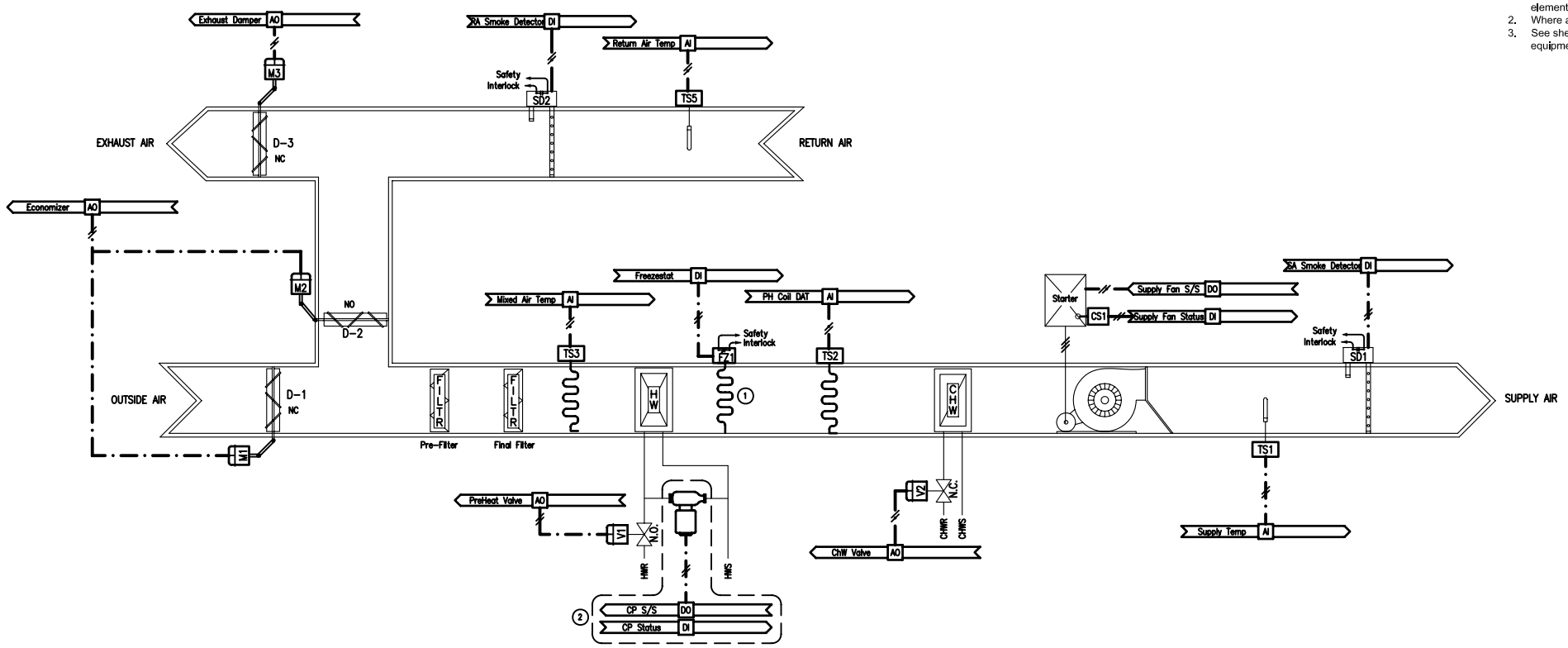


NOTES

1. Provide multiple Freezestats as required to achieve 3ft of element for each 3 sq.ft of coil face area.
2. Where applicable per mechanical design.
3. See sheet C-4.05 Miscellaneous Controls for additional equipment details.

SINGLE DUCT CV AH WITH PREHEAT & CHW COIL

POINTS LIST

ADDRESS	POINT DESCRIPTOR	POINT TYPE DI	AI	DO	AO	VP	REMARKS
	Supply Fan S/S			*			
	Supply Fan Status	*					
	Supply Temp		*				
	SA Smoke Detector	*					
	RA Smoke Detector	*					
	PH Coil DAT		*				
	Freezestat	*					
	Mixed Air Temp		*				
	Return Air Temp		*				
	Circ Pump S/S			*			
	Circ Pump Status	*					
	PreHeat Valve				*		
	CHW Valve				*		
	Economizer				*		
	Exhaust Damper				*		
	Fire Alarm	*					

