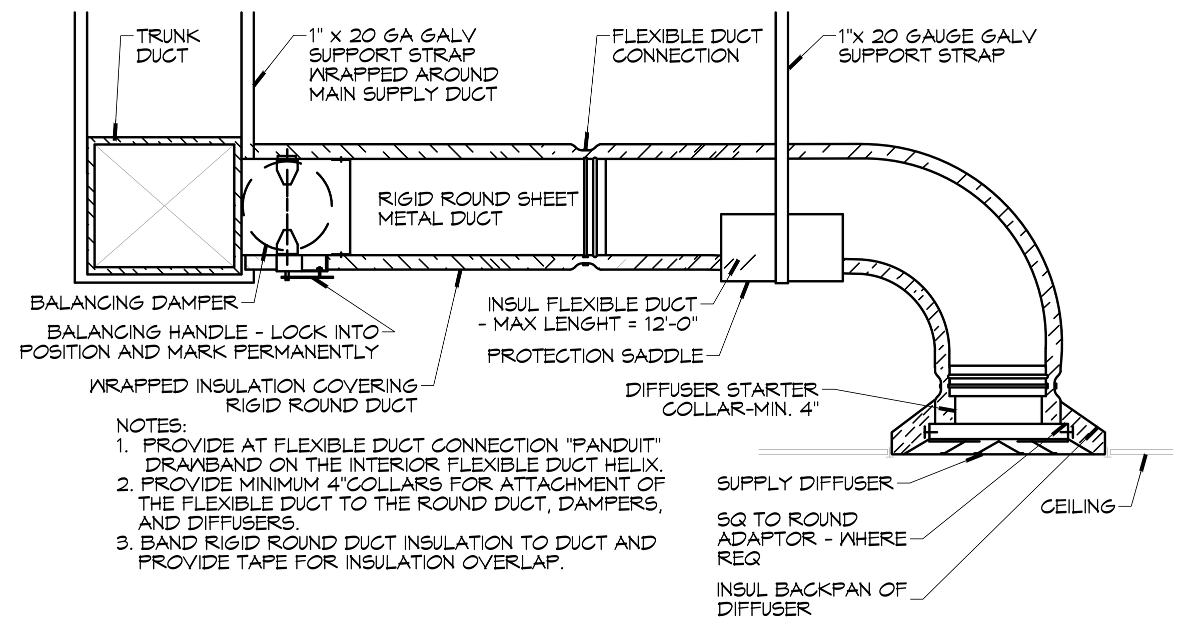
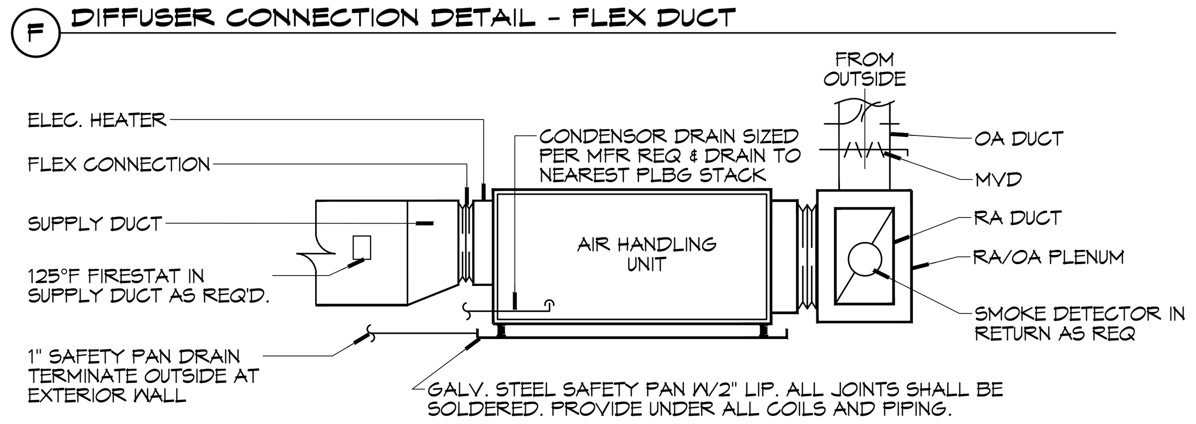
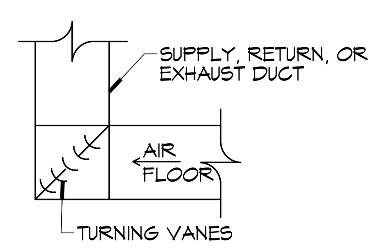


