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ARCHITECTURE
ENGINEERING
STUDIES
PLANNING
INVESTIGATION
EXPERT WITNESS

NEW DAY
CARE CENTER

FRIEDA
TORREGANO
CARROLL RD.
SUDELL, LA
70458

MECHANICAL
PLAN

REV:

SCALE: AS NOTED

JOB#: 1991

DATE: 8-19-08

SHEET

M-1

OF

A/C UNIT SCHEDULE						COMMENTS
NO.	TOTAL BTU	CFM	O.A. (KW)	ELECTRICAL VOLTAGE	MCA	CKT BRKR
1	60,000	2000	983	240 V, 1Ø	33.3	
2	60,000	2000	624	240 V, 1Ø	33.3	

AIR BALANCE SCHEDULE					
	AHU-1	AHU-2	EF-1	HOOD	
COURTSIDE AIR FLOW (CFM)	983	624		200	
RETURN AIR FLOW (CFM)	1017	1376			
SUPPLY AIR FLOW (CFM)	2000	2000			
EXHAUST AIR FLOW (CFM)		75		275	
BUILDING PRESSURE (CFM)	+983	+624		-75	
QUANTITIES	1	1		8	
TOTAL PRESSURIZATIONS	+983	+624		-600	
REMARKS					
RESULTING BUILDING PRESSURIZATION (CFM) = +932					

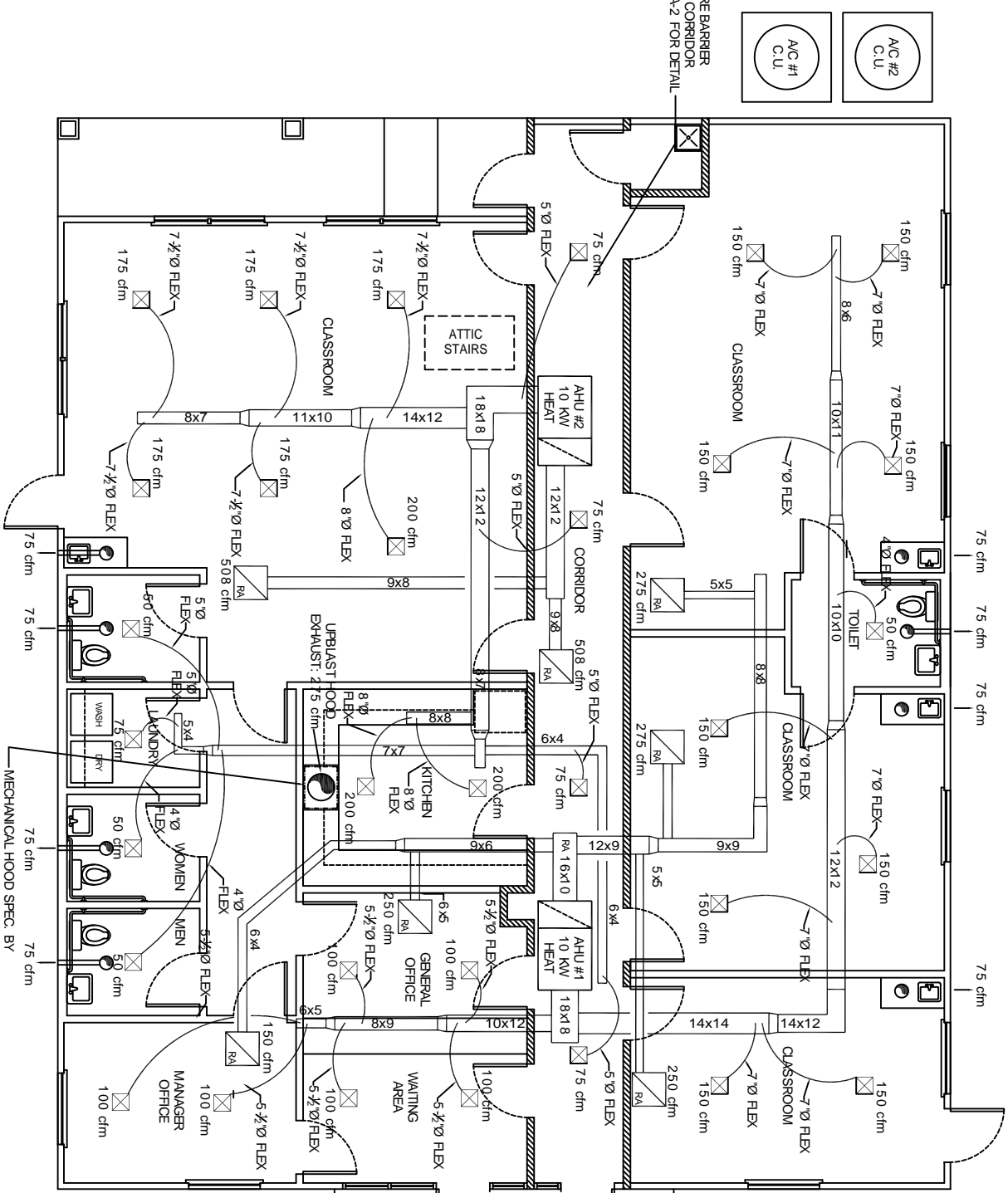
FRESH AIR REQUIREMENTS PER IMC 2003, TABLE 403.3				
ROOM NAME	SQUARE FEET	CFM	A/C ZONE	TOTAL REQ. O.A.
CLASSROOMS	950	712		
TOILET ROOMS	50	75	1	983 CFM
WAITING AREA	200	180		
OFFICES	115	16		
A/C #2 - TOTAL 1378 S.F.				
CORRIDORS	407	20		
TOILET ROOMS	150	225		
LAUNDRY	41	12	2	624 CFM
CLASSROOM	480	345		
KITCHEN	140	42		

