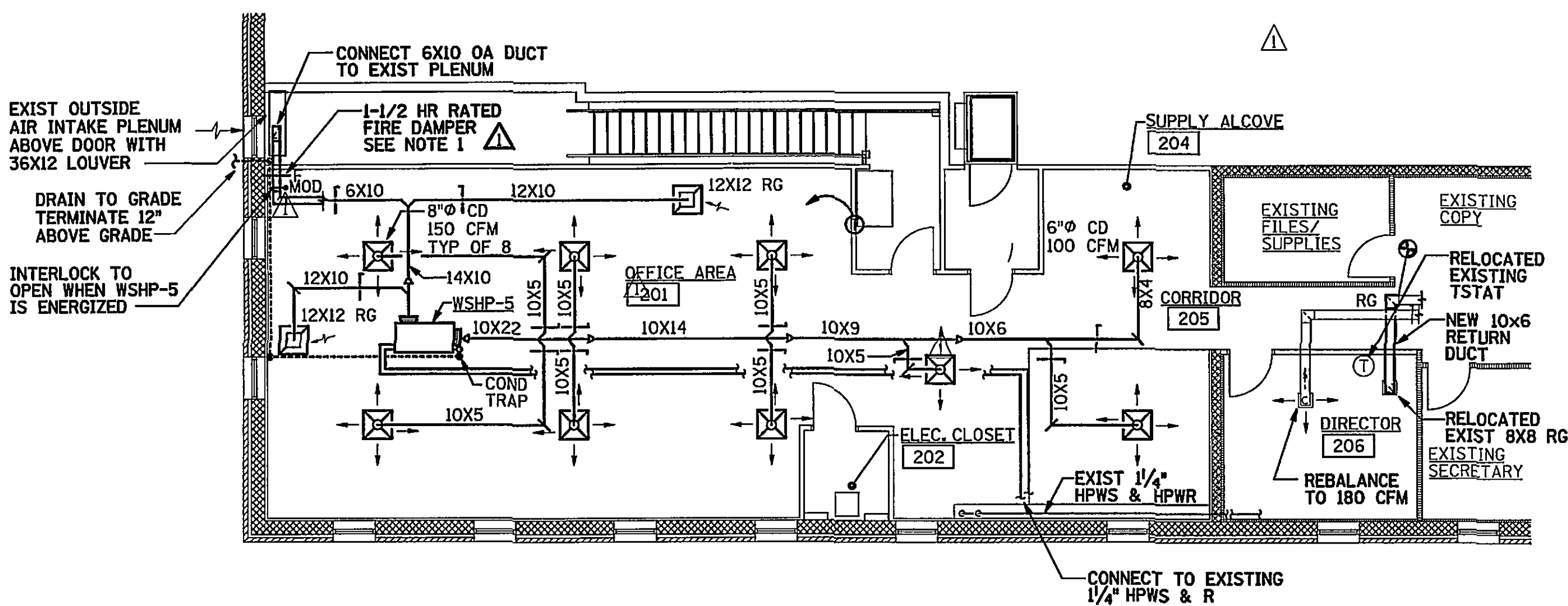


NOTES: 1. FIRE DAMPERS SHALL BE TYPE B AND HAVE A MAXIMUM AIR VELOCITY AND STATIC PRESSURE RATING SUITABLE FOR USE IN THE INSTALLED AIR SYSTEM. FIRE DAMPERS SHALL UL-555 LISTED, PROVIDE ACCESS DOOR FOR INSPECTION OF FIRE DAMPER.

NEW WORK - FIRST FLOOR PLAN

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



NOTES: 1. FIRE DAMPERS SHALL BE TYPE B AND HAVE A MAXIMUM AIR VELOCITY AND STATIC PRESSURE RATING SUITABLE FOR USE IN THE INSTALLED AIR SYSTEM. FIRE DAMPERS SHALL BE UL-555 LISTED, PROVIDE ACCESS DOOR FOR INSPECTION OF FIRE DAMPER.

