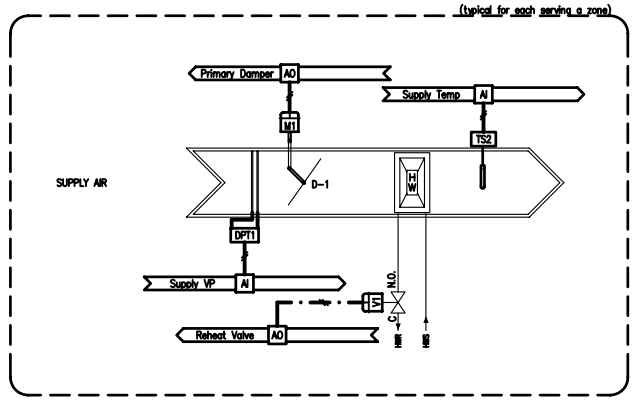
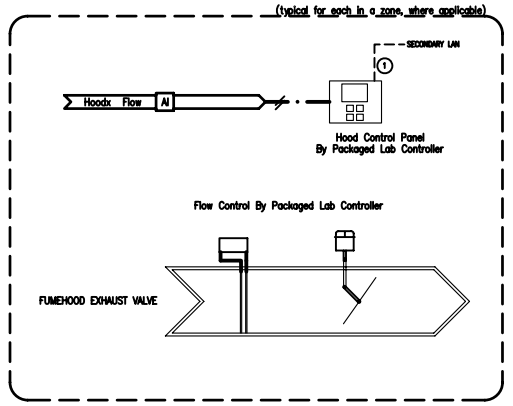
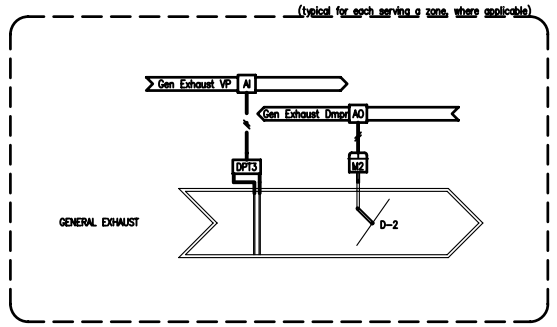
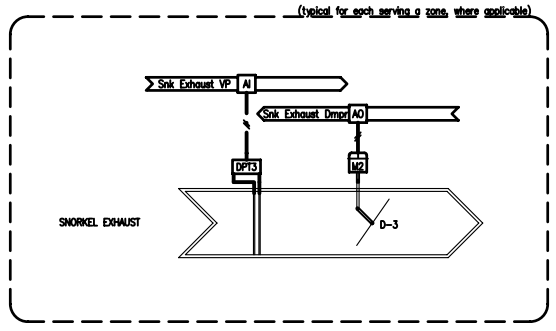


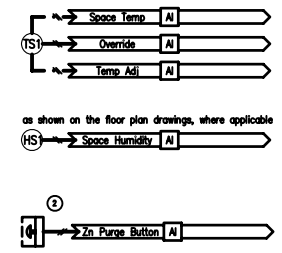






NOTES

1. Provide digital Interface to the control system for diagnostic point Information. Required points to be mapped include: Hood cfm, Master Alarm, Volume/Velocity Reset & Sash Position. Hood Flow point to be hardwired to the BAS for flow calculation of General Exhaust and Supply Air Valves
2. Emergency Purge Buttons located as shown on the floor plans. Typical for each open lab (not just a particular zone in an open lab) will go to the emergency purge mode when any button in that open lab is pressed.
3. Provide a single controller for each Flow Tracking Zone. Broadcasting flow setpoints between separate controllers at each Supply or Exhaust valve is not acceptable.
4. Provide a single graphic for each flow tracking zone that depicts all equipment and devices in the zone. Show all values and setpoints as indicated in the logic diagram below. Provide links to the fume hood controllers from the tracking zone graphic, as applicable.