LOGIC VARIABLES

BINARY	ANALOG	DESCRIPTION
Occ		ON WHEN OCCUPIED MODE ACTIVE
RUN		ON WHEN UNIT COMMANDED TO START
SBH		ON WHEN SETBACK HEATING MODE ACTIVE
SBC		ON WHEN SETBACK COOLING MODE ACTIVE
WUP		ON WHEN WARM-UP MODE ACTIVE
CDN		ON WHEN COOL-DOWN MODE ACTIVE
SGO		ON WHEN SUPPLY FAN ENERGIZED AND STATUS PROVEN
MAGO		ON WHEN OA CONDITIONS ALLOW ECONOMIZER CONTROL
SMK		ON WHEN EITHER SMOKE DETECTOR IS IN ALARM
FRZ		ON WHEN FREEZESTAT IS IN ALARM
Fire		ON WHEN FIRE ALARM IS ACTIVE
SFTY		ON WHEN "FRZ", "Fire" OR "SMK" ARE ON
	HST	VARIABLE CALCULATED VALUE OF HIGHEST SPACE TEMPERATURE
	SAT	VARIABLE VALUE OF SUPPLY AIR TEMPERATURE
	OAT	VARIABLE VALUE OF OUTSIDE AIR TEMPERATURE
	PHT	VARIABLE VALUE OF PREHEAT AIR TEMPERATURE
	MAT	VARIABLE VALUE OF MIXED AIR TEMPERATURE
	DASP	VARIABLE CALCULATED VALUE OF DISCHARGE TEMPERATURE SETPOINT
	CPCT	VARIABLE CALCULATED VALUE OF CHW VALVE POSITION
	HPCT	VARIABLE CALCULATED VALUE OF HW VALVE POSITION
	EPCT	VARIABLE CALCULATED VALUE OF ECONOMIZER PID OUTPUT

