

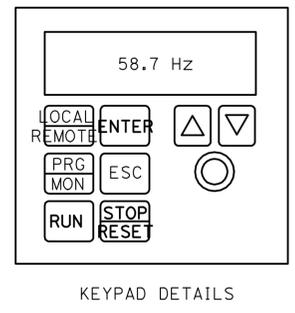
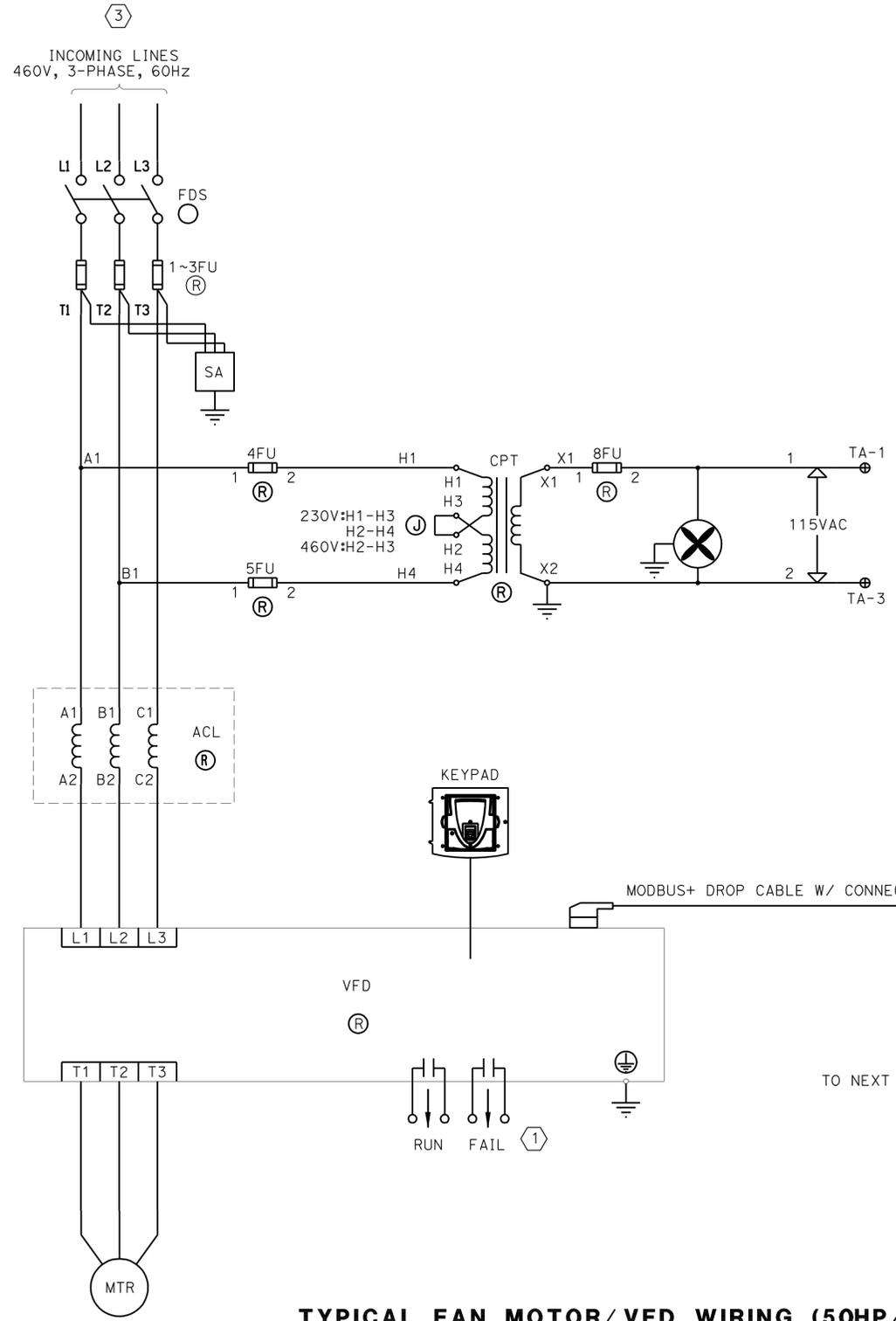
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala,CC	24,260	R5.9/R6.2, R0.0/R0.5,R0.9/R1.9	60	100


 REGISTERED ELECTRICAL ENGINEER DATE 02-26-08
 No. E-13014
 Exp. 6/30/09
 ELEC
 STATE OF CALIFORNIA

11-24-08
 PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

STV Incorporated 9130 Anaheim Place, Suite 210 Rancho Cucamonga, CA 91730
 JDL Design, LLC 18582 Beach Blvd, Suite 229 Huntington Beach, CA 92647



GENERAL OPERATING INSTRUCTIONS
 PRESS [LOCAL/REMOTE] TO PLACE VFD IN LOCAL MODE.
 PRESS [RUN] TO MANUALLY START MOTOR.
 USE POTENTIOMETER TO ADJUST FREQUENCY.
 PRESS [STOP/RESET] TO MANUALLY STOP MOTOR.
 PRESS [LOCAL/REMOTE] TO RETURN VFD TO PLC CONTROL.

TYPICAL MODBUS PLUS REGISTERS		
REGISTER	MODE	DESCRIPTION
40001	READ/WRITE	LOCAL/REMOTE
40002	READ/WRITE	RUN/STOP COMMAND
40003	READ-ONLY	VFD COMMON FAULT
40004	READ-ONLY	VFD RUNNING
40005	READ-ONLY	VFD SPEED INDICATOR (0-60Hz)
40006	READ/WRITE	VFD SPEED REFERENCE (0-60Hz)

LEGEND
 (R) VERIFY RATING (50HP/75HP/100HP), USE DRIVE MANUFACTURER'S RECOMMENDATION.
 CPT CONTROL POWER TRANSFORMER
 FDS FUSIBLE DISCONNECT SWITCH
 FU FUSE
 SA SURGE ARRESTOR
 ACL AC LINE REACTOR

NOTES:
 (1) FOR WEBSTER TUBE OIL PRESSURE SWITCH CONTROLS.
 (2) DAMPER DOORS MUST BE IN POSITION (USING MANUAL CONTROL STATION) PRIOR TO LOCAL VFD OPERATION.
 (3) EXISTING POWER, REFER TO PLAN SHEETS EE1-1 & 2.

TYPICAL FAN MOTOR/VFD WIRING (50HP/ 75HP/ 100HP)

DESIGN	BY G. RUSSELL	CHECKED D. LE
DETAILS	BY D. LE	CHECKED S. LO
QUANTITIES	BY D. LE	CHECKED S. LO

PREPARED FOR THE
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 ELECTRICAL-MECHANICAL-WATER
 AND
 WASTEWATER DESIGN

BRIDGE NO. VARIES
 POST MILE VARIES

SCADA SYSTEM UPGRADE: POSEY/WEBSTER STREET TUBES AND CALDECOTT TUNNEL
 VFD FAN MOTOR STARTER 3-LINE & CONTROL DIAGRAM

SHEET
EE4-17