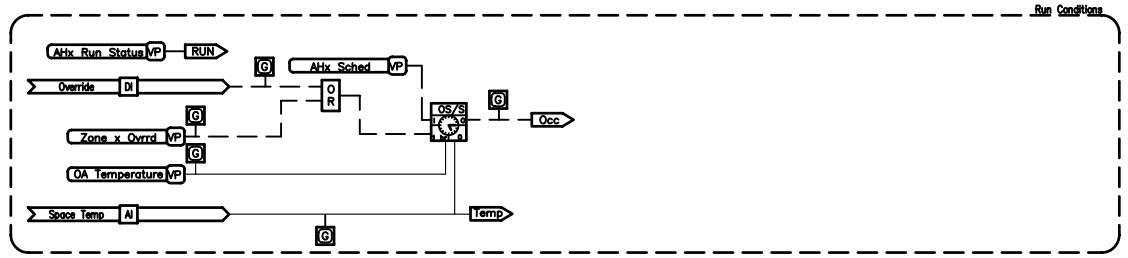
POINTS LIST

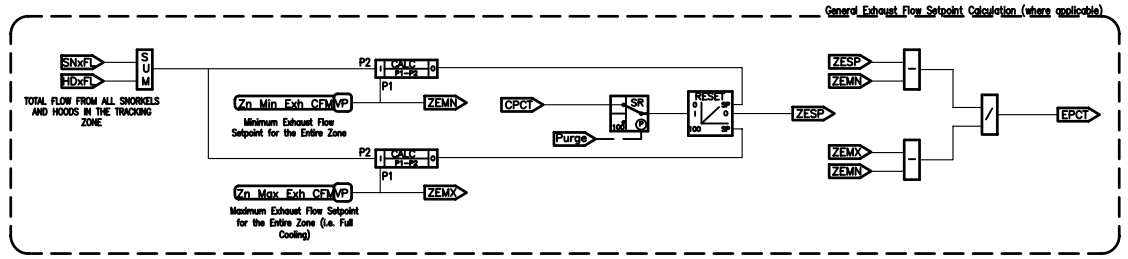
ADDRESS	POINT DESCRIPTOR	POINT TYPE DI	AI	DO	AO	VP	REMARKS
	Override	•					
	Space Temp		•				
	Temp Adj		•				
	Space Humidity		•				
	Supply VP		•				
	Primary Damper				•		
	Supply Temp		•				
	Reheat Valve				•		
	Gen Exhaust VP		•				
	Gen Exhaust Dmpr				•		
	Snk Exhaust VP		•				
	Snk Exhaust Dmpr				•		
	Hood x Flow		•				
	Emergency Purge Button	•					

