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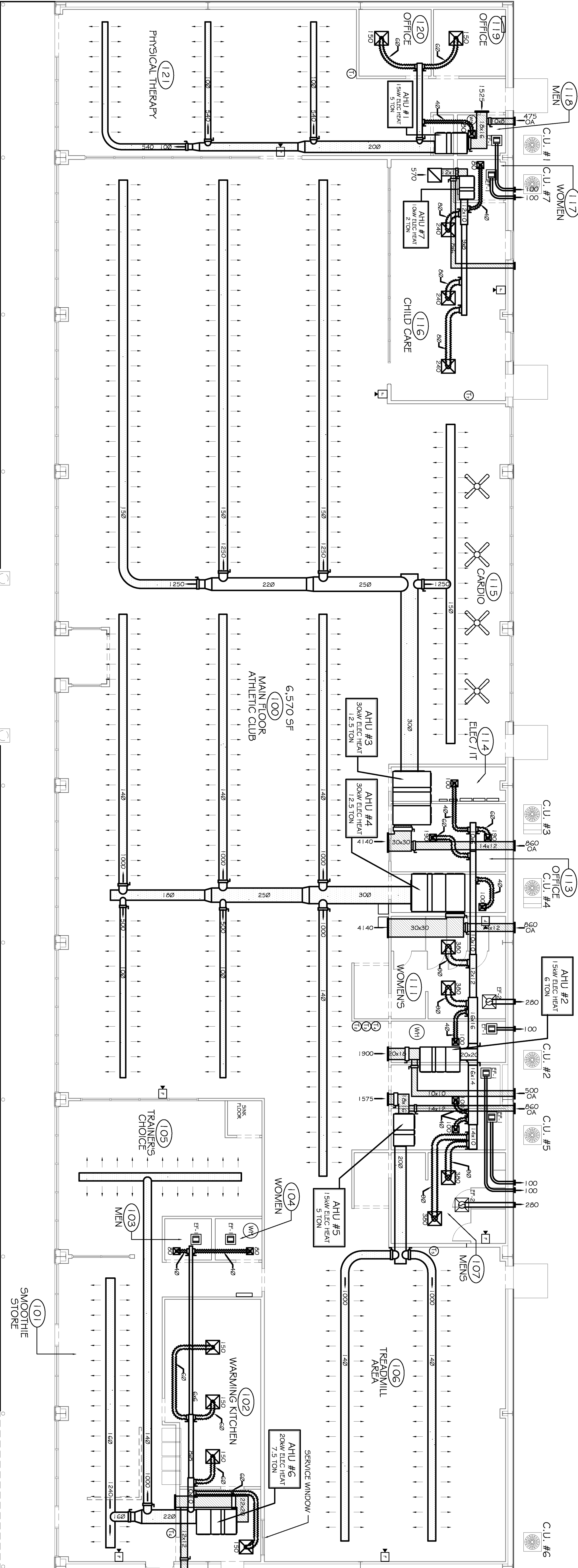
ARCHITECTURE
ENGINEERING
STUDIES
PLANNING
INVESTIGATION
EXPERT WITNESS

SLIDELL
ATHLETIC
CLUB

FLOOR PLAN

REV:	
SCALE: AS NOTED	
JOB#:	
DATE: 06-22-11	
SHEET 1	

M-1



HVAC NOTES

1. 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.
2. EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL PER SMACNA STANDARDS. LINE WITH NEOPRENE COATED 1.0" x 1.5 POUNDS PER CUBIC FOOT DUCT INSULATION.
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 U.L. LISTED 1.25" F-FIRST/AT IN RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE.
7. PROVIDE U.L. 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.
8. ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOWS PER PLANS.
9. ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
10. EXHAUST FAN EQUAL TO BROAN MODEL NO. 100 CF. OR EQUAL. FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCH(15).
11. 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.
14. LOCATE OUTDOOR UNITS AS SHOWN ON ARCH. DWGS.
15. REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURERS' INSTRUCTIONS.
16. FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
17. INSTALL FIRE DAMPER WHERE S.A. & R.A. DUCTS PENETRATE 1 HOUR RATED CEILINGS.
18. 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 E814.
19. ALL MECHANICAL SYMBOLS ARE DRAWN DIAGRAMATICALLY. CONTRACTOR TO VERIFY WITH OWNER LOCATIONS OF VENTS, DAMPERS, REGISTERS, ETC.
20. REFER TO STRUCTURAL DRAWINGS TO COORDINATE LOCATIONS(15) & MOUNTING OF MECHANICAL EQUIPMENT.
21. FLEXIBLE DUCTWORK LENGTH NOT TO EXCEED 10'-0".
22. REFER TO REFLECTED CEILING PLAN FOR FINAL GRILLE AND DIFFUSER LOCATIONS AND COORDINATE AS REQUIRED.
23. FINAL LOCATION OF TEMPERATURE CONTROLS TO BE COORDINATED WITH OWNER AT JOB SITE.
24. PROVIDE AND INSTALL SMOKE DETECTORS AS APPROVED BY LOCAL AHS. PLACE NEAR R/A AND S/A OPENINGS OF AHU AND PROVIDE, WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR.
25. FRESH AIR INTAKES ARE REQUIRED TO HAVE MOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING. ALL THERMOSTATS MUST BE PROGRAMMABLE. SEE SECTIONS 502.4.4 OR 503.2.4.3 OF THE 2006 INTERNATIONAL ENERGY CODE.

