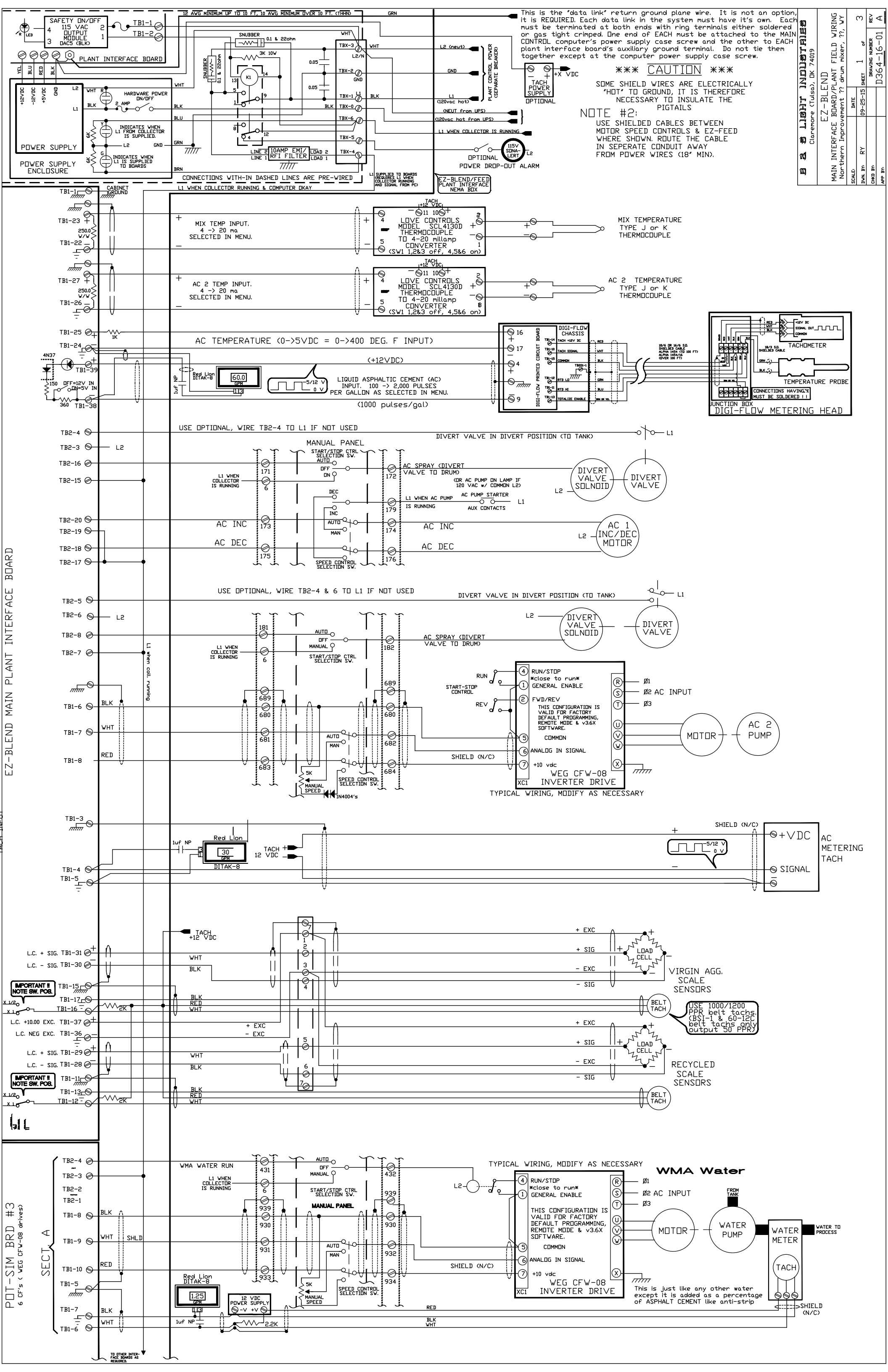
EZ-BLEND MAIN PLANT INTERFACE BOARD
B & B LIGHT INDUSTRIES
Claremore (Tulsa), OK 74019
EZ-BLEND
MAIN INTERFACE BOARD/PLANT FIELD WIRING
Northern Improvement ?? drum mixer, ??, WY
SCALE:
DWN. BY: RY
DATE 09-25-15
SHEET 1 of 3
DRAWING NUMBER D364-16-01
REV A
CHKD BY:
APP BY:
12 AWG MINIMUM UP TO 10 FT, 10 AWG MINIMUM OVER 10 FT. (THHN)
SAFETY ON/OFF 115 VAC OUTPUT MODULE DAC5 (BLK)
PLANT INTERFACE BOARD
SNUBBER 0.1 & 22ohm
3K 10W
K1
HARDWARE POWER ON/OFF
2 AMP
INDICATES WHEN L1 FROM COLLECTOR IS SUPPLIED.
