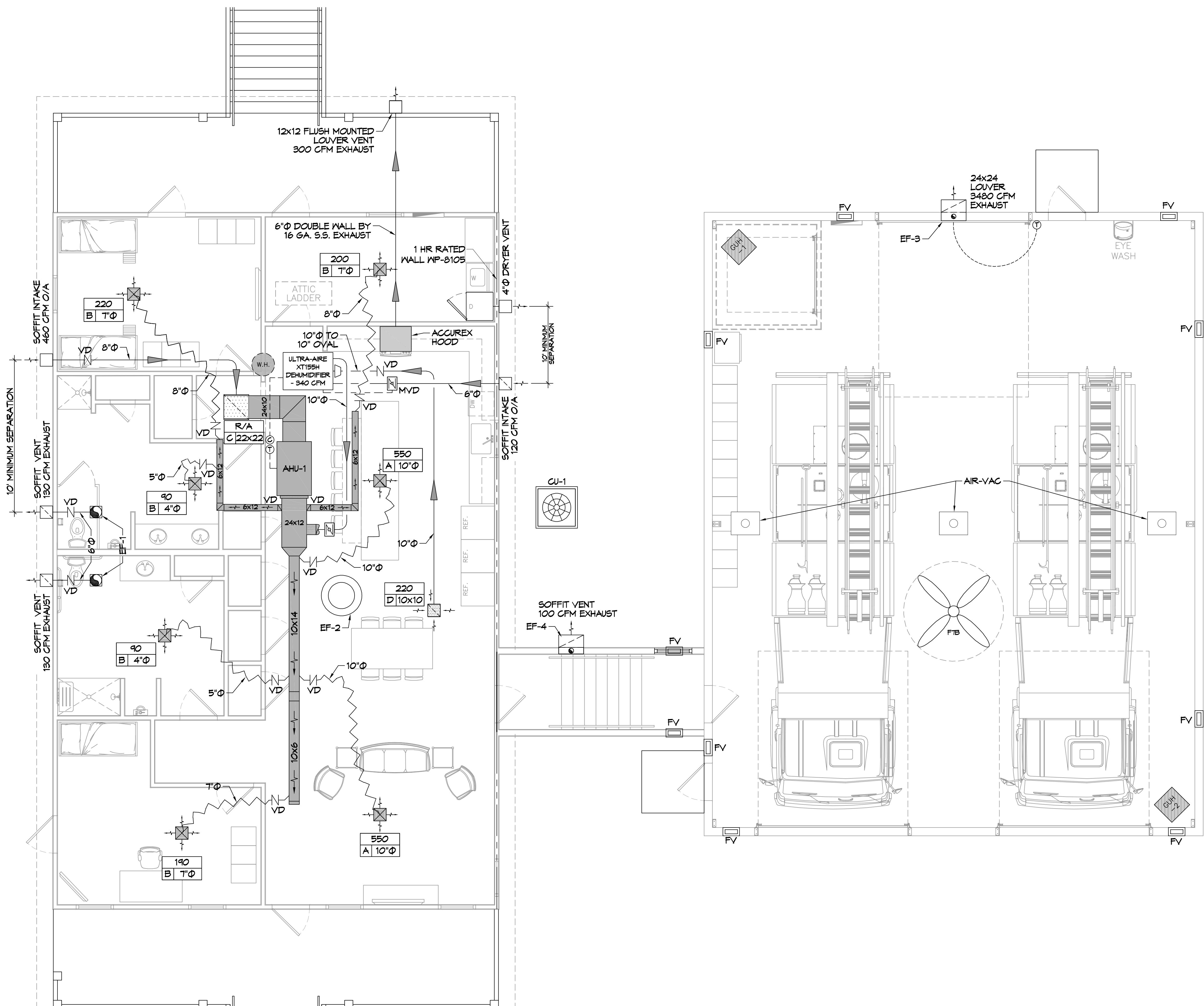


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 PLOT DATE: 04-07-2023 10:46:11 AM
 PLOT BY: JMS
 PLOT SCALE: 1/4" = 1'-0"



