MECHANICAL GENERAL NOTES:

1. DO NOT ROUTE ANY DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS.
2. REFER TO BRANCH DUCT AND DEVICE COLLAR CHART FOR APPLICABLE SIZING OF CONNECTING DUCTWORK TO ALL TERMINAL DEVICES UNLESS NOTED OTHERWISE ON PLAN.
3. REFER TO SHEET M001 FOR ADDITIONAL GENERAL NOTES AND REQUIREMENTS.
4. REFER TO DETAILS AND SCHEDULES SHEETS FOR FURTHER INFORMATION.
5. MOUNT ALL THERMOSTATS AND SENSORS CONTROLLING HVAC EQUIPMENT AT 48"AFF UNLESS NOTED OTHERWISE ON PLANS.

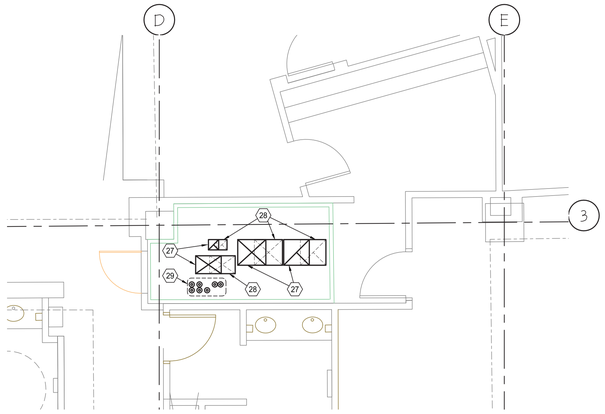
MECHANICAL PLAN NOTES:

1. TYPE I GREASE HOOD EXHAUST DUCTWORK SHALL BE MINIMUM 16 GAUGE BLACK IRON WITH LIQUID TIGHT WELDS. INSTALL ACCESS PANELS FOR CLEANING AS REQUIRED BY NFPA 96 AND LOCAL CODES. TRANSITION GREASE DUCTWORK AS REQUIRED TO HOOD AND FAN CONNECTIONS. PROVIDE 45° MAX OFFSETS AS REQUIRED TO COORDINATE WITH STRUCTURE. PROVIDE RADIUS ELBOWS WITHOUT TURNING VANES. SLOPE HORIZONTAL GREASE DUCT BACK TOWARDS HOOD AT MINIMUM OF 1/4" PER LINEAL FOOT. GREASE DUCTS SHALL BE CONTAINED IN A UL APPROVED GREASE DUCT WRAP SYSTEM.
2. TYPE I HOODS SHALL BE FURNISHED COMPLETE WITH INTERNALLY PIPED FIRE SUPPRESSION SYSTEM AND EXTNAL FOAM SUPPLY BOTTLES WITH REMOTE PULL CONTROLS AND IN COMPLIANCE WITH NFPA 96. DIVISION 23 SHALL COORDINATE COMPLETE INSTALLATION WITH FIRE PROTECTION CONTRACTOR TO MEET APPROVAL OF LOCAL INSPECTOR AND CODE COMPLIANCE INCLUDING TESTING.
3. PROVIDE 12x20 DUCT DROP TO CONNECT TO MAKE-UP AIR PLENUM SUPPLY RISER WITH DAMPER @ HOOD. BALANCE EACH CONNECTION AT HOOD 1 TO 621 CFM, AND EACH CONNECTION AT HOOD 2 TO 590 CFM.
4. REFER TO CAPTIVE AIRE SHEETS FOR DUCT CONNECTION SIZES.
5. PROVIDE AN 8Ø SUPPLY DUCT WITH DAMPER TO HOOD 2 SUPPLY PLENUM. BALANCE SUPPLY AIR TO 137 CFM EACH (TYP. 4).
6. PROVIDE AN 8Ø SUPPLY DUCT WITH DAMPER TO HOOD 1 SUPPLY PLENUM. BALANCE SUPPLY AIR TO 136 CFM EACH (TYP. 4).
7. MOUNT THERMOSTATS AND TEMPERATURE AND/OR HUMIDITY SENSOR(S) ON WALL. THERMOSTATS AND SENSOR(S) SHALL BE LABELED TO MATCH THE UNIT TAG AND CORRESPOND TO THE ELECTRICAL LEGEND IN THE ELECTRICAL PANELBOARD SERVING THE EQUIPMENT. COORDINATE COLOR WITH ARCHITECT.
8. INSTALL HOOD FIRE SUPPRESSION MANUAL PULL STATION. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH FIRE SUPPRESSION SYSTEM INSTALLER.
9. INSTALL AIR DEVICE ABOVE CEILING AND DIRECT AIR ACROSS FREEZER CONDENSER ON TOP OF FREEZER.
10. COORDINATE WITH GENERAL CONTRACTOR TO PROVIDE 1" DOOR UNDERCUT.
11. DUCTWORK SHALL NOT BE ROUTED OVER ELECTRICAL PANELS OR TRANSFORMERS, AND THEIR WORKING SPACE.
12. INSTALL DUCT SMOKE DETECTOR IN RETURN AIR PLENUM.
13. 8x8 EA DUCT UP THRU SHAFT AT 2ND FLOOR, TO EF-1 IN PENTHOUSE. REF M150 FOR CONTINUATION.
14. 22x20 MAKEUP AIR DOWN FROM MAU-1 ON ROOF, REF M150 FOR CONTINUATION.
15. 20x20 GREASE EXHAUST DUCT UP TO KEF-1 ON ROOF, REF M150 FOR CONTINUATION.
16. MOUNT TEMPERATURE SENSOR PROVIDED WITH KITCHEN EXHAUST HOODS ON WALL.
17. CARBON MONOXIDE DETECTOR PROVIDED BY OWNER. INSTALL WITHIN 2'-0" OF CEILING. COORDINATE FINAL LOCATION WITH OWNER REPRESENTATIVE.
18. PROVIDE ANALOX AX50 OR APPROVED EQUAL CARBON DIOXIDE SENSOR WITH REMOTE ALARM REPEATER TO BE MOUNTED AT 18"AFF. PROVIDE CARBON DIOXIDE SENSOR WITH RELAY. RELAY SHALL BE INTERLOCKED WITH THE BUILDING FIRE ALARM SYSTEM. THE SENSOR SHALL BE EQUIPPED WITH A LOCAL AUDIBLE AND VISUAL ALARM. THE LOW LEVEL ALARM SHALL ACTIVATE THE LOCAL AUDIBLE AND VISUAL ALARM. THE HIGH LEVEL ALARM SHALL ACTIVATE RELAY. INSTALL SENSOR PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
ALARM SET POINTS:
LOW LEVEL ALARM - 0.5% = 5,000 PPM
HIGH LEVEL ALARM - 3.0% = 30,000 PPM
19. INSTALL "DUCTMATE ULTIMATE DOOR" GREASE DUCT ACCESS PANELS FOR CLEANING IN LOCATION SHOWN AT A MINIMUM AND AS REQUIRED BY NFPA 96 AND LOCAL CODES.
20. PROVIDE FULL SIZE, 24" DEEP PLENUM AT INLET OF FAN COIL UNIT.
21. 20x14 OA DUCT DOWN FROM ROOF, REF M150 FOR CONTINUATION.
22. INSTALL CENTRAL VRF CONTROL PANEL PROVIDED BY VRF MANUFACTURER IN OFFICE ON WALL. PROVIDED CONTROL WIRING AS REQUIRED FOR SENSOR OPERATION. MOUNT CONTROL PANEL 48" AFF. COORDINATE WITH OTHER OFFICE EQUIPMENT.
23. INSTALL AIR DEVICE ABOVE CEILING.
24. REFRIGERATION PIPING FROM EQUIPMENT ON ROOF. REF 2/M101 FOR CONTINUATION AND M102 FOR ROUTING INFORMATION.
25. COORDINATE WITH KITCHEN CONSULTANT TO LOCATE WALK-IN FREEZER CONDENSING UNIT WITHIN DASHED OUTLINE.
26. PROVIDE 3.5 SQ FT FREE AREA IN GYP WALL ABOVE CEILING FOR AIR TRANSFER.
27. SHIFT DUCT IN SHAFT @ SECOND FLOOR AS REQUIRED TO PENETRATE ROOF BETWEEN CONCRETE BEAMS, REF M150 FOR CONTINUATION.
28. DUCT UP FROM FIRST FLOOR CEILING PLENUM, REF 1/M101 FOR CONTINUATION.
29. ROUTE REFRIGERANT IN SHAFT @ SECOND FLOOR AS REQUIRED TO PENETRATE ROOF BETWEEN CONCRETE BEAMS. REF M150 FOR CONTINUATION.
30. PROVIDE 24x24 ACCESS PANEL FOR EQUIPMENT MAINTENANCE ACCESS.

