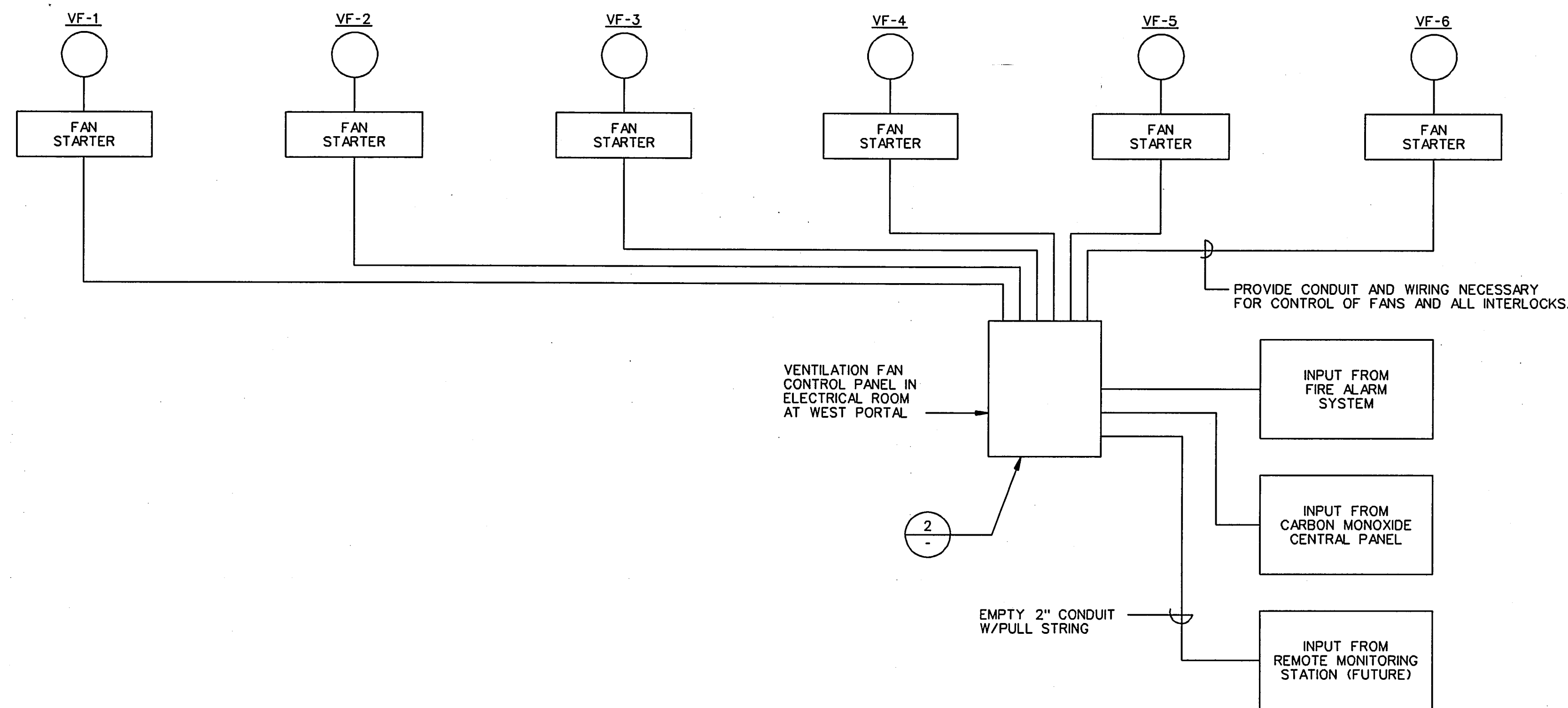


**GENERAL NOTES:**

- A. MOUNT FAN STARTERS ON NORTH WALL OF TUNNEL.
- B. VENTILATION FAN CONTROL PANEL IN ELECTRICAL ROOM AT WEST PORTAL OVERRIDES ALL OTHER CONTROLS.
- C. INPUT FROM FIRE ALARM SYSTEM INCLUDES PULL STATIONS AND HEAT DETECTORS.
- D. PROVIDE AN EMPTY 2" CONDUIT FROM THE TOLL PLAZA AREA TO THE VENTILATION CONTROL PANEL IN ELECTRICAL ROOM AT WEST PORTAL FOR FUTURE INPUT FROM REMOTE MONITORING STATION.
- E. A SIGNAL FROM A PULL STATION OR HEAT DETECTOR EAST OF STA 18+00 SHALL START ALL TUNNEL VENTILATION FANS IN THE "DISCHARGE EAST" MODE. A SIGNAL FROM A PULL STATION OR HEAT DETECTOR WEST OF STA 18+00 SHALL START ALL TUNNEL VENTILATION FANS IN THE "DISCHARGE WEST" MODE. IF SIGNALS ARE RECEIVED FROM HEAT DETECTORS OR PULL STATIONS ON BOTH SIDES OF STATION 18+00, ALL TUNNEL VENTILATION FANS SHALL GO TO THE "DISCHARGE WEST" MODE.
- F. A SIGNAL FROM ANY CARBON MONOXIDE SENSOR SHALL START ALL TUNNEL VENTILATION FANS IN THE DISCHARGE WEST MODE.
- G. PROVIDE ALL CONDUIT, WIRING, TRANSFORMERS, RELAYS AND DEVICES NECESSARY FOR A COMPLETE AND OPERATING FAN CONTROL SYSTEM WITH OPERATING SEQUENCE AS INDICATED ABOVE.
- H. PROVIDE A 30 SECOND DELAY BETWEEN ANY FAN REVERSAL, WHETHER FROM THE FIRE ALARM SYSTEM INPUT OR MAIN CONTROL PANEL INPUT.



1 VENTILATION FAN CONTROL SCHEMATIC  
NO SCALE

FAN No.	FAN CONTROL			AIR FLOW INDICATOR		VIBRATION INDICATOR	