GENERAL HVAC NOTES

1. CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL WRAPPED WITH FIBROUS GLASS DUCT WRAP WITH FSK VAPOR BARRIER, MIN R-6. INSTALLED PER SMACNA STANDARDS. DUCT WORK IMMEDIATELY DOWNSTREAM FROM RTU SHALL BE LINED FOR SOUND ATTENUATION.
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 12E 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 LISTED 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 CHANGE-OVER 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. FRESH AIR INTAKES 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". SUPPORT FLEX DUCT TO PREVENT SAGGING.
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 A.H.J.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 16 GA GALVANIZED SHEET METAL TO BLANK-OFF GABLE VENTS WHERE INTAKE/EXHAUST DUCTS OCCUR.

HVAC LEGEND

	RETURN AIR FILTER		DAMPER CONTROL
	SUPPLY AIR VENT		MOTORIZED DAMPER
	MINI SPLIT		BACK DRAFT DAMPER
	EXHAUST FAN		THERMOSTAT
	1 HR RATED WALL		DEHUMIDIFIER CONTROLLER
	CLEAN OUT		GAS FIRED HEATER MODINE PTC-85-55-01
	8" SHOP FAN - BIG ASS FAN BIG ASS FANS POWERFOIL B-08		ROUND FLEX DUCT, MAX. LENGTH 12'-0", MIN. R-6. DUCT SIZE AS FOLLOWS: 250 CFM - 350 CFM = 9" 200 CFM - 250 CFM = 8" 150 CFM - 200 CFM = 7" 100 CFM - 150 CFM = 6"
	SMART VENT INSULATED FLOOD VENT 1540-520		CFM MK SIZE

DAMMON ENGINEERING, INC.
 LOUISIANA & MISSISSIPPI
 Chief Engineer: Brian Hirsch, PE
 554 Old Spanish Trail
 Slidell, LA 70458
 www.dammonengineering.com
 info@dammonengineering.com
 PH: 985.649.8832

#	DESCRIPTION	DATE

SEAL: _____

17MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

ST. TAMMANY FIRE PROTECTION DISTRICT NO. 1
FIRE STATION 19
 57047 ALLEN ROAD
 SLIDELL, LOUISIANA 70461
 JOB No: _____ DATE: 04-07-2023
 DRAWN BY: CKD CHECKED BY: JMS

SHEET TITLE:
 MECHANICAL PLAN
 DRAWING NUMBER:
M101
 SHEET No: 10 of X

SPLIT DX SYSTEM SCHEDULE																			
TAG	MAKE/MODEL	NOMINAL TONS	TOTAL CFM	AIR HANDLER				HEAT KW	CONDENSING UNIT				REMARKS						
				OA CFM	Motor HP	ESP (" WC)	VAC		PH	MCA	MAX FUSE (AMPS)	TAG		MAKE/MODEL	NOMINAL TONS	VAC	PH	MCA	MAX FUSE (AMPS)
AHU-1	Trane TEM6A0C60	5	1890	460	3/4	0.4	7.6	240	1	44	45	CU-1	Trane 4TTZ6060	5	240	1	34	60	1, 2, 3

NOTES:
 1. Provide condensate overflow switch & programmable 7/24 thermostat with lockable cover.
 2. Install units in accordance with manufacturer's recommendations.
 3. Provide new filters after commissioning and final acceptance.

DIFFUSER SCHEDULE				
TAG	SERVICE	NECK SIZE	DESCRIPTION	REMARKS
A	Supply Air	Ref. Plan	24"x 24" Adjustable Square Cone Diffuser, Price ASCDA w/ Insulated Back Panel	1, 2, 3
B	Supply Air	Ref. Plan	12"x 12" Adjustable Square Cone Diffuser, Price ASCDA w/ Insulated Back Panel	1, 2, 3
C	Return Air	Ref. Plan	24" X 24" Perforated, Ducted Return, Titus PAR	1, 2, 3
D	Return Air	Ref. Plan	12" X 12" Perforated, Ducted Return, Titus PAR	1, 2, 3

Notes:
 1. Seal perimeter of diffusers/grilles to prevent moisture migration from attic space, as applicable
 2. R value of insulated back panels/plenums to exceed R-6
 3. Coordinate with owner / architect for color and finish