INDICATES WHEN L1 IS SUPPLIED TO BOARDS
POWER SUPPLY
POWER SUPPLY ENCLOSURE
10AMP EMI/RFI FILTER
LINE 2
LINE 1
LOAD 2
LOAD 1
TBX-3
TBX-2
TBX-1
TBX-0
TBX-6
TBX-5
TBX-4
L2 (neut)
GND
L1 (120vac hot)
PLANT CONTROL POWER (SEPARATE BREAKER)
(NEUT from UPS)
(120vac hot from UPS)
L1 WHEN COLLECTOR IS RUNNING
TACH POWER SUPPLY
OPTIONAL
+X VDC
115V SONA-LERT
OPTIONAL POWER DROP-OUT ALARM
CONNECTIONS WITH-IN DASHED LINES ARE PRE-WIRED
L1 SUPPLIED TO BOARDS (REQUIRES L1 WHEN COLLECTOR RUNNING AND SIGNAL FROM PC)
EZ-BLEND/FEED PLANT INTERFACE NEMA BOX
L1 WHEN COLLECTOR RUNNING & COMPUTER OKAY
This is the "data link" return ground plane wire. It is not an option, it is REQUIRED. Each data link in the system must have it's own. Each must be terminated at both ends with ring terminals either soldered or gas tight crimped. One end of EACH must be attached to the MAIN CONTROL computer's power supply case screw and the other to EACH plant interface board's auxiliary ground terminal. Do not tie them together except at the computer power supply case screw.
*** CAUTION ***
SOME SHIELD WIRES ARE ELECTRICALLY "HOT" TO GROUND, IT IS THEREFORE NECESSARY TO INSULATE THE PIGTAILS
NOTE #2:
USE SHIELDED CABLES BETWEEN MOTOR SPEED CONTROLS & EZ-FEED WHERE SHOWN. ROUTE THE CABLE IN SEPERATE CONDUIT AWAY FROM POWER WIRES (18" MIN).
CABINET GROUND
MIX TEMP INPUT. 4 -> 20 ma SELECTED IN MENU.
LOVE CONTROLS MODEL SCL4130D THERMOCOUPLE TO 4-20 millamp CONVERTER (SW1 1,2&3 off, 4,5&6 on)
MIX TEMPERATURE TYPE J or K THERMOCOUPLE
AC 2 TEMP INPUT. 4 -> 20 ma SELECTED IN MENU.
AC 2 TEMPERATURE TYPE J or K THERMOCOUPLE
AC TEMPERATURE (0->5VDC = 0->400 DEG. F INPUT)
(+12VDC)
Red Lion DITAK-8
LIQUID ASPHALTIC CEMENT (AC) INPUT. 100 -> 2,000 PULSES PER GALLON AS SELECTED IN MENU.
(1000 pulses/gal)
DIGI-FLOW CHASSIS
DIGI-FLOW PRINTED CIRCUIT BOARD
TACHOMETER
TEMPERATURE PROBE
CONNECTIONS HAVING X MUST BE SOLDERED !!
JUNCTION BOX
DIGI-FLOW METERING HEAD
USE OPTIONAL, WIRE TB2-4 TO L1 IF NOT USED
DIVERT VALVE IN DIVERT POSITION (TO TANK)
MANUAL PANEL
START/STOP CTRL SELECTION SW.
AC SPRAY (DIVERT VALVE TO DRUM)
(OR AC PUMP ON LAMP IF 120 VAC w/ COMMON L2)
AC PUMP STARTER
AUX CONTACTS
L1 WHEN AC PUMP IS RUNNING
DIVERT VALVE SOLNOID
DIVERT VALVE
AC INC
AC DEC
SPEED CONTROL SELECTION SW.
AC 1 INC/DEC MOTOR
USE OPTIONAL, WIRE TB2-4 & 6 TO L1 IF NOT USED
L1 when coll. running
RUN/STOP
close to run
GENERAL ENABLE
FWD/REV
THIS CONFIGURATION IS VALID FOR FACTORY DEFAULT PROGRAMMING, REMOTE MODE & v3.6X SOFTWARE.
COMMON
ANALOG IN SIGNAL
+10 vdc
SHIELD (N/C)
START-STOP CONTROL
MANUAL SPEED
1N4004's
WEG CFW-08 INVERTER DRIVE
TYPICAL WIRING, MODIFY AS NECESSARY
MOTOR
AC 2 PUMP
Ø1
Ø2 AC INPUT
Ø3
Red Lion DITAK-8
TACH 12 VDC
+VDC
SIGNAL
AC METERING TACH
TACH +12 VDC
LOAD CELL
VIRGIN AGG. SCALE SENSORS
BELT TACH
USE 1000/1200 PPR belt tachs. (BSI-1 & 60-12C belt tachs only output 50 PPR)
RECYCLED SCALE SENSORS
IMPORTANT !! NOTE SW. POS.
L.C. + SIG. TB1-31
L.C. - SIG. TB1-30
L.C. +10.00 EXC. TB1-37
L.C. NEG EXC. TB1-36
L.C. + SIG. TB1-29
L.C. - SIG. TB1-28
+ EXC
- EXC
+ SIG
- SIG
POT-SIM BRD #3
6 CF's (WEG CFW-08 drives)
SECT. A
WMA WATER RUN
WMA Water
FROM TANK
WATER PUMP
WATER METER
WATER TO PROCESS
TACH
This is just like any other water except it is added as a percentage of ASPHALT CEMENT like anti-strip
TO OTHER INTER-FACE BOARDS AS REQUIRED.