NOTES:
1. PROVIDE AT FLEXIBLE DUCT CONNECTION "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX.
2. PROVIDE MINIMUM 4"COLLARS FOR ATTACHMENT OF THE FLEXIBLE DUCT TO THE ROUND DUCT, DAMPERS, AND DIFFUSERS.
3. BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

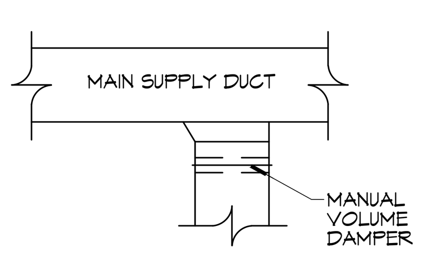
F DIFFUSER CONNECTION DETAIL - FLEX DUCT



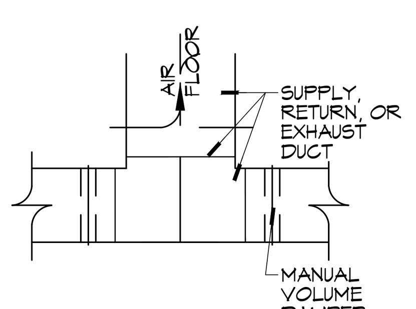
E TYPICAL HORIZONTAL AHU DETAIL



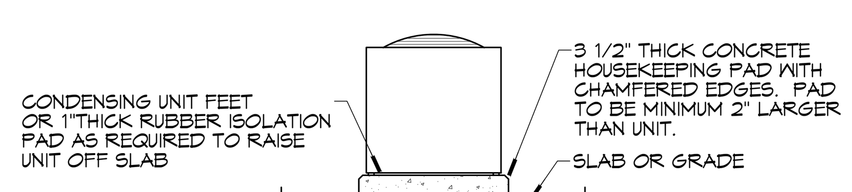
D SQUARE ELBOW DETAIL



C SUPPLY DUCT TAKE-OFF DETAIL



B DUCT SPLITTER DET



A CONDENSING UNIT MOUNT

15 DETAILS
SCALE: NTS

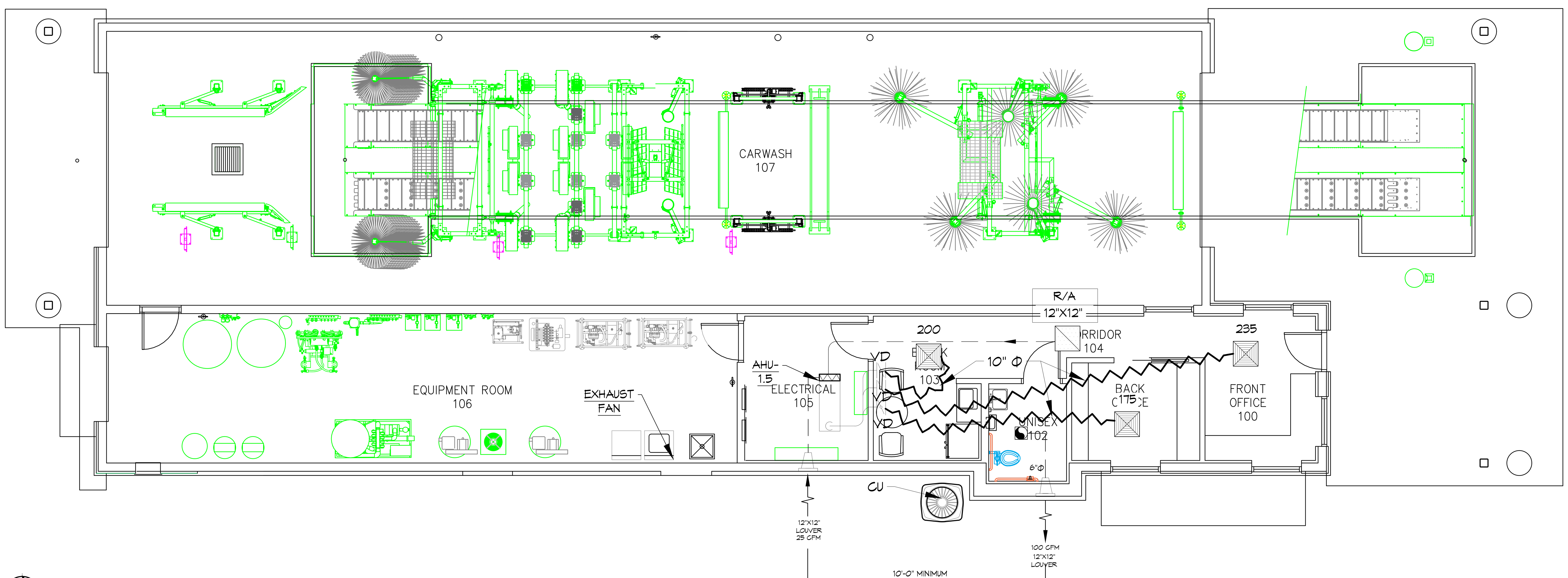
EXHAUST FAN SCHEDULE

EXHAUST	LOCATION	CFM	VOLTAGE	TYPE	MANUFACTURER
EF-1	TOILET	100	120	VENT	BROAN OR EQUAL

A/C SYSTEM SCHEDULE

AIR HANDLER																	OUTDOOR UNIT										
TAG	SERVICE	ORIENTATION	MAKE / MODEL (9)	NOMINAL TONS	TOTAL CFM	VENT. AIR (CFM)	COOLING REQ'D TOTAL MBH	COOLING REQ'D SENSIBLE MBH	Motor HP	ESP (" WC)	POWER VAC	POWER HZ	POWER PH	HEAT KW	HEAT STAGE	HEAT MCA	TAG	Make / Model (9)	POWER VAC	POWER HZ	POWER PH	MCA	Total Fan FLA	# Comp.	Total Compressor RLA	REMARKS
AH-1.5	Office	Horizontal	Trane GAM5B0A18	1.5	610	25	17.6	16.8	1/3	0.5	208	60	1	2.88	1	21	C-1.7	Trane 4TTR5018	208	60	1	9	0.74	1	6.4	1, 3, 4, 5, 6, 7, 8, 9, 10

NOTES:
1. Air handling units shall be provided with factory installed heater packages (fused circuit breakers), foil faced fiberglass or elastomeric insulation, single point power connection with UL disconnect switch, time delay relay and pre-painted cabinet.
2. Air handling units to be provided with foil faced fiberglass or elastomeric insulation, single point power connection with UL disconnect switch.
3. Cooling capacities to be rated per AHRI standard 210/290 for ASHRAE standard design weather conditions in New Orleans, LA.
4. Furnish commercial programmable electronic thermostats w/ 7 day time clock, auto changeover and lockable cover.
5. Furnish smoke detectors in accordance with NFPA as applicable. The unit shall shut down if smoke is detected
6. Each cooling coil shall be furnished with a matching thermostatic expansion valves (TVX)
7. Provide factory filter housing and new filters after commissioning and final acceptance.
8. Condensing units shall be furnished with anti-short cycle timers and coil guards.
9. Install units per Manufacturer's recommendations and local codes and regulations.
10. Basis for design - make/model may vary with approval



