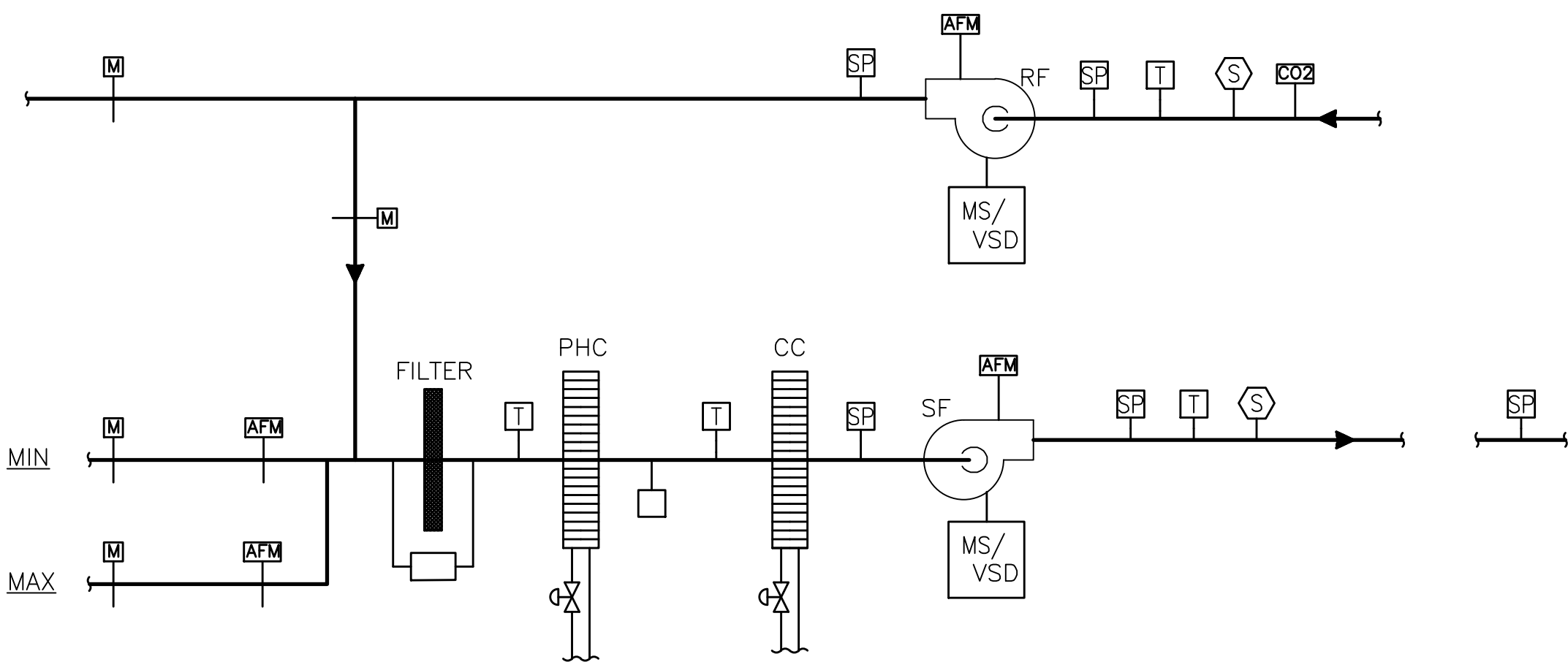
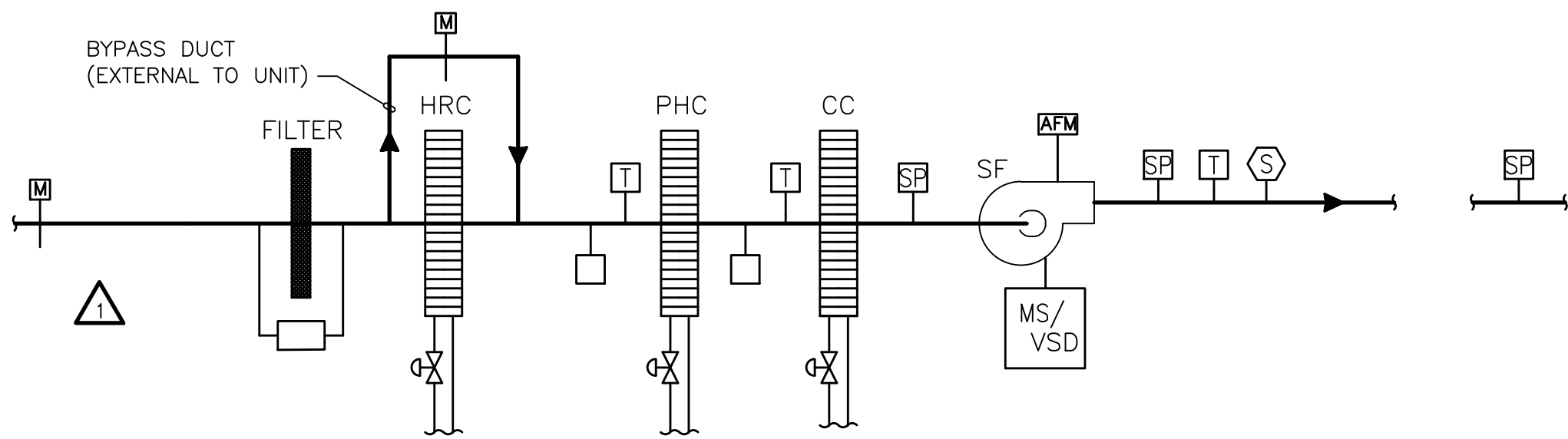


INSTRUMENTATION AND CONTROL SYMBOL LIST	
VALVES AND GAUGES	
	DUCT SMOKE DETECTOR
	SPACE TEMPERATURE SENSOR WITH SET POINT ADJUSTMENT AND TEMPERATURE INDICATOR
	SWITCH WITH PILOT LIGHT
	HUMIDITY SENSOR
	OCCUPANCY SENSOR
	CARBON DIOXIDE SENSOR
	AIR FLOW MEASURING STATION
	AQUASTAT
	DIFFERENTIAL PRESSURE SENSOR
	FLOW SENSOR
	FLOW METER
	FREZZESTAT
	MOTOR STATUS
	MOTORIZED DAMPER
	PRESSURE SENSOR
	STATIC PRESSURE SENSOR
	TEMPERATURE SENSOR
	VARIABLE FREQUENCY DRIVE
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
ABBREVIATIONS	
AI	ANALOG INPUT
AO	ANALOG OUTPUT
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
DDC	DIRECT DIGITAL CONTROL
H	HUMIDIFIER
HRC	HEAT RECOVERY COIL
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
CC	CHILLED WATER COOLING COIL
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
DX	DIRECT EXPANSION (REFRIGERANT) COOLING COIL
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
LCP	LABORATORY CONTROL PANEL (DDC)
LPS	LOW PRESSURE STEAM SUPPLY
LPR	LOW PRESSURE STEAM RETURN
MPS	MEDIUM PRESSURE STEAM SUPPLY
MPR	MEDIUM PRESSURE STEAM RETURN
HPS	HIGH PRESSURE STEAM SUPPLY
HPR	HIGH PRESSURE STEAM RETURN
MBC	MAIN BUILDING CONTROLLER
OA	OUTSIDE AIR
PHC	PREHEAT HEATING COIL
SAC	STAND ALONE CONTROLLER
TXV	THERMOSTATIC EXPANSION VALVE
VFD	VARIABLE FREQUENCY DRIVE

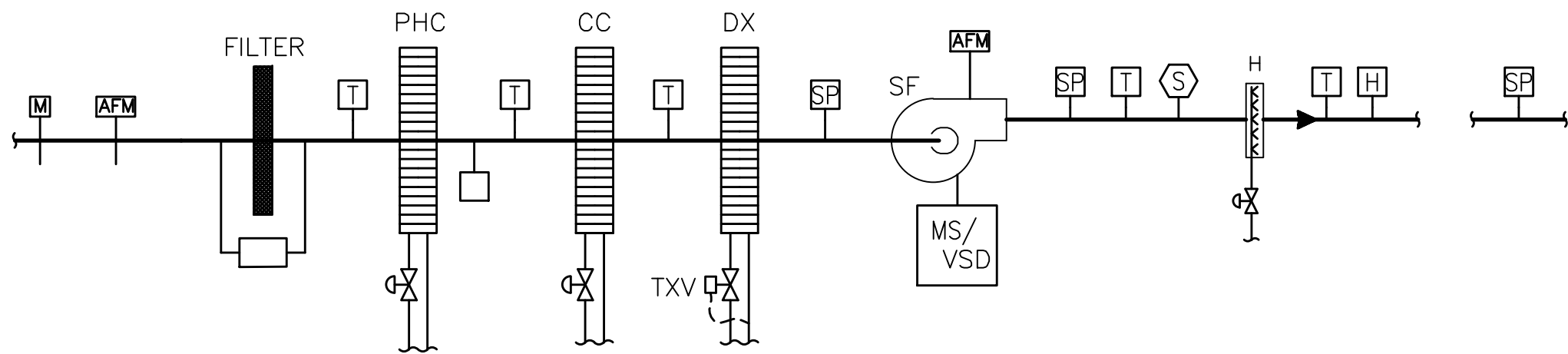
- GENERAL NOTES**
- REFER TO FLOOR PLANS, SPECIFICATIONS, AND DETAILS FOR ALL QUANTITIES, SIZES, AND LOCATIONS OF ALL DEVICES.
  - REFER TO SPECIFICATION SECTION 15995 FOR ADDITIONAL MONITORING AND CONTROL POINTS.



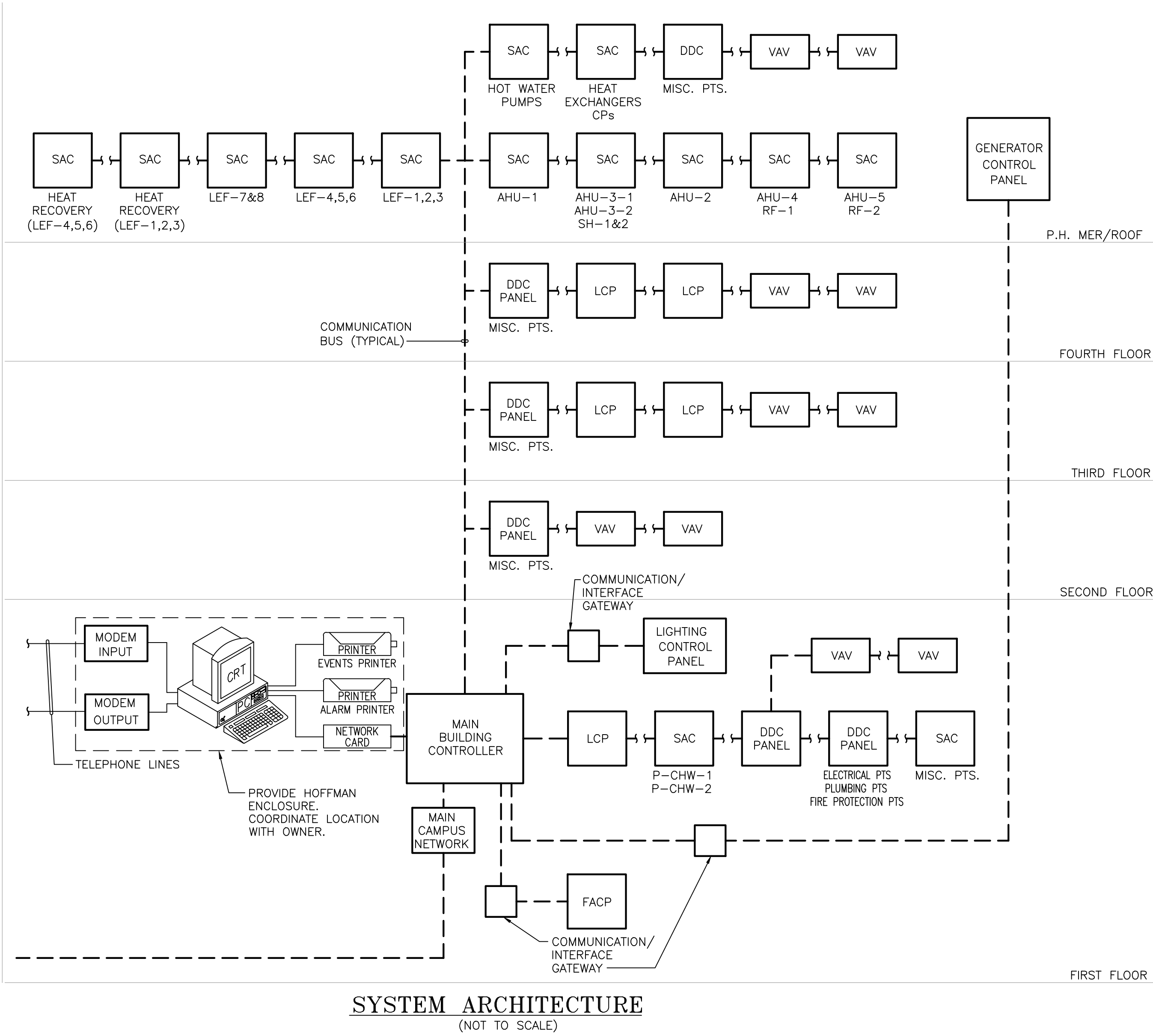
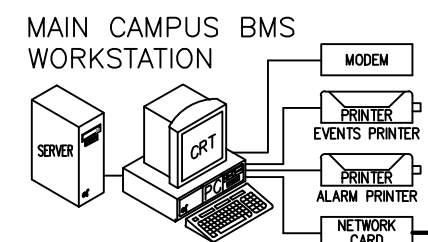
**TYPICAL AIR HANDLING UNIT CONTROL SCHEMATIC  
(UNITS WITH RETURN AIR FANS)**  
(NOT TO SCALE)



**TYPICAL AIR HANDLING UNIT CONTROL SCHEMATIC  
(100% OA)**  
(NOT TO SCALE)



**TYPICAL AIR HANDLING UNIT CONTROL SCHEMATIC  
(100% OA WITH DX COIL AND HUMIDIFIER)**  
(NOT TO SCALE)



**SYSTEM ARCHITECTURE**  
(NOT TO SCALE)



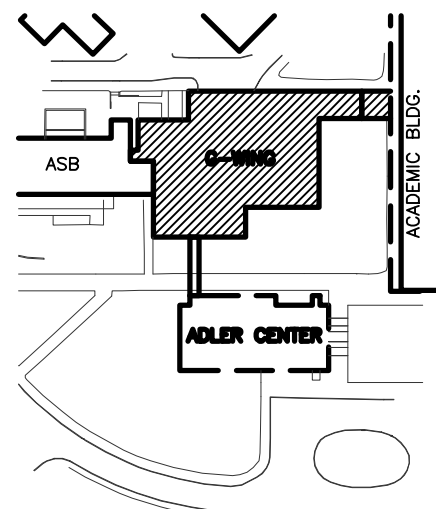
- OWNER:  
Ramapo College of New Jersey  
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Mahwah, New Jersey 07430-1630

- CONSTRUCTION MANAGERS:  
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212 687 2233

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- SITE CIVIL ENGINEER:  
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Elmwood Park, NJ 07407-1338  
201 794 6900
- AV CONSULTANT:  
Cerami & Associates  
404 Fifth Avenue  
New York, NY 10018  
212 370 1776

Key Plan:



6/8/12	DCA FILING
7/19/12	ISSUED FOR BID
11/21/12	BID ADDENDUM #5
1/15/13	ISSUED FOR CONSTRUCTION
8/12/16	AS-BUILT CONSTRUCTION DOCUMENTS

NO	DATE	COMMENTS
1	6/8/12	DCA FILING

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR BEFORE PROCEEDING WITH THE WORK.

Project:  
**G-WING RENOVATION &  
ADLER CENTER**

Submission:  
**CONSTRUCTION DOCUMENTS**

Drawing Title:  
**MECHANICAL  
CONTROLS SHEET No.1  
G-WING**

PROJECT NO: 102700	DATE: 6/8/12
CONJ PROJ. NO: 08-240C	SCALE: NOT TO SCALE

**H8.01G**