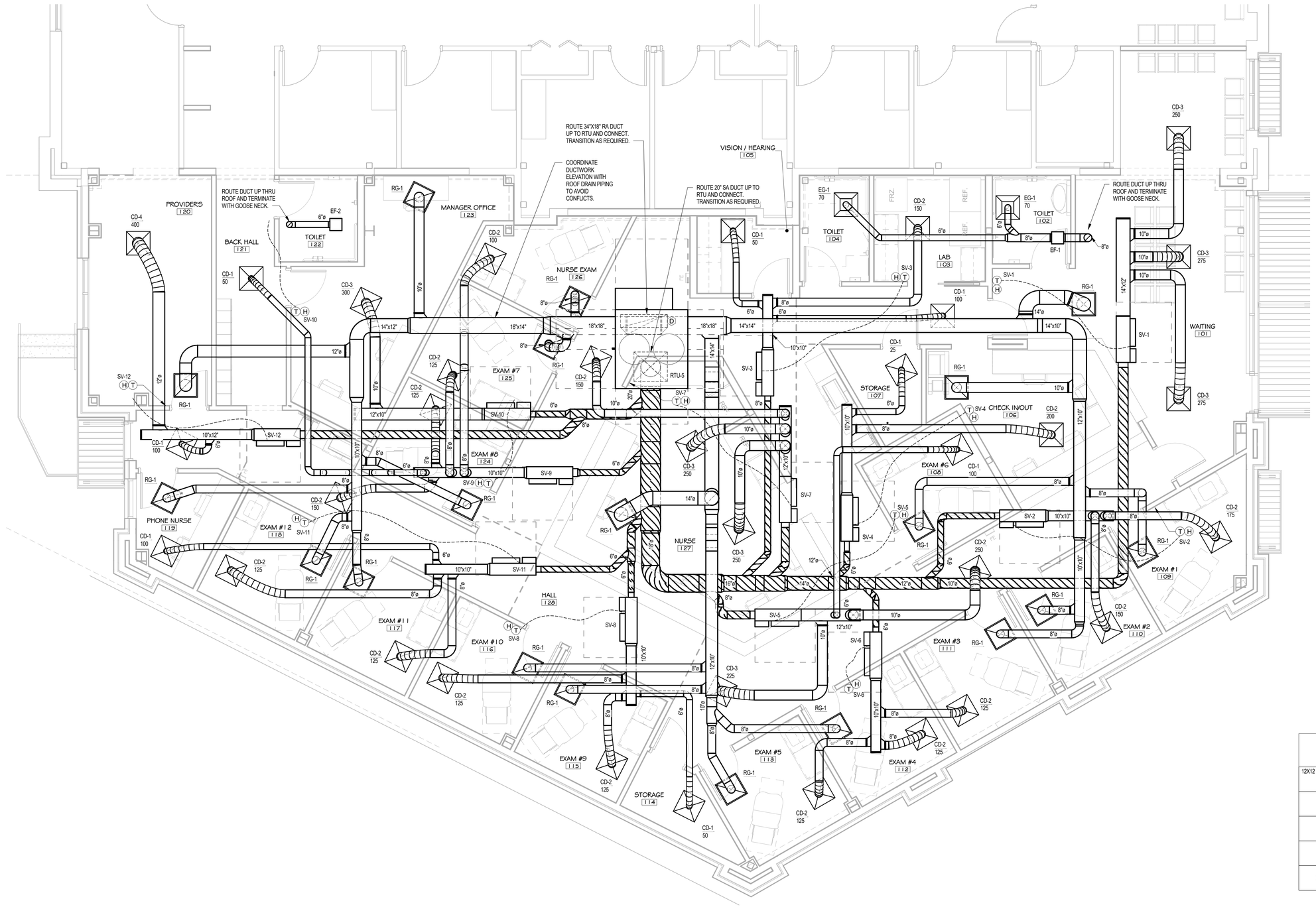

1 MECHANICAL PLAN

SCALE: 1/4" = 1'-0"