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

LEGEND

LEGEND

- SUPPLY AIR GRILLE
- RETURN AIR GRILLE
- EXHAUST FAN
- TRANSFER/REDUCER FROM HARD PIPE TO FLEX PIPE
- REDUCER FOR HARD PIPE
- SUPPLY AIR DUCT
- RETURN AIR DUCT
- DAMPER
- F FILTER, MERV 8
- ROUND FLEX DUCT, MAX. LENGTH 12'-0", MIN. R-6. PROVIDE MAN. DAMPER AT DIFFUSER CONNECTIONS, DUCT SIZE AS FOLLOWS:
  - 250 CFM TO 350 CFM = 10"
  - 200 CFM TO 250 CFM = 9"
  - 110 CFM TO 200 CFM = 8"
  - 100 CFM AND BELOW = 6"

GENERAL NOTES

1. CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROUS GLASS DUCT LINER, MIN R-6. INSTALLED PER SMACNA STANDARDS.
3. ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, AIR DUCT MATERIALS.
4. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
5. IN ALL SYSTEMS OVER 2000 CFM AND LESS THAN 15,000 CFM, SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72E IN THE RETURN DUCT DOWNSTREAM OF THE AIR HANDLING UNIT AND ALL FILTERS TO AUTOMATICALLY STOP THE FAN.
6. PROVIDE UL LISTED 125 'F' FIRESTAT IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
7. PROVIDE UL RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES AND EXHAUST FANS.
8. CONDENSATE DRAINS TO BE PVC PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
9. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
10. ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
11. EXHAUST FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCH(S). PROVIDE BACK DRAFT DAMPER.
12. PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
13. ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS AT THE REGISTER.
14. LOCATE OUTDOOR UNITS AS SHOWN ON ARCHITECTURAL DRAWINGS.
15. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
16. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
17. ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS SHALL BE FIRE CAULKED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E8-14).
18. ALL MECHANICAL SYMBOLS ARE DRAWN DIAGRAMMATICALLY, CONTRACTOR TO VERIFY WITH OWNER LOCATIONS OF VENTS, DAMPERS, REGISTERS, ETC.
19. FLEXIBLE DUCTWORK LENGTH NOT TO EXCEED 12'-0".
20. REFER TO REFLECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
21. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
22. PROVIDE AND INSTALL SMOKE DETECTORS AS APPROVED BY LOCAL AHJ'S. PLACE NEAR R/A AND S/A OPENINGS OF AHU AND PROVIDE, WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR.
23. FRESH AIR INTAKES ARE REQUIRED TO HAVE MOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING.
24. PROVIDE BIRD SCREENS AT ALL EXTERIOR MECHANICAL PENETRATIONS.
25. COORDINATE WALL MOUNTED THERMOSTAT LOCATIONS WITH ALL OWNER FURNISHED ITEMS EITHER WALL MOUNTED OR FLOOR MOUNTED AGAINST PARTITIONS. REFER TO ARCHITECTURAL DRAWINGS.
26. SEE ROOF PLAN FOR ALL ROOF PENETRATIONS.
27. PROVIDE MIN 18 GA GALVANIZED SHEET METAL TO BLANK-OFF GABLE VENTS WHERE INTAKE/EXHAUST DUCTS OCCUR.

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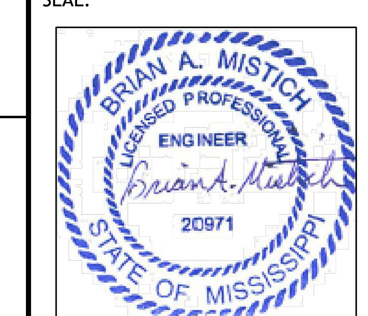
#	DESCRIPTION	DATE

REVISIONS

SEAL:



A NEW CARWASH FOR
CHEEKY MONKEY CARWASH
WEST FRONTAGE DRIVE
WIGGINS, MISSISSIPPI 39577

JOB No:	2024	DATE:	08-22-2024
DRAWN BY:	CKD	CHECKED BY:	BAM

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SHEET TITLE:
MECHANICAL PLAN

DRAWING NUMBER:
M101