NEW WORK - SECOND FLOOR PLAN

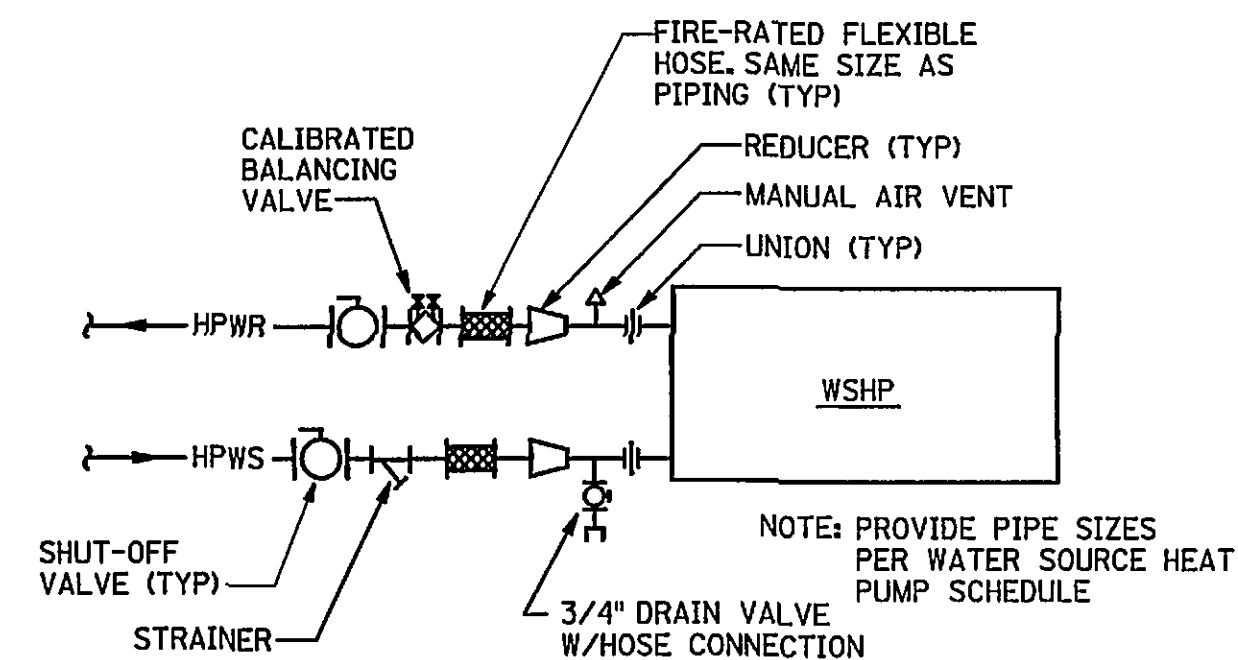
SCALE: 1/8" = 1'-0"

CABINET UNIT HEATER SCHEDULE

DESIGNATION	CUH-2
TYPE UNIT	CONVECTION
MANUFACTURER	CHROMALOX
MODEL NUMBER	CAF-20215
HEAT CAPACITY - KW	1.5
MOTOR VOLTAGE/PHASE	SEE ELECTRICAL
MOUNTING	SEMI-RECESSED
REMARKS	

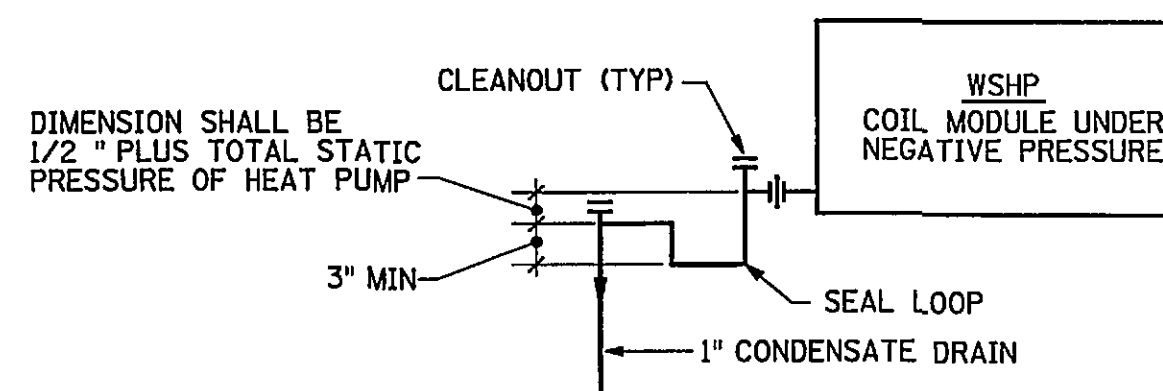
AIR DISTRIBUTION DEVICE SCHEDULE

DESIGNATION	RG	CD
DEVICE	RETURN GRILLE	CEILING DIFFUSER
MANUFACTURER	ANEMOSTAT	ANEMOSTAT
MODEL NO.	GC5L	EP-D
TYPE	LAY-IN	HORIZ. AIR PATTERN, LAY-IN
NECK	SQUARE	ROUND
CONSTRUCTION	ALUMINUM	STEEL
REMARKS	STANDARD WHITE FINISH 1/2"x1/2"x1/2" GRID CORE	STANDARD WHITE FINISH WITH DIRECTIONAL TABS & OPPOSED BLADE DAMPER



