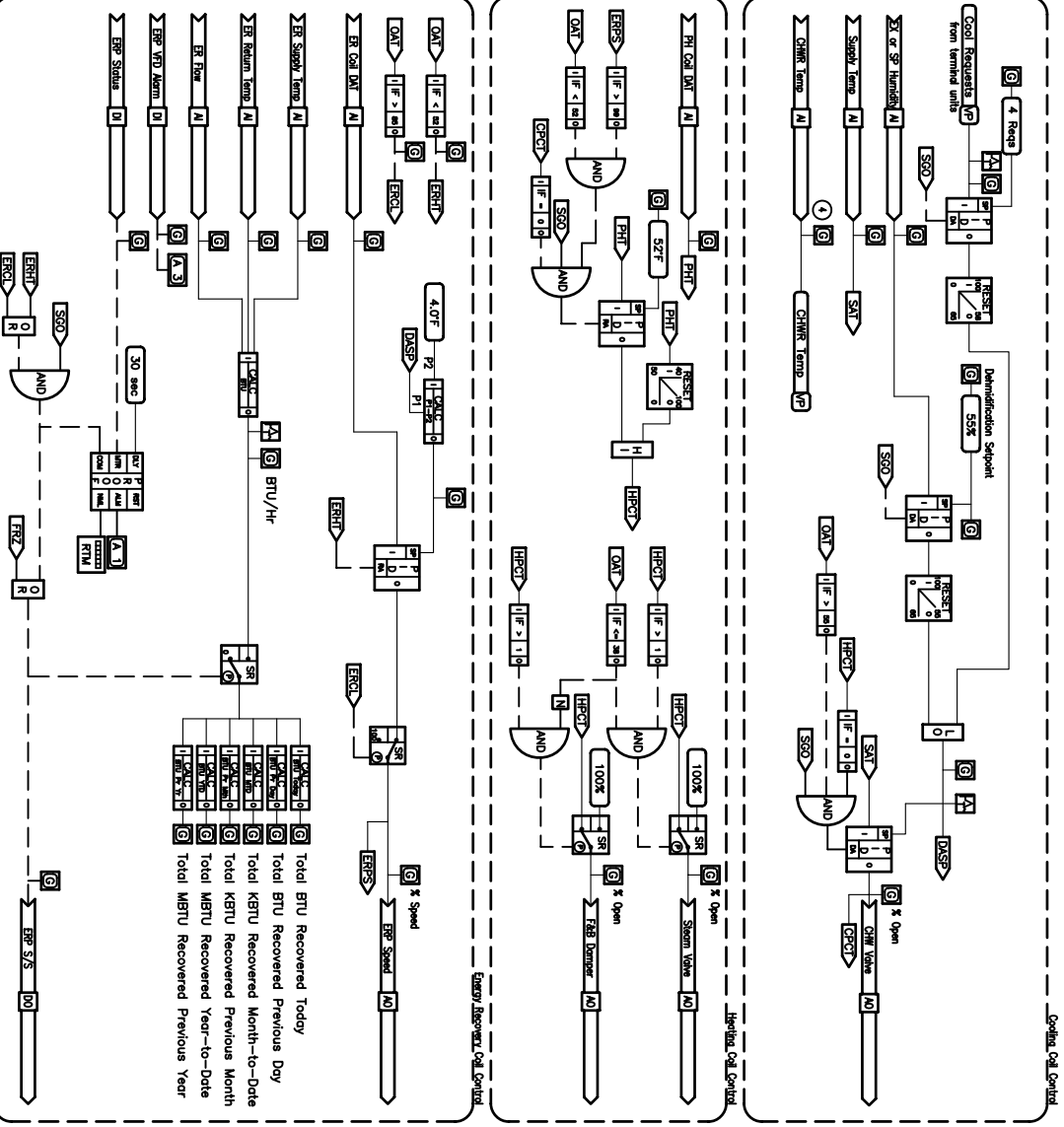