KITCHEN HOOD SYSTEM NOTES

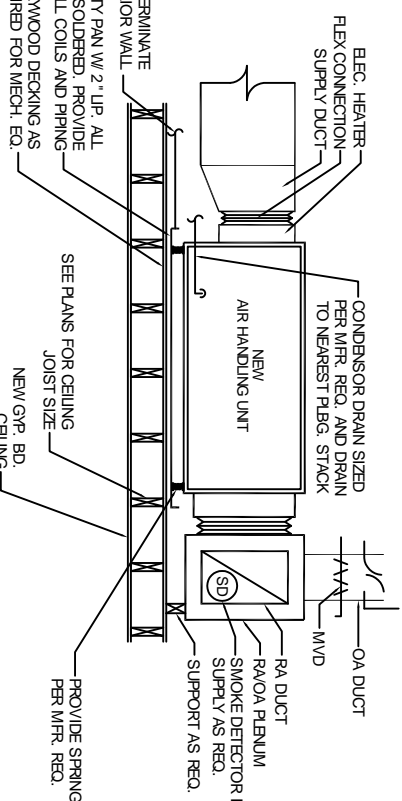
- SUBCONTRACTOR TO SUBMIT SHOP DRAWINGS AND REVIEW PACKAGE SUITABLE FOR FIRE MARSHAL KITCHEN HOOD REVIEW.
- SUBCONTRACTOR TO SUBMIT SHOP DRAWINGS AND REVIEW PACKAGE SUITABLE FOR FIRE MARSHAL KITCHEN HOOD CHEMICAL FIRE SUPPRESSION SYSTEM REVIEW.
- PROVIDE SHUNT TRIP BREAKERS FOR ALL EQUIPMENT UNDER HOOD CONNECTED TO HOOD EXHAUST SYSTEM.

MECHANICAL NOTES

- CONCEALED DUCTWORK TO BE UL-181, CLASS 1, FIBERGLASS DUCTBOARD. DUCTS SHALL BE SIZED TO LIMIT MAIN DUCTS TO 1000 CFM & SECONDARY DUCTS TO 800 CFM. TO BE INSTALLED PER SMACNA STANDARDS.
- EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL PER SMACNA STANDARDS. LINE WITH NEOPRENE COATED 1.0" 1.5 POUNDS PER CUBIC FOOT DUCT INSULATION.
- ROUND FLEXIBLE DUCT TO BE UL-181, CLASS 1, AIR DUCT MATERIALS.
- DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
- 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.
- PROVIDE UL LISTED 125 F FRESH AIR RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
- PROVIDE UL RATED FIRE DAMPERS WHERE REQUIRED AT ALL DUCT PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE INCLUDING OUTSIDE AIR INTAKES.
- CONDENSATE DRAINS TO BE PVC PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
- ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
- ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
- EXHAUST FAN EQUAL TO BROWN MODE, NO. 100 CF OR EQUAL. FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCHES. PROVIDE BACK DRAFT DAMPER PROVIDE AND INSTALL WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
- ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS.
- LOCATE OUTDOOR UNITS AS SHOWN ON ARCH. DWGS.
- REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURERS' INSTRUCTIONS.
- FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
- INSTALL FIRE DAMPER WHERE S.A. & R.A. DUCTS PENETRATE 1 HOUR RATED CEILINGS.
- ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS SHALL BE FIRE CALKED, PENETRATIONS THROUGH RATED CEILING CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-BB-141.
- MECHANICAL PLANS ARE DRAWN SCHEMATICALLY. CONTRACTOR TO ROUTE DUCT SYSTEMS PER FIELD CONDITIONS.
- AREA OF REFUGE SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 92A. TO INCLUDE STAIRWELL PRESSURIZATION SYSTEMS. PROVIDE PROPER ACTIVATION AND CONTROL SYSTEMS.



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



TYPICAL HORIZONTAL AHU DETAIL
SCALE: N.T.S.

- 1" SAFETY PAN DRAIN TERMINATE OUTSIDE @ EXTERIOR WALL.
- GALV. STEEL SAFETY PAN W/ 2" UP. ALL JOINTS SHALL BE SOLDERED. PROVIDE UNDER ALL COILS AND PIPING.
- 3/4" PLYWOOD DECKING AS REQUIRED FOR MECH. EQ.
- CONDENSOR DRAIN SIZED PER MFR. REQ. AND DRAIN TO NEAREST FLEGG. STACK.
- NEW AIR HANDLING UNIT.
- RA/OA PLUMBING SMOKE DETECTOR IN SUPPLY AS REQ.
- SUPPORT AS REQ.
- OA DUCT.
- MVD.
- NEW GYP. BD. CEILING.
- PROVIDE SPRING ISOLATORS PER MFR. REQ.
- SEE PLANS FOR CEILING JOIST SIZE.
- 1" SAFETY PAN DRAIN TERMINATE OUTSIDE @ EXTERIOR WALL.
- GALV. STEEL SAFETY PAN W/ 2" UP. ALL JOINTS SHALL BE SOLDERED. PROVIDE UNDER ALL COILS AND PIPING.
- 3/4" PLYWOOD DECKING AS REQUIRED FOR MECH. EQ.