MECHANICAL PLAN

SCALE: 1/8" = 1'-0"

LEGEND

- ☒ - INDICATES NEW CEILING DIFFUSER. - CFM AS NOTED - 24x24 UNLESS OTHERWISE NOTED.
- ☒ SIZE INDICATES NECK SIZE
- ☒ - INDICATES NEW RETURN AIR CEILING GRILLE OF SIZE INDICATED. TRANSFER DUCT TO BE RECTANGULAR AS INDICATED.
- ☒ - VENT / LIGHT COMBINATION
- ☒ - THERMOSTAT
- ☐ - INDICATES NEW SHEET METAL DUCTWORK FOR SUPPLY AIR. SIZES INDICATED ARE SHEET METAL DIMENSIONS
- ☐ - INDICATES NEW SHEET METAL DUCTWORK FOR RETURN AIR. SIZES INDICATED ARE SHEET METAL DIMENSIONS
- ☐ ROUND FLEX DUCT. MAX. LENGTH 12'-0". MIN. R.G. PROVIDE MAN. DAMPER AT DIFFUSER CONNECTIONS, SIZE AS INDICATED
- ☐ - AC UNIT

EXHAUST FAN SCHEDULE

FAN NO.	CFM	VOLTAGE	TYPE	MANF.
EF-1	100	120	VENT/LIGHT	
EF-2	280	120	VENT	

AC UNIT SCHEDULE TOTAL HVAC TONS = 50.5

NO.	TOTAL BTU	CFM	O.A.	HEAT ELEC.	VOLTAGE	WCA	ELECTRICAL CKT BRKR	COMMENTS
1	60,000 5 TON	2,000	475	15 KW	208V, 3Ø	-		CARRIER (VERIFY WITH OWNER)
2	72,000 6 TON	2,400	500	15 KW	208V, 3Ø			
3	150,000 12.5 TON	5,000	860	30 KW	208V, 3Ø			
4	150,000 12.5 TON	5,000	860	30 KW	208V, 3Ø			
5	60,000 5 TON	2,000	425	15 KW	208V, 3Ø			
6	90,000 7.5 TON	3,000	700	20 KW	208V, 3Ø			
7	24,000 2 TON	800	230	10 KW	208V, 3Ø			

FRESH AIR REQUIREMENTS

PER IMC 2009 TABLE 403.3

ROOM NAME	SF	OCC/ 1000 SF	CFM/ OCC	CFM/ SF	TOTAL OA
AHU #1					475
PHYSICAL THERAPY 121	1265	20	15	-	363
TOILET	70 CFM PER TOILET FIXTURE				70
OFFICE	260	5	5	0.06	22
AHU #2					500
TOILET	70 CFM PER TOILET FIXTURE				490
OFFICE	120	5	5	0.06	10
AHU #3					860
HEALTH CLUB	3300	10	20	0.06	860
AHU #4					860
HEALTH CLUB	3300	10	20	0.06	860
AHU #5					425
TREADMILL AREA	1635	10	20	0.06	425
AHU #6					700
SMOOTHIE STORE	1675	100	7.5	0.18	425
TOILET	70 CFM PER TOILET FIXTURE				140
RETAIL	584	15	7.5	0.12	135
AHU #7					230
TOILET	70 CFM PER TOILET FIXTURE				70
CHILD CARE	25	10	0.18		160