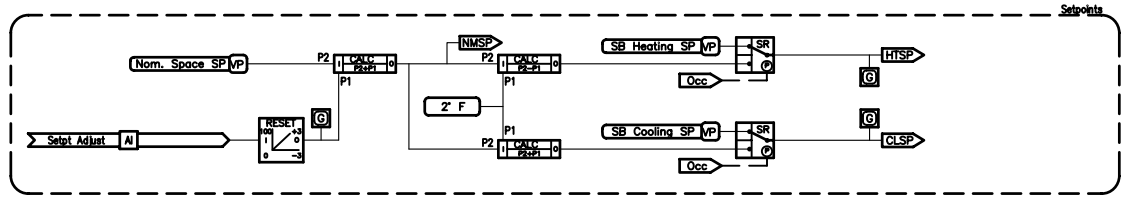
LOGIC VARIABLES

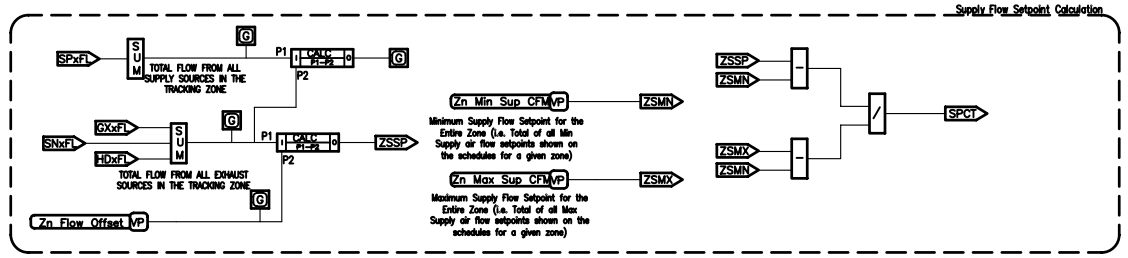
BINARY	ANALOG	DESCRIPTION
Occ		ON WHEN OCCUPIED MODE IS ACTIVE
StBK		ON WHEN AHU IN SETBACK MODE
Purge		ON WHEN OPEN LAB PURGE SWITCH IS DEPRESSED
	Temp	VARIABLE VALUE OF SPACE TEMPERATURE
	HTSP	VARIABLE CALCULATED VALUE OF EFFECTIVE HEATING SETPOINT
	CLSP	VARIABLE CALCULATED VALUE OF EFFECTIVE COOLING SETPOINT
	HDxFL	VARIABLE CALCULATED VALUE OF HOOD EXHAUST FLOW (CFM) FOR HOOD x
	GXxFL	VARIABLE CALCULATED VALUE OF GENERAL EXHAUST FLOW (CFM) FOR VALVE x
	SPxFL	VARIABLE CALCULATED VALUE OF SUPPLY FLOW (CFM) FOR SUPPLY VALVE x
	SPCT	VARIABLE CALCULATED VALUE OF SUPPLY FLOW SETPOINT % FOR EACH VALVE
	ZESP	VARIABLE CALCULATED VALUE OF ZONE TOTAL SUPPLY FLOW SETPOINT
	ZSMN	VARIABLE CALCULATED VALUE OF ZONE TOTAL SUPPLY SCHEDULED MIN SETPT
	ZSMX	VARIABLE CALCULATED VALUE OF ZONE TOTAL SUPPLY SCHEDULED MAX SETPT
	EPCT	VARIABLE CALCULATED VALUE OF EXHAUST FLOW SETPOINT % FOR EACH VALVE
	ESMN	VARIABLE CALCULATED VALUE OF ZONE TOTAL EXHAUST MIN SETPOINT
	ESMX	VARIABLE CALCULATED VALUE OF ZONE TOTAL EXHAUST MAX SETPOINT
Run		ON WHEN SUPPLY AIR SOURCE (AHUs) IS PROVEN ON
	SNxFL	VARIABLE CALCULATED VALUE OF SNORKEL EXHAUST FLOW (CFM) FOR SNKL x