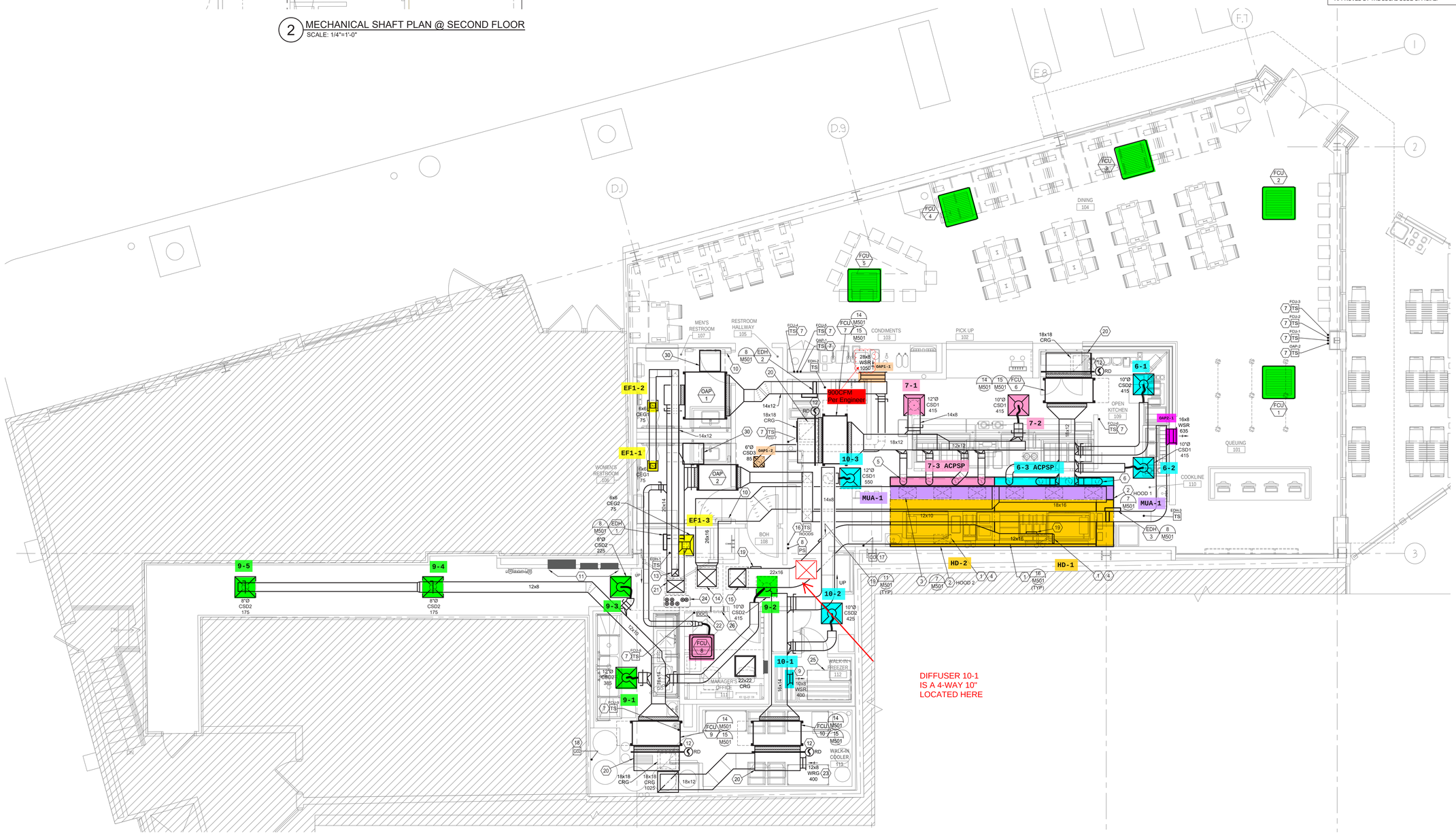
PAINT ALL EXPOSED MECHANICAL EQUIPMENT, REFRIGERANT PIPING, DUCTWORK, INSULATION, ANY SYSTEM ACCESSORIES TO MATCH CEILING. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

ALL VRF PIPE FITTINGS SHALL BE VRF "Y" TYPE FITTINGS. PER MANUFACTURER INSTALLATION REQUIREMENTS.

ALL PORTIONS OF THE GREASE DUCT SYSTEM SHALL BE TESTED IN ACCORDANCE WITH THE "GREASE DUCT TEST" PARAGRAPH OF THE IMC, UTILIZING WATER LEAKAGE OR EQUIVALENT TEST METHODS AS APPROVED BY THE LOCAL CODE OFFICIAL.



2 MECHANICAL SHAFT PLAN @ SECOND FLOOR
SCALE: 1/4"=1'-0"



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

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MO. CORPORATE NUMBER: E-5550
EXPIRES 12/31/18

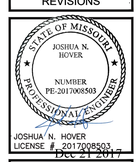
SHAKE SHACK

239 W 47th ST, KANSAS CITY, MO, 64112

Shack # 1237

No	Date	Remarks
	12/22/17	ISSUE FOR PERMIT SID
	11/22/17	75% DINERS REVIEW

REVISIONS



JOSHUA N. HOVER
LICENSE # 2017008503
Dec 21 2017

Drawing Title
MECHANICAL FLOOR PLAN

Job No.	Drawn
173151	MAB

Scale	Date
AS NOTED	11/22/17

Sheet No.
M101

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JOSHUA N. HOVER