EXHAUST FAN SCHEDULE										
TAG	FAN				POWER		MAKE / MODEL	REMARKS		
	AIRFLOW (CFM)	TSP (" wc)	Watts	HP	VAC	PH			HZ	
EF-1	130	0.2	98		Ceiling Exhaust	120	1	60	Cook GC-148	1, 2
EF-2	1450	0.1		1/4	Attic Exhaust	120	1	60	Greenheck AE-12-433-A4X-QD	1, 3
EF-3	3480	0.1		1/3	Side Wall Exhaust	120	1	60	Greenheck S2-18-415-A3	1, 4
EF-4	100	0.1		57	Side Wall Exhaust	120	1	60	S&P SWF-100	1

1. Install per manufacturer's recommendations.
 2. Furnish with inline aluminum grille.
 3. Furnish with matching roof curb.
 4. Furnish with OSHA motor guard, weatherhood and backdraft damper.

DEHUMIDIFIER SCHEDULE							
TAG	PART NUMBER	WATTS	PHASE	VOLTS	AMPS	DUCT SIZES	
						INLET	OUTLET
DH	ULTRA - AIRE - XT155H	920 @ 80°F & 60% RH	SINGLE	110-120	8	10" ROUND DUCT COLLAR 6" ROUND DUCT COLLAR	10" OVAL DUCT COLLAR

