONS	DATE

Date | 01-02-2024  
 Project Number | 3360  
 Sheet Name | MECHANICAL ROOF PLAN

**M2.02**

STATE OF MISSOURI  
 DAVID E. LAUVER  
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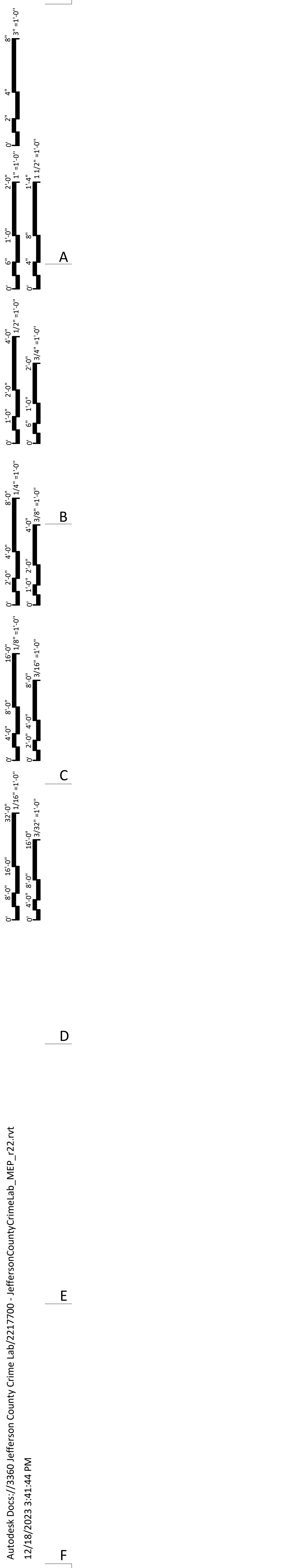
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1 MECHANICAL FIRST FLOOR PLAN PIPING  
 SCALE | 1/8" = 1'-0"  
 0 4'-0" 8'-0" 16'-0"  
 SCALE: 1/8" = 1'-0"

- M3.01 KEYED NOTES**
- PROVIDE DIFFERENTIAL PRESSURE SENSOR BETWEEN MAIN SEROLOGY/EXTRACTIONS LAB AND GOWNING VESTIBULE. SENSOR SHALL BE PROVIDED WITH GREEN LIGHT/RED LIGHT DISPLAY ONLY. LIGHT SHALL BE GREEN WHEN GOWNING VESTIBULE IS NEGATIVE COMPARED TO MAIN SEROLOGY/EXTRACTIONS LAB AND RED IF IT IS NEUTRAL OR POSITIVE. VAV BOXES, FANS, AIR DEVICES, ETC. SHALL BE BALANCED SUCH THAT THE POST AMP LAB IS NEGATIVE COMPARED TO THE GOWNING VESTIBULE AND THE GOWNING VESTIBULE IS NEGATIVE COMPARED TO THE MAIN SEROLOGY/EXTRACTIONS LAB.
  - PROVIDE 2 ALARM CONTACTS, ONE FOR EACH FRIDGE AT THIS LOCATION. BAS SHALL MONITOR CONTACTS AND INDICATE AN ALARM AT THE OPERATOR'S WORKSTATION IF ANY OF THE MONITORED EQUIPMENT IS OUT OF RANGE. REFER TO ARCHITECTURAL AND LABORATORY DRAWINGS FOR EXACT QUANTITIES AND LOCATIONS.
  - PROVIDE 2 ALARM CONTACTS, ONE FOR THE FRIDGE AND ONE FOR THE FREEZER AT THIS LOCATION. BAS SHALL MONITOR CONTACTS AND INDICATE AN ALARM AT THE OPERATOR'S WORKSTATION IF ANY OF THE MONITORED EQUIPMENT IS OUT OF RANGE. REFER TO ARCHITECTURAL AND LABORATORY DRAWINGS FOR EXACT QUANTITIES AND LOCATIONS.
  - PROVIDE 4 ALARM CONTACTS, ONE FOR EACH FRIDGE AND ONE FOR EACH FREEZER AT THIS LOCATION. BAS SHALL MONITOR CONTACTS AND INDICATE AN ALARM AT THE OPERATOR'S WORKSTATION IF ANY OF THE MONITORED EQUIPMENT IS OUT OF RANGE. REFER TO ARCHITECTURAL AND LABORATORY DRAWINGS FOR EXACT QUANTITIES AND LOCATIONS.
  - ROUTE REFRIGERANT PIPING UP TO CONDENSING UNIT. ROUTE CONDENSATE PIPING TO MOP SINK IN JANITOR'S CLOSET.

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 License No: PE-2007002812  
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**M3.01**