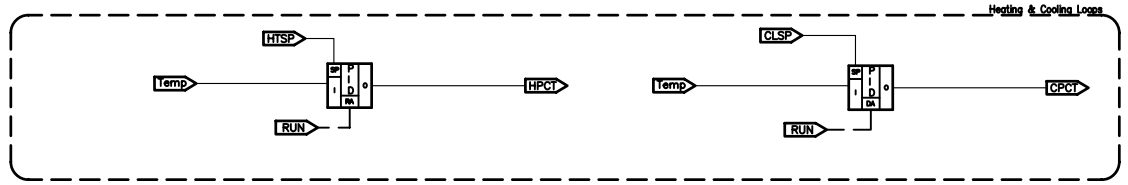
FLOW TRACKING ZONE

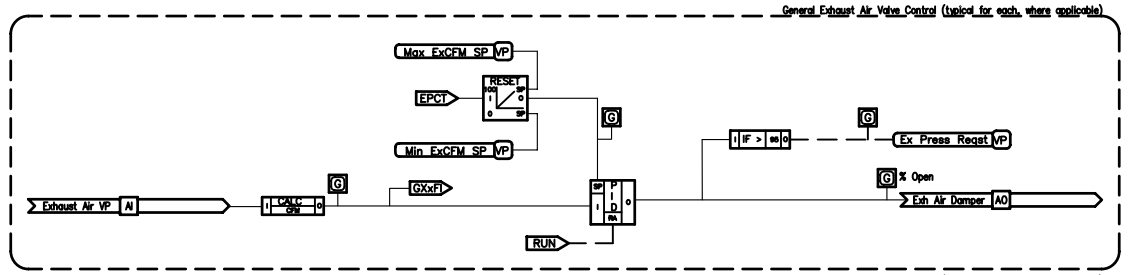


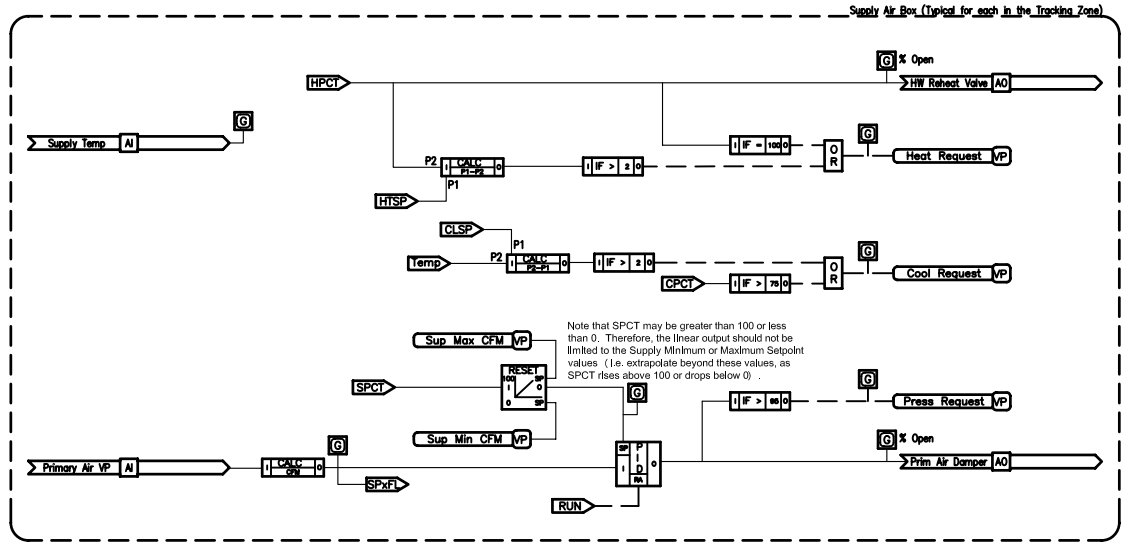


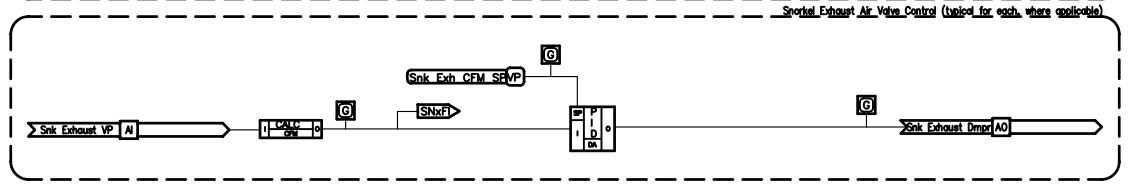


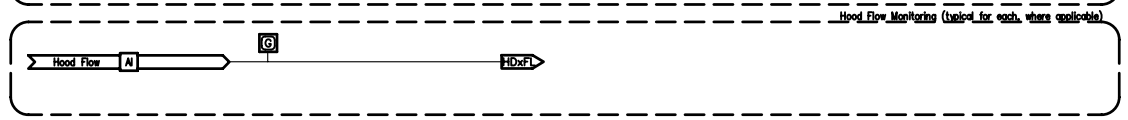


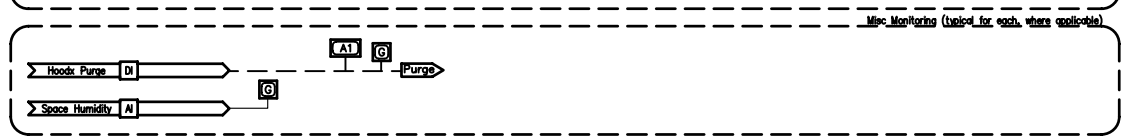












REVISIONS

NO.	DESCRIPTION	DATE

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

The University of North Carolina
Chapel Hill, North Carolina

Standard Control Drawings

Eng	KDS
Drawn	KDS
Chkd	---
Apvd	---
Issued	06/06/2010
Job No.	-----
Scale	N/A
Proj Code	

Revision 5

LAB FLOW TRACKING ZONE WITH HOOD

00 OF 00
SHEET NUMBER

C2.05a

DWG NUMBER