WSHP PIPING DETAIL

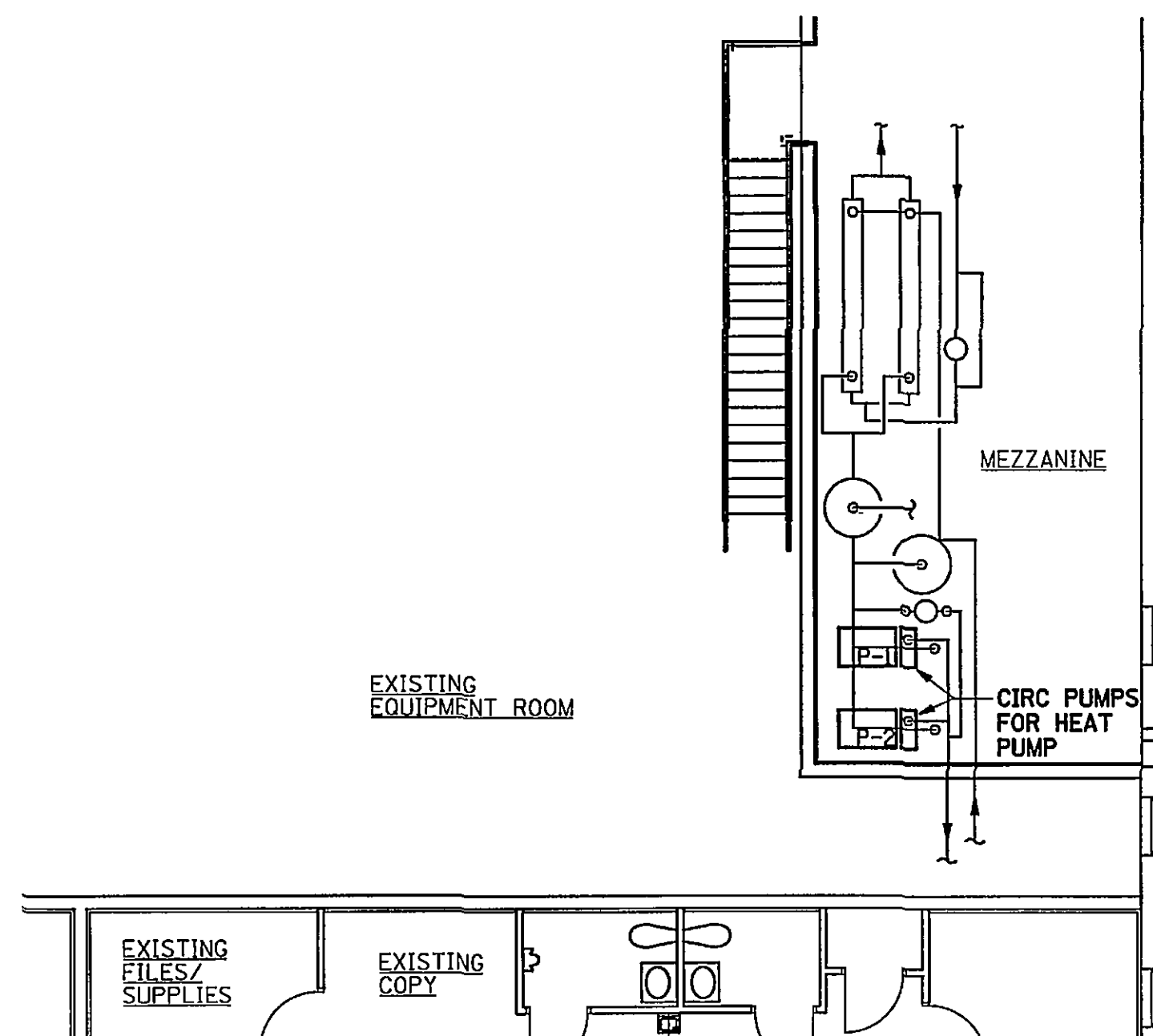
NOT TO SCALE



CONDENSATE DRAIN TRAP DETAIL

NOT TO SCALE

(FOR NEGATIVE PRESSURE COIL MODULE)



