



**DAMMON ENGINEERING, INC.**  
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ARCHITECTURE  
ENGINEERING  
STUDIES  
PLANNING  
INVESTIGATION  
EXPERT WITNESS

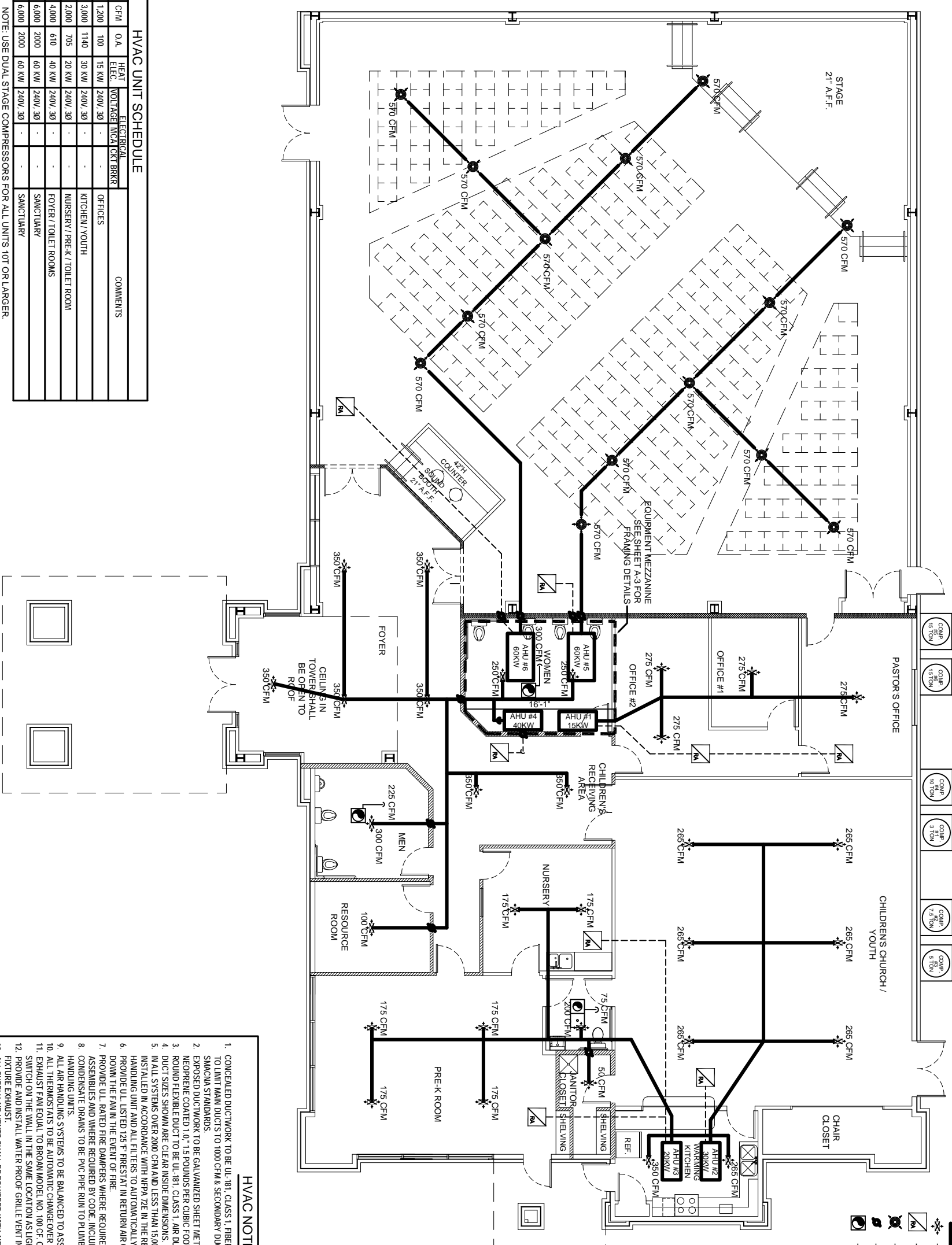
**LAKE SHORE CHURCH**

BRYAN BLIAC  
BREWSTER ROAD  
SECTION 12, TOWNSHIP 7S  
RANGE 10E  
COVINGTON, LA

**MECHANICAL PLAN**

REV:  
SCALE: AS NOTED  
JOB#: 1863  
DATE: 10-22-07  
SHEET 12  
**M-1**  
OF 13

- LEGEND**
- 6" x 12" DIFFUSER
  - RETURN AIR
  - CIRCULAR ALUMINUM DIFFUSER
  - FIRE DAMPER
  - EXHAUST FAN



**HVAC UNIT SCHEDULE**

NO.	TOTAL BTU	CFM	O.A.	HEAT ELEC.	ELECTRICAL MECH. CKT BRKR	COMMENTS
1	36,000	1,200	100	15 KW	240V, 30	OFFICES
2	90,000	3,000	1140	30 KW	240V, 30	KITCHEN/YOUTH
3	2,000	705	20 KW	240V, 30	-	NURSERY/PRE-K/TOILET ROOM
4	120,000	4,000	610	40 KW	240V, 30	FOYER/TOILET ROOMS
5	180,000	6,000	2,000	60 KW	240V, 30	SANCTUARY
6	15,000	6,000	2,000	60 KW	240V, 30	SANCTUARY

NOTE: USE DUAL STAGE COMPRESSORS FOR ALL UNITS 10T OR LARGER.

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

**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" 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 UL LISTED 125°F FIRE-RESIST 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.
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 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 SWITCHES. PROVIDE BACK DRAFT DAMPER, PROVIDE AND INST. WATER PROOF GRILLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
12. PROVIDE AND INST. 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. DINGS.
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 E-814.
19. DRAWN DIAGRAMMATICALLY.