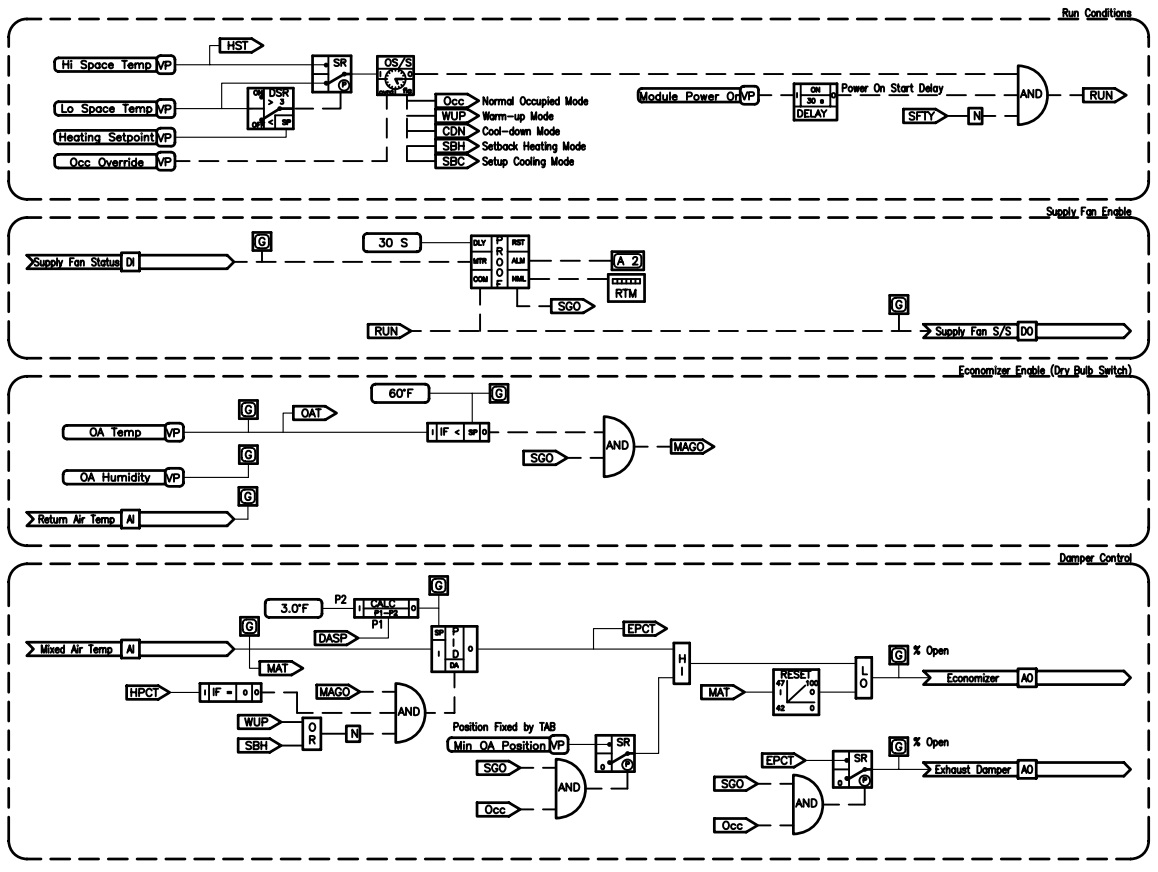
REVISIONS

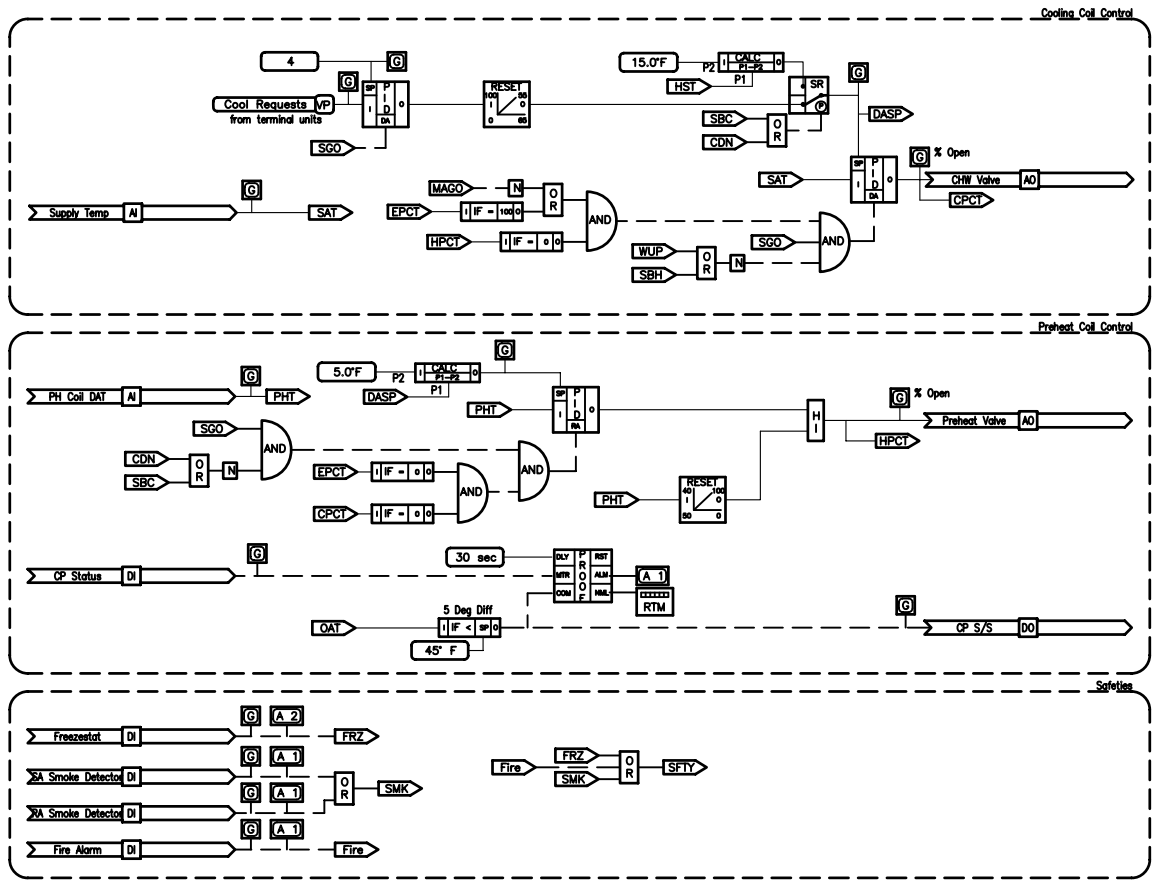
NO.	DESCRIPTION	DATE

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

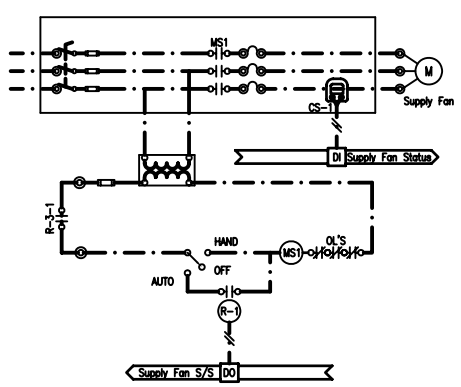
The University of North Carolina
Chapel Hill, North Carolina

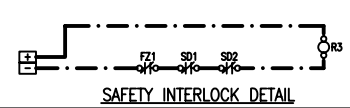
Standard Control Drawings





ELECTRIC LADDER DIAGRAMS





SAFETY INTERLOCK DETAIL

Eng	HJH
Drawn	HJH
Chkd	---
Appd	---
Issued	12/23/2008
Job No.	----
Scale	N/A
Proj Code	

100% Design Review (REV 3)

SINGLE DUCT CV AH WITH PREHEAT & CHW COIL

00 OF 00
SHEET NUMBER

C-1.10

DWG NUMBER

© 2008 FACILITY DYNAMICS ENGINEERING

Software Logic Diagram