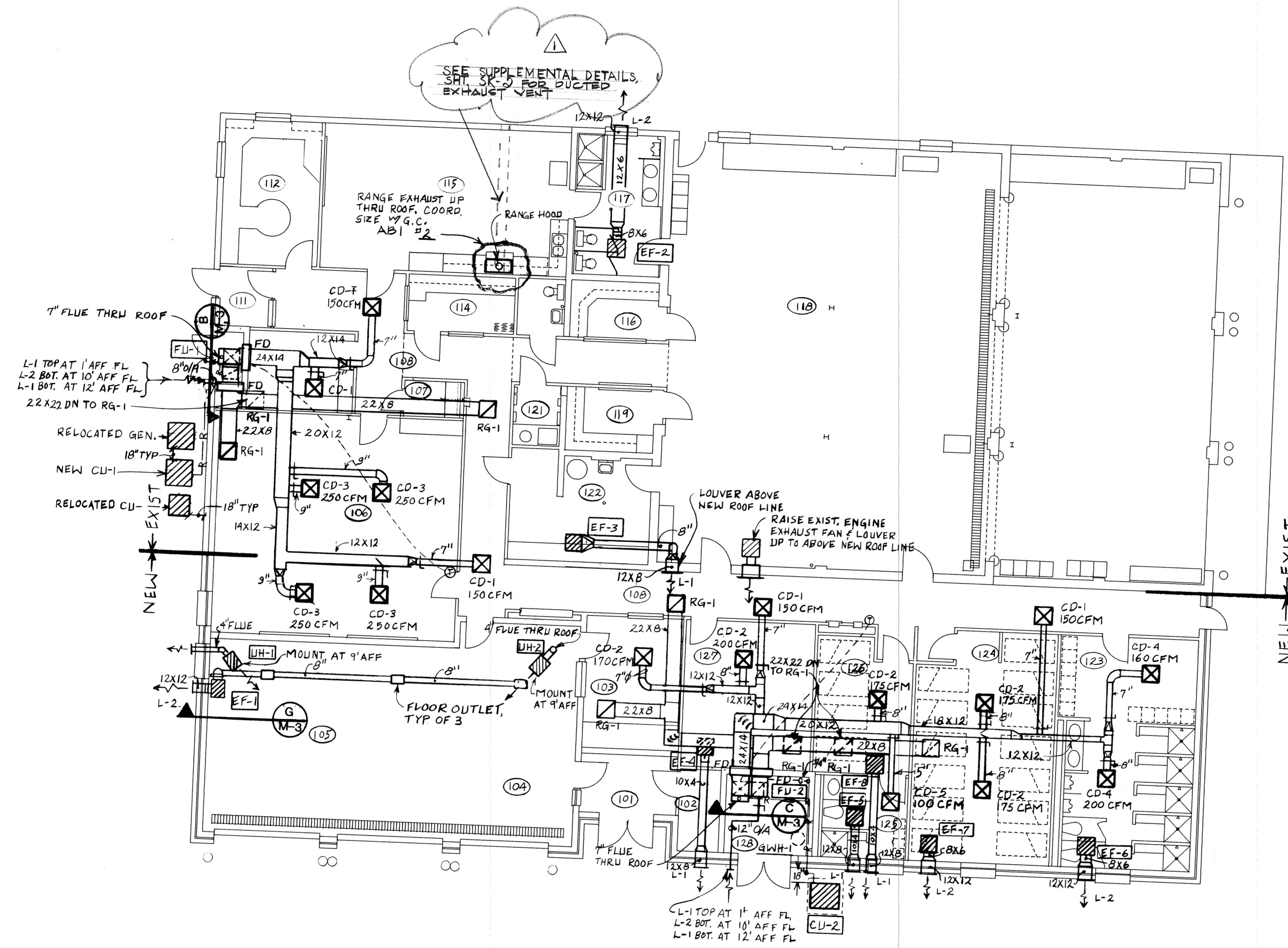




ADDITION / ALTERATION OF
FIRE STATION
 ARKANSAS AIR NATIONAL GUARD
 FORT SMITH, ARKANSAS



MECHANICAL LEGEND			
DUCT (1ST FIGURE, SIDE SHOWN; 2ND FIGURE, SIDE NOT SHOWN)	20 X 12	VOLUME DAMPER	VD
MECHANICAL EQUIPMENT	MARK	MANUAL OPERATION	
DUCT RISER	38 X 20	AUTOMATIC DAMPERS	AD
DUCT RISER 1ST DIMENSION SIDE POINTED TO		MOTOR OPERATED	MO
CEILING DIFFUSER	MARK CFM	TURNING VANES	TV
RETURN GRILLE	MARK CFM	EXTRACTOR SPIN IN	ESI
EXHAUST GRILLE	MARK CFM	SPLITTER DAMPER	SD
AIR FLOW ARROW		RECTANGULAR DUCT	
DUCT SECTION (SUPPLY)		COOLING CONDENSATE DRAIN	C
DUCT SECTION (RETURN)		REFRIGERANT PIPING	R
DUCT SECTION (EXHAUST)		FIRE DAMPER	FD
TRANSITION FROM ROUND TO SQUARE			
THERMOSTAT MOUNT AT 5' AFF	T		