	OFF	DISCHARGE WEST	DISCHARGE EAST	AIR FLOW WEST	AIR FLOW EAST	VIBRATION ALERT	VIBRATION ALARM
VF-1	(C) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(Y) (⊙)	(R) (⊙)
VF-2	(C) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(Y) (⊙)	(R) (⊙)
VF-3	(C) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(Y) (⊙)	(R) (⊙)
VF-4	(C) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(Y) (⊙)	(R) (⊙)
VF-5	(C) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(Y) (⊙)	(R) (⊙)
VF-6	(C) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(R) (⊙)	(Y) (⊙)	(R) (⊙)

⊙ PUSH TO TEST INDICATING LIGHTS

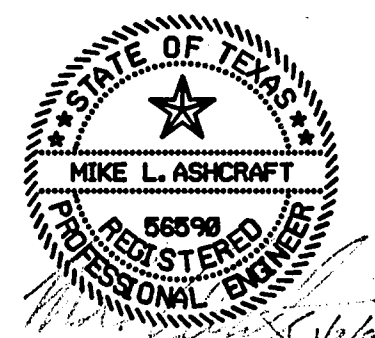
WEST PORTAL      TUNNEL FAN LAYOUT      EAST PORTAL

MOMENTARY CONTACT PUSH BUTTON (TYP.)

INDICATING LIGHT (TYP.)

PROVIDE CONTROL PANEL IN STAINLESS STEEL WEATHERPROOF CABINET WITH LOCKING COVER. LOCATE IN THE ELECTRIC ROOM AT THE WEST PORTAL.

2 VENTILATION FAN CONTROL PANEL  
PI41 NO SCALE



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MIKE L. ASHCRAFT, P.E., 56590 ON SEPTEMBER 9, 1996

**FINAL RECORD DRAWING**  
Date: 12/25/99

No.	REVISION	BY	DATE
TEXAS TURNPIKE AUTHORITY ADDISON AIRPORT TUNNEL			
TUNNEL VENTILATION CONTROL SCHEMATICS			
HDR Engineering, Inc.			SECTION XIII
DRAWN: WTD	DATE: 12/05/96	DESIGNED: MLA	DATE: 08/28/96
CHECKED: KG	DATE: 08/28/96	SCALE: AS SHOWN	
CONTRACT No. DNT-260 SHEET M142 OF 166			