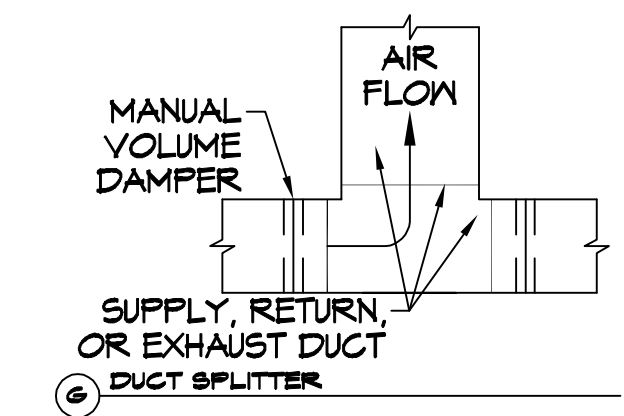
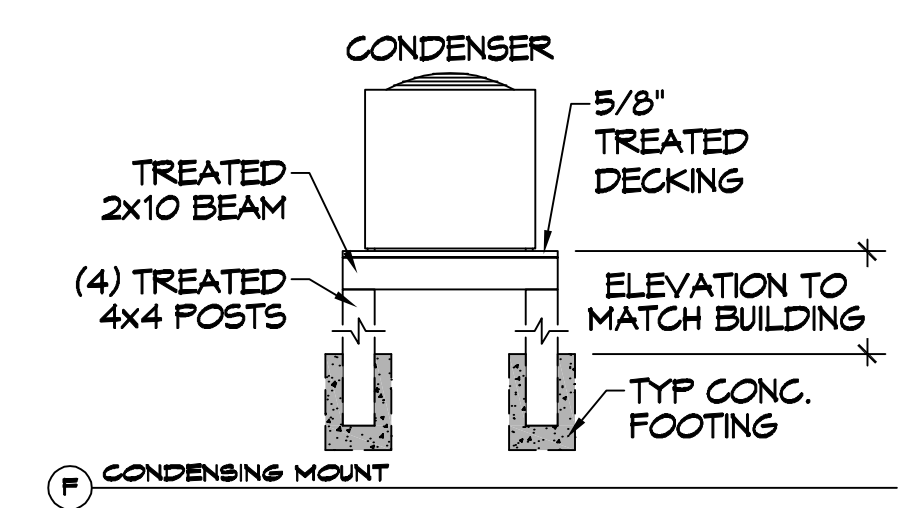
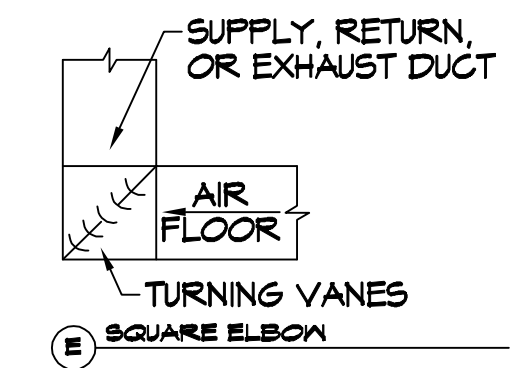
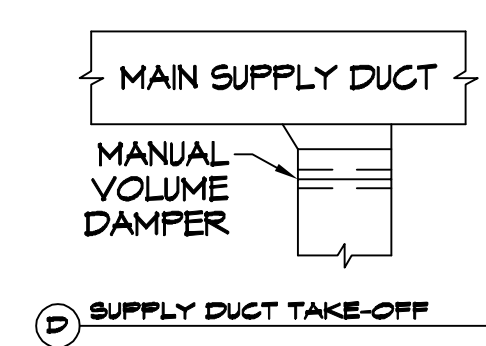
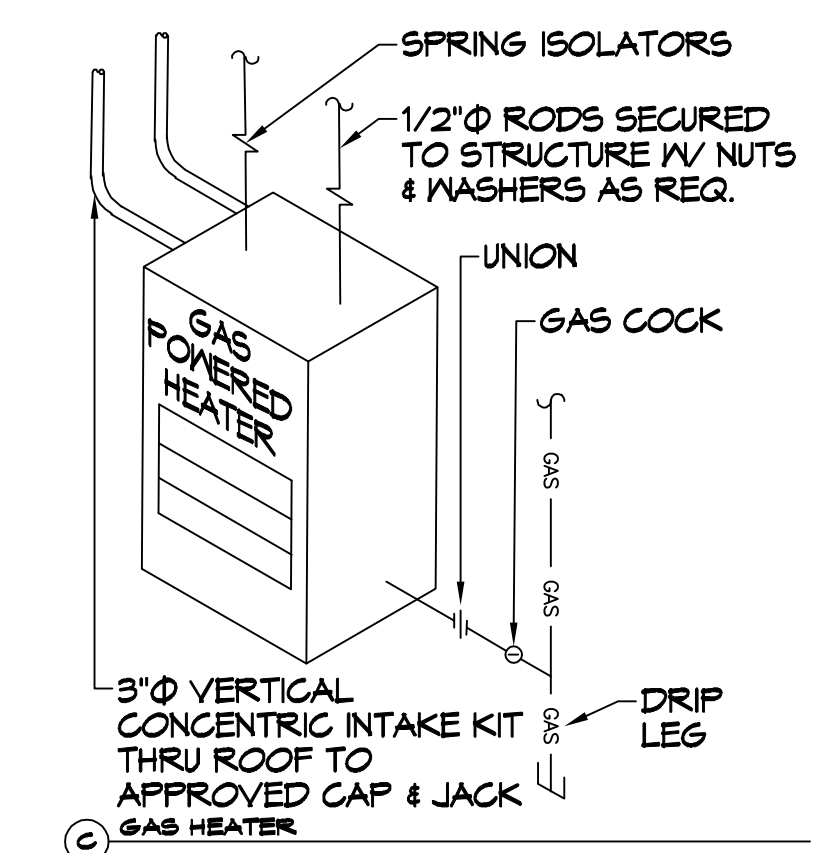
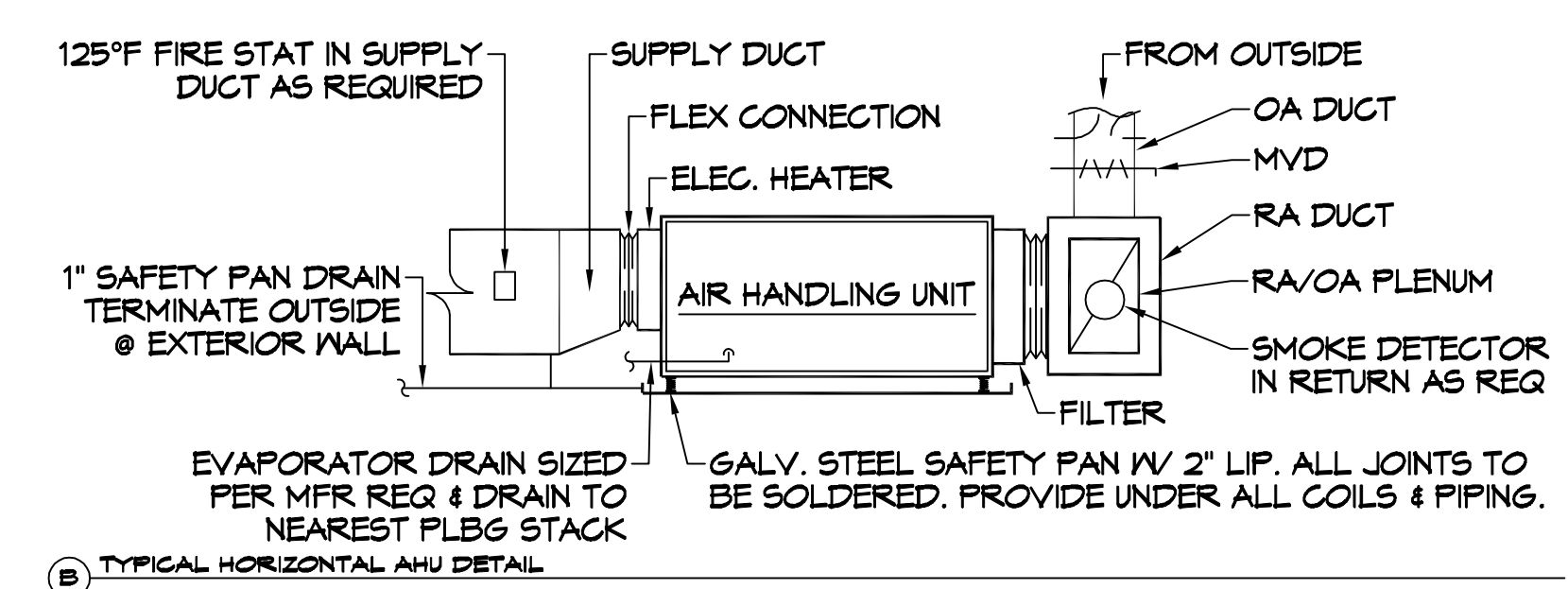
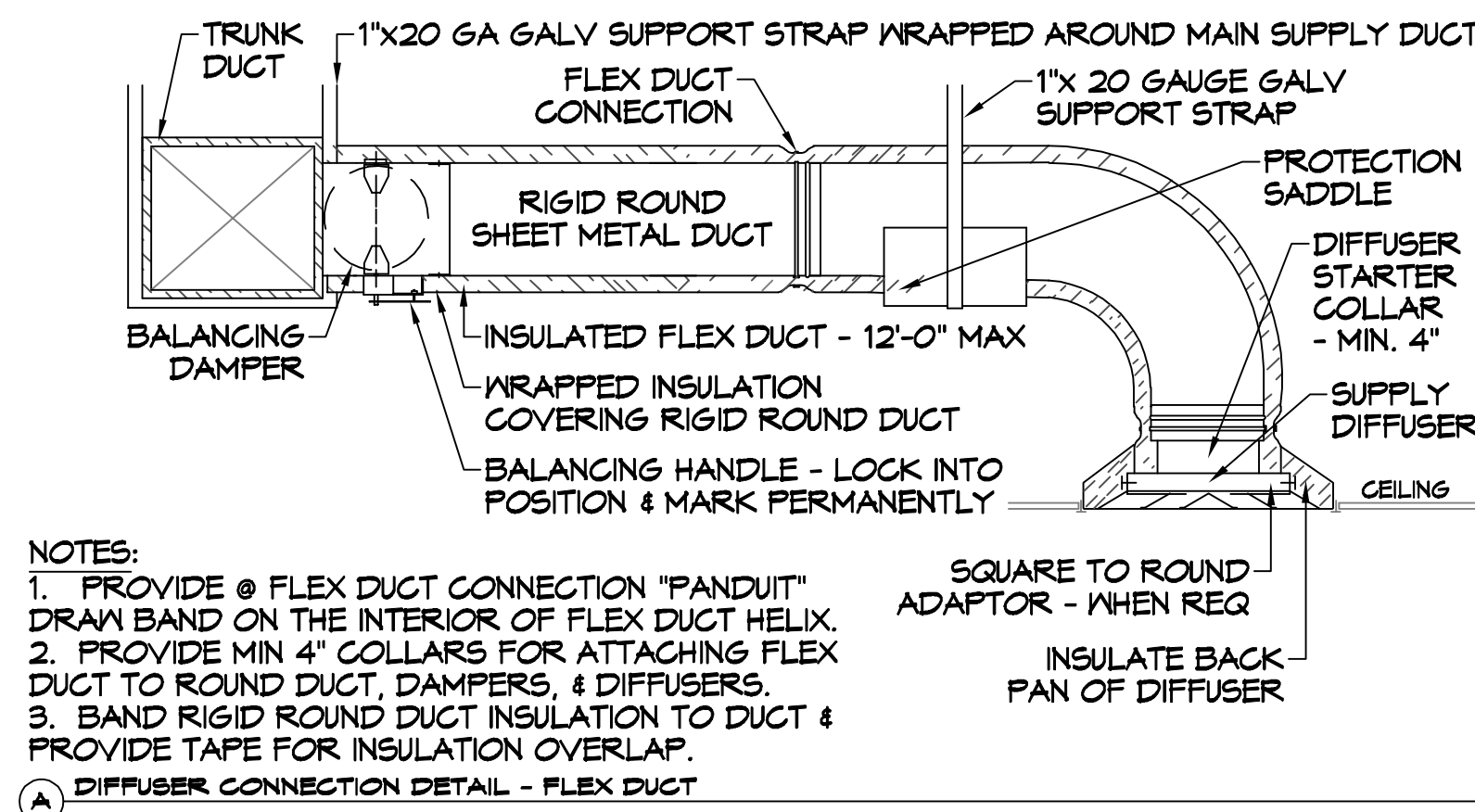
GAS FIRED HEATER SCHEDULE									
TAG	LOCATION	BTUH INPUT	CFM	HP	VOLTS	PHASE	RPM	FLUE DIA.	DESCRIPTION
GUH-1,2	ENGINE BAY	85000	1650	1/8	120	SINGLE	1550	3"	93% EFFICIENT CONDENSING FURNACE GAS HEATER WITH SEPARATE COMBUSTION, POWERED EXHAUST AND CONCENTRIC COMBUSTION/ EXHAUST KIT PROVIDED OPTONIC 409 SS HEAT EXCHANGER. MODINE FTC-85-SS-01

