

REVISIONS		
NO.	DESCRIPTION	DATE



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

The University of North Carolina
Chapel Hill, North Carolina

Standard Control Drawings

Rev	BY
Design	HEV
Checked	HEV
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100% Design
Review (REV 3)

REDUNDANT VAV
EXHAUST FAN
CONTROL FOR
MANIFOLD
EXHAUST LAB
SYSTEMS

00 OF 00
SHEET NUMBER

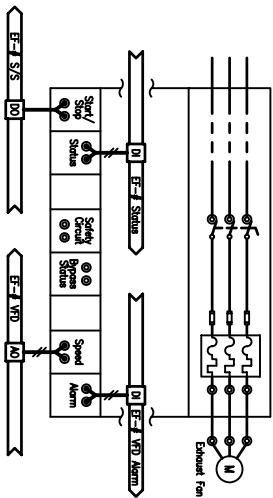
C-4.01

DWG NUMBER

POINTS LIST					REMARKS
ADDRESS	POINT DESCRIPTOR	DI	AI	DO	
	FE-1 S/S			*	
	FE-1 Status			*	
	FE-1 VFD			*	
	FE-1 VFD Alarm			*	
	FE-2 S/S			*	
	FE-2 Status			*	
	FE-2 VFD			*	
	FE-2 VFD Alarm			*	
	FE-4 S/S			*	
	FE-4 Status			*	
	FE-4 VFD			*	
	FE-4 VFD Alarm			*	
	FE-1 Damper			*	
	FE-2 Damper			*	
	FE-2 Open			*	
	FE-2 Damper			*	
	FE-4 Damper			*	
	OA Damper			*	
	Exhaust Pressure			*	
	RH DA Temp			*	
	OA Flow			*	
	Exhaust Flow			*	

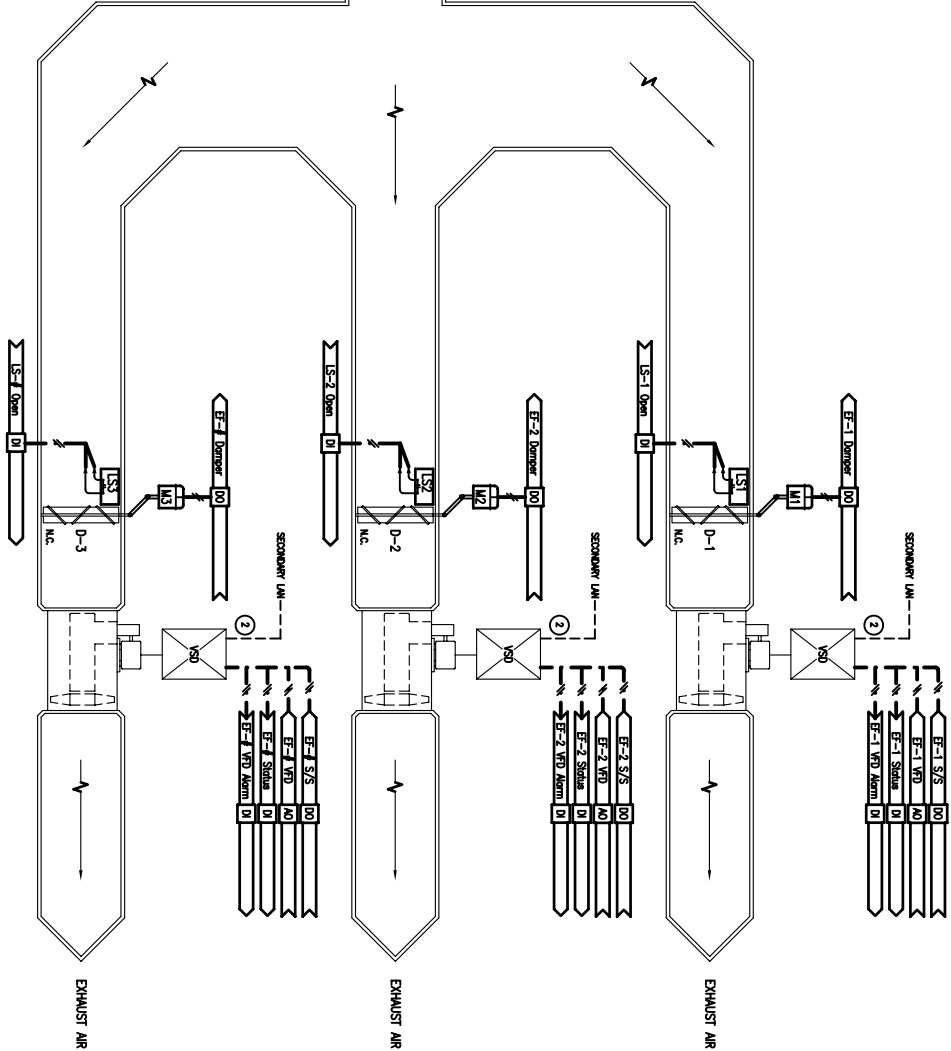
LOGIC VARIABLES		
BINARY	ANALOG	DESCRIPTION
STRSD		ON WHEN COOLING SYSTEM IS ENGAGED
FE-EP		ON WHEN EXHAUST FAN x STATUS IS PROVEN
FE-AL		ON WHEN EXHAUST FAN x PROOF HAS FAILED
FE-X		ON WHEN EXHAUST FAN x IS COMMAND TO RUN
ETD		ON WHEN EXHAUST FAN DAMPER x PROOF HAS FAILED
TSKO		ON WHEN EXHAUST FAN DAMPER x LIMIT SWITCH PROVEN
FE-ED		VARIABLE VALUE OF EXHAUST FAN x RUNNING (H/M)
ETIO		VARIABLE CALCULATED VALUE OF EXHAUST FLOW (CFM)

ELECTRIC LADDER DIAGRAMS



EXHAUST FAN VSD (TYPICAL FOR ALL EXHAUST FANS)

- NOTES
- Pressure monitoring relative to the least hazardous space surrounding the critical area served.
 - Provide communication interface to the control system for diagnostic point information. Refer to points list for required points to be mapped.
 - Coordinate with mechanical design to ensure adequate straight lengths of duct and proper range on the sensor.



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