GENERAL MECHANICAL NOTES

- ALL DUCT SIZES SHOWN ARE THE METAL DIMENSIONS. ALLOWANCES HAVE BEEN MADE FOR THE LINER IN RECTANGULAR DUCTS.
- ALL DIMENSION AND SIZES IN INCHES UNLESS OTHERWISE NOTED.
- ALL RECTANGULAR SUPPLY AND RETURN DUCTS SHALL BE LINED. ALL ROUND DUCTS TO BE WRAPPED.
- ALL ELBOWS IN RECTANGULAR DUCTS SHALL HAVE TURNING VANES PER SPECIFICATIONS. PROVIDE PERFORATED ACOUSTIC VANES IN LINED DUCTS 20" AND WIDER.
- USE SPIN-IN EXTRACTORS WITH BUTTERFLY DAMPER AT ALL ROUND BRANCH TAKE-OFFS.
- USE FLEX DUCTS FOR FINAL CONNECTION TO CEILING SUPPLY DIFFUSER AND LIMIT TO 6' MAX. LENGTHS. DO NOT USE FOR RETURN DUCTS.
- THE CONTRACTOR SHALL PROVIDE A COMPLETE AND OPERATING MECHANICAL SYSTEM, INCLUDING ALL INCIDENTAL ITEMS AND CONNECTIONS NECESSARY FOR PROPER OPERATION OR CUSTOMARILY INCLUDED, EVEN THOUGH EACH AND EVERY ITEM MAY NOT BE INDICATED.
- THE DRAWINGS INDICATE THE GENERAL LAYOUT REQUIREMENTS FOR EQUIPMENT, FIXTURES, PIPING, DUCTWORK, ETC. FINAL LAYOUT SHALL BE GOVERNED BY ACTUAL FIELD CONDITIONS WITH ALL MEASUREMENTS VERIFIED AT THE SITE.
- IF INSTALLED DUCT DIMENSIONS ARE DIFFERENT THAN THOSE SHOWN, THE INSTALLED DUCTS SHALL HAVE EQUAL FRICTION TO THOSE SHOWN.
- THE MECHANICAL INSTALLATION SHALL BE SAFE, RELIABLE ENERGY, EFFICIENT AND EASILY MAINTAINED WITH ADEQUATE PROVISIONS ALLOWED FOR ACCESS TO EQUIPMENT.
- THE MECHANICAL SYSTEM SHALL OPERATE QUIETLY WITH NOISE LEVELS BELOW THE CRITERIA RECOMMENDED FOR THE APPLICATION BY ASHRAE. PROVIDE CORRECTIVE ACTION AS REQUIRED TO REDUCE OBJECTIONAL NOISE OR VIBRATION.
- PROVIDE BALANCING DAMPERS AT ALL INDIVIDUAL CEILING DIFFUSER BRANCH DUCTS IN BOTH NEW AND EXISTING DUCTS.
- UNDERCUT DOORS 1 INCH WHERE NO RETURN IS PROVIDED IN AN ENCLOSED SPACE.
- DUCT OSA THROUGH ROOF AS SHOWN. PROVIDE BALANCING DAMPER.
- PROVIDE AT ALL NATURAL DRAFT GAS APPLIANCE FLUES A GRAVITY TYPE VENT CAP EQUAL TO BRIEDERT TYPE L.
- ALL CEILING MOUNTED EXHAUST FAN SHALL BE SUSPENDED FROM THE BUILDING STRUCTURE.

A MECHANICAL PLAN
 SCALE: 1/8" = 1'-0"
 NORTH

REF: SEE SHT M-3 FOR SCHEDULES & DETAILS

architecture plus
 120 North 9th Street • Fort Smith, Arkansas • 501/783-8395

OMG O. MICHAEL GREEN ENGINEERING INC.
 SUITE 610 FIRST PLACE • FAYETTEVILLE ARKANSAS • (501) 442-4682

MECHANICAL PLAN

REVISIONS:	
PROJECT: 88-18	
DATE: 7-24-89	
SHT. M-2 of 3	