PARTIAL SECOND FLOOR PLAN

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

WATER SOURCE HEAT PUMP SCHEDULE

DESIGNATION	WSHP-5
TYPE	HORIZONTAL
MANUFACTURER	TRANE
MODEL NUMBER	GEHA 036
AIRFLOW - CFM	1300
EXTERNAL STATIC PRESSURE, IN.H2O	0.69
FAN HP	1/2
TOTAL COOLING MBH	39.7
SENSIBLE COOLING MBH	30.4
HEAT OF REJECTION MBH	47.4
COOLING EAT, DB/WB DEG F	80.6/66.2
HEATING CAPACITY MBH	44.0
HEAT OF ABSORPTION MBH	34.2
WATER FLOW GPM	9.3
MAX WATER PD, FT HD	12.4
VOLTS/PHASE	SEE ELECTRICAL
HPWS PIPE SIZE - INCHES	1-1/4
HPWR PIPE SIZE - INCHES	1-1/4
DRAIN PIPE SIZE - INCHES	1
OUTSIDE AIR CFM	230
REMARKS	HIGH STATIC FAN PACKAGE

NOTES: 1. COOLING CAPACITY BASED UPON 64°F ENTERING WATER TEMPERATURE.
2. HEATING CAPACITY BASED UPON 50°F ENTERING WATER TEMPERATURE AND 68°F ENTERING AIR TEMPERATURE.

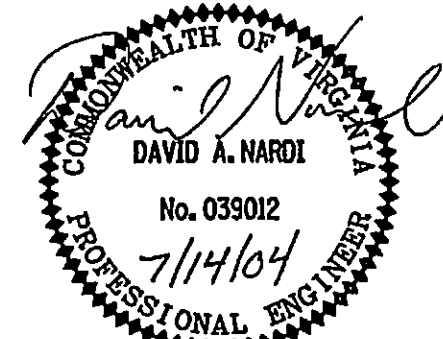
EXISTING PUMP SCHEDULE

DESIGNATION	P-1	P-2
LOCATION	MEZZANINE	MEZZANINE
FUNCTION	HEAT PUMP LOOP	HEAT PUMP LOOP
MANUFACTURER	B&G	B&G
MODEL NUMBER	1510, 1/4AC	1510, 1/4AC
TYPE	CENTRIFUGAL	CENTRIFUGAL
CAPACITY - GPM	33	33
DEVELOPED HEAD - FT H2O	50	50
APPROX EFFICIENCY - PCT	53	53
MOTOR HORSEPOWER	1.0	1.0
MOTOR VOLTAGE/PHASE	460/3	460/3
PUMP SPEED - RPM	1750	1750
OUTLET DIAMETER - INCHES	1.25	1.25
INLET DIAMETER - INCHES	1.5	1.5
REMARKS		

NOTES: 1. REPLACE EXISTING PUMP MOTORS TO BE AS INDICATED BY BOLD TYPE IN THIS SCHEDULE. EXISTING PUMPS ARE TO REUSED AND REBALANCED FOR NEW FLOWS.

IF THIS DRAWING IS A REDUCTION,
GRAPHIC SCALE MUST BE USED.
0 5' 10' 15'
1/8" = 1'-0"

REV.	DATE	BY	APP.	DESCRIPTION
1	7/14/04	DAN	MJG	ADDED SMOKE DAMPERS TO OUTSIDE AIR DUCTWORK ON 1ST AND 2ND FLOOR LEVELS.



Wiley & Wilson
ARCHITECTS ENGINEERS PLANNERS
An Employee-Owned Company
2310 LANGHORNE ROAD
LYNCHBURG, VIRGINIA 24501
(804) 947-1901
P.O. BOX 877
LYNCHBURG, VIRGINIA 24505-0877

DESIGNED DAN	DRAWN DAN	PROJECT CRYSTAL SPRING WATER TREATMENT PLANT BUILDING MODIFICATION DESIGN CITY OF ROANOKE, VIRGINIA
CHECKED MJG	REVIEWED MJG	REFERENCE MECHANICAL
COMM. NO. 204079.00	CADD NO. 204079M2.DGN	TITLE NEW WORK PLANS, SCHEDULES & DETAILS
DATE JULY 14, 2004	DWG. NO. M-2	SHEET NO. 6 OF 10
		REV. 1