ELECTRIC WATER HEATER SCHEDULE								
TAG	GAL	RECOVERY 80°F RISE	KW	VOLT	PHASE	MOUNT	PIPE SIZE	DESCRIPTION
WH	47*	61	12	208	SINGLE	ATTIC	1"	RHEEM ELD5-52

* PROVIDED HOLDRITE 50-SWHP-W WALL MOUNT KIT. MOUNT 6'-8" A.F.F.

AIR VAC EXHAUST			
PART NUMBER	MOTOR	ELECTRIC	QTY
AIR VAC 911 EXHAUST REMOVAL SYSTEM	3/4 HP	115VOLT, SINGLE PHASE, 13 FL AMPS	3

HVLS FAN SCHEDULE						
TAG	LOCATION	SIZE	RPM	HP	FR	DESCRIPTION
FTB	ENGINE BAY	8' DIA.	191	1	1	HVLS 8'Ø FAN WITH VFD AND WALL MOUNTED CONTROL PANEL BIG ASS FANS POWERFOL 8-08



TYPICAL DETAILS
 SCALE: N.T.S.

DAMMON ENGINEERING, INC.
 LOUISIANA & MISSISSIPPI
 Chief Engineer: Brian Mischick, PE
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REVISIONS	DATE
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SHEET TITLE:
 MECHANICAL DETAILS AND SCHEDULES
 DRAWING NUMBER:
M102
 SHEET No: 10 of X