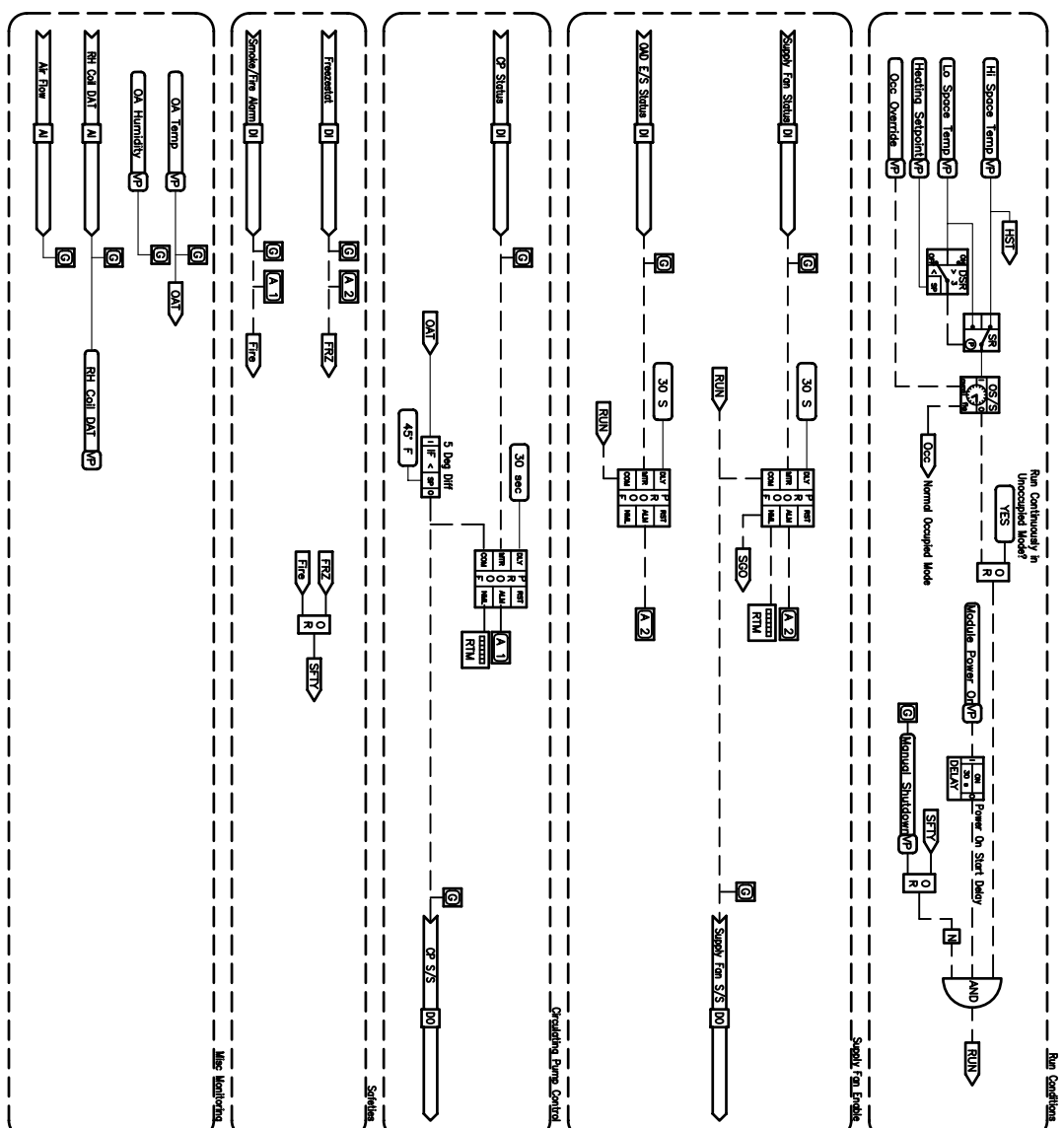


- NOTES
1. Provide multiple Freezestats as required to achieve 3ft of element for each 3 sqft of coil face area.
  2. Provide CHWR temperature wall and sensor on all units with coil capacity greater than 10 tons.
  3. Where applicable per mechanical design.
  4. See sheet C-4.05 Miscellaneous Controls for additional equipment details.



## 100% OA CV AH WITH HEAT RECOVERY, FACE & BYPASS STEAM, CHW COIL

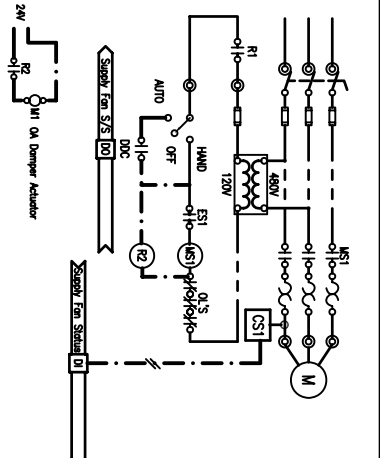


POINTS LIST			
POINT TYPE	ADDRESS	DESCRIPTION	REMARKS
DI	AI	DO	AP
Supply Fan S/S	*		
Supply Fan Status	*		
Air Flow	*		
Supply Temp	*		
RH Coil DAT	*		
FreezeStat	*		
OAQ E/S Status	*		
ER Coil DAT	*		
CHWR Temp	*		
CHW Valve	*		
Steam Valve	*		
Freeze/Free Alarm	*		
ER Pump S/S	*		
ER Pump Status	*		
ER VFD Alarm	*		
ER Speed	*		
ER Supply Temp	*		
ER Return Temp	*		
ER Flow	*		
EX or SP Humidity	*		

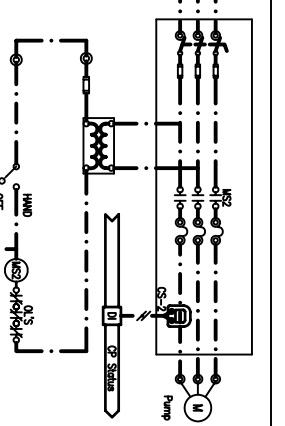
### LOGIC VARIABLES

BINARY	ANALOG	DESCRIPTION
LOC		ON WHEN OCCUPIED MODE ACTIVE
RUN		ON WHEN UNIT COMMENCED TO START
SSO		ON WHEN SUPPLY FAN ENERGIZED AND STATUS PROVEN
SMKZ		ON WHEN SMOKE DETECTOR IS IN ALARM
FRZ		ON WHEN FREEZE/STAT IS IN ALARM
FRZ		ON WHEN FIRE ALARM IS ACTIVE
SFTY		ON WHEN 'FIRE', 'TWO' OR 'SMK' ARE ON
LSI		VARIABLE CALCULATED VALUE OF HIGHEST SPACE TEMPERATURE
LOAT		VARIABLE VALUE OF OUTSIDE AIR TEMPERATURE
SAT		VARIABLE VALUE OF SUPPLY AIR TEMPERATURE
PHT		VARIABLE VALUE OF PRESENT AIR TEMPERATURE
LOPC		VARIABLE CALCULATED VALUE OF CHW VALVE POSITION
HRPC		VARIABLE CALCULATED VALUE OF RH VALVE POSITION
ERPS		VARIABLE CALCULATED VALUE OF ENERGY RECOVERY PUMP SPEED
ERHT		ON WHEN ENERGY RECOVERY SYSTEM ENERGIZED IN HEATING MODE
ERCL		ON WHEN ENERGY RECOVERY SYSTEM ENERGIZED IN COOLING MODE

### ELECTRIC LADDER DIAGRAMS



### SAFETY INTERLOCK DETAIL



REV. 5

100% OA CV AH  
WITH HEAT  
RECOVERY, FACE &  
BYPASS STEAM, CHW  
COIL

00 OF 00  
SHEET NUMBER  
C-1.11  
DWG NUMBER



The University of North Carolina  
Chapel Hill, North Carolina  
Standard Control Drawings