

LEGEND

- WIRE NODE SYMBOL MAY HAVE TERMINAL BLOCK
- POWER TERMINAL
- CUSTOMER TERMINAL
- BENSHAW TERMINAL
- DEVICE TERMINAL
- ELAPSED TIME METER
- PC BOARD TERMINALS
- TWISTED PAIR
- FIELD WIRING
- PANEL WIRING
- CONNECTOR
- SHIELDED WIRE
- CONTROL RELAYS

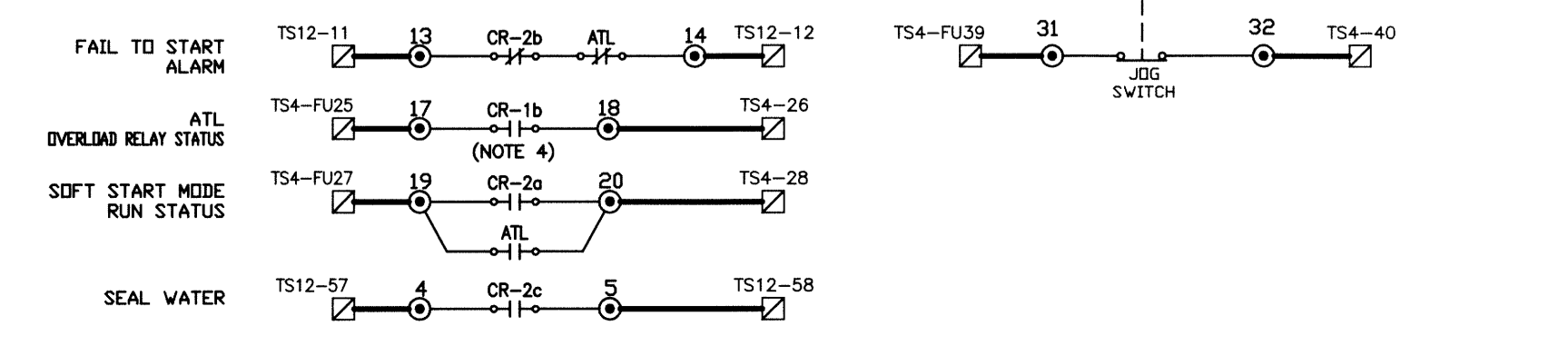