MECHANICAL NOTES

1. THIS SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND REGULATIONS.
2. PROVIDE ACCESS PANELS AT ALL CONCEALED DEVICES (DAMPERS, VALVES, ETC.) REQUIRING ACCESSIBILITY FOR OPERATION OR MAINTENANCE. COORDINATE ACCESS PANEL LOCATION WITH OTHER TRADES TO AVOID CONFLICTS. DO NOT INSTALL ANY MAINTENANCE ITEMS ABOVE HARD CEILINGS IF IT CAN BE AVOIDED. PROVIDE MINIMUM 12X12 ACCESS DOOR OR 18X18 IF PERSONNEL ACCESS IS REQUIRED.
3. NO RIGID CONNECTIONS SHALL BE MADE BETWEEN SPRING MOUNTED EQUIPMENT AND THE STRUCTURE. ALL FANS SHALL BE CONNECTED TO DUCTS WITH FLEXIBLE SLEEVES AT LEAST 6" WIDE WITH SLACK. THE MECHANICAL SYSTEM SHALL OPERATE QUIETLY WITH ALL NOISE LEVELS BELOW ASHRAE RECOMMENDED GUIDELINES. PROVIDE CORRECTIVE ACTION TO REMOVE ALL OBJECTIONABLE NOISE AND VIBRATION.
4. ALL DUCT RUNOUTS TO DIFFUSERS AND GRILLES SHALL CONSIST OF A 45° TAKEOFF FITTING AND VOLUME DAMPER. LOCATE THE DAMPERS IN AN ACCESSIBLE LOCATION AS FAR AS PRACTICAL FROM THE AIR DEVICE.
5. ALL EQUIPMENT FURNISHED SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE ALL DRAINS, VENTS, CONNECTIONS, VIBRATION ISOLATION, ETC. TO EQUIPMENT IN ACCORDANCE WITH SAID INSTRUCTIONS. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR A COMPLETE, OPERATING SYSTEM. THIS INCLUDES ALL INCIDENTAL ITEMS, FITTINGS, HARDWARE AND CONNECTIONS NECESSARY FOR PROPER OPERATION EVEN IF THOSE ITEMS ARE NOT SPECIFICALLY INDICATED ON THE DRAWINGS.
6. WHERE MOUNTING HEIGHTS ARE NOT SPECIFIED, INSTALL MECHANICAL SERVICES AND OVERHEAD EQUIPMENT TO PROVIDE MAXIMUM HEADROOM POSSIBLE.
7. THESE DRAWINGS INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND ARE TO BE FOLLOWED INSOFAR AS POSSIBLE. THE CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS AND SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES TO AVOID CONFLICT OR DELAY.
8. ALL DUCT SIZES SHOWN ON THESE DRAWINGS ARE THE METAL DIMENSIONS. REFER TO MECHANICAL DUCTWORK AND INSULATION SCHEDULE FOR INSULATION REQUIREMENTS.
9. PIPE CONDENSATE DRAINS FROM ALL AIR HANDLING UNITS TO NEAREST FLOOR DRAIN, ROOF DRAIN, TURN DOWN TO AN AIR GAP. DO NOT DISCHARGE ANY CONDENSATE DIRECTLY ONTO ROOF.
10. ALL RUNOUT DUCT SIZES ON THE DRAWING SHALL BE THE SAME SIZE AS THE DIFFUSER NECK SIZE. REFER TO THE MECHANICAL SCHEDULE FOR ALL NECK SIZES PRIOR TO CONSTRUCTION.
11. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE FINAL LOCATION OF ALL CEILING MOUNTED DEVICES. MOUNTING HEIGHTS AND FINAL LOCATIONS OF ALL WALL MOUNTED DEVICES SHALL BE COORDINATED WITH ARCHITECTURAL ELEVATIONS PRIOR TO INSTALLATION.
12. THIS BUILDING CONTAINS A FIRE ALARM SYSTEM. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE MANUFACTURER OF THE EXISTING FIRE ALARM SYSTEM TO PROCURE NEW DUCT DETECTORS FOR THE PROJECT. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF NEW DUCT DETECTORS INCLUDING ALL CONDUIT AND WIRING. THE MECHANICAL CONTRACTOR SHALL INSTALL THE DUCT DETECTORS IN THE DUCTWORK AND SHALL PROVIDE CONTACTS FOR THE FIRE ALARM CONTROL CONNECTION FOR UNIT SHUTDOWN IN "ALARM" MODE. INSTALL DUCT DETECTORS IN THE RETURN DUCT OF ALL AIR HANDLING UNITS SUPPLYING 2000 CFM OF AIR OR GREATER.
13. UNLESS OTHERWISE NOTED, SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH INDUSTRY-ACCEPTED PROCEDURES TO WITHIN 10% OF DESIGN AIRFLOW RATES.
14. ALL DEVICES TO BE INSTALLED BY THIS TRADE SHALL BE COORDINATED WITH ALL TRADES (ARCHITECTURAL, MILLWORK, MECHANICAL, ELECTRICAL, FIRE PROTECTION, STRUCTURAL, ETC.) DURING CONSTRUCTION TO AVOID CONFLICTS AND TO PROVIDE A QUALITY PROJECT. IF YOU NOTICE ANY DISCREPANCY BETWEEN THIS WORK AND A SEPARATE TRADE, NOTIFY THE ENGINEER IMMEDIATELY FOR DIRECTION. ANY COORDINATION WORK THAT OCCURS WITHOUT APPROVAL FROM THE ENGINEER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL MOUNTING HEIGHTS SHALL BE CONFIRMED WITH ARCHITECTURAL ELEVATIONS IN EACH ROOM.
15. PROVIDE A RADIUS ELBOW ON ALL RECTANGULAR FITTINGS WITH ASPECT RATIO R/W=1. IF RADIUS ELBOW IS NOT PRACTICAL OR CREATES CONFLICT, THEN INSTALL TURNING VANES IN FITTING. USE ACOUSTIC STYLE PERFORATED VANES IN DUCTS WIDER THAN 20-INCHES.

MECHANICAL LEGEND

12X12	DUCT RISER, FIRST DIMENSION IS SIDE POINTED TO	MARK / CFM	AIR DEVICE TAG
	CEILING DIFFUSER		AIRFLOW ARROW
	RETURN GRILLE	T	THERMOSTAT, MOUNT AT 48" AFF
	EXHAUST GRILLE	20X20	DUCT, FIRST DIMENSION IS SIDE SHOWN
	ROUND DUCT SECTION	D	DUCT MOUNTED SMOKE DETECTOR

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PRELIMINARY NOT FOR CONSTRUCTION

Rev. #	Date	Revision Schedule Description

NWA PEDIATRICS ADDITION
3730 S PINNACLE HILLS PKWY #3
ROGERS, AR 72758

MANA
3383 N MANA CT. SUITE 201
FAYETTEVILLE, AR 72703

DATE	DRAWN BY
Issue Date	Designer
PROJECT #	CHECKED BY
2438	Checker

SHEET
M1.1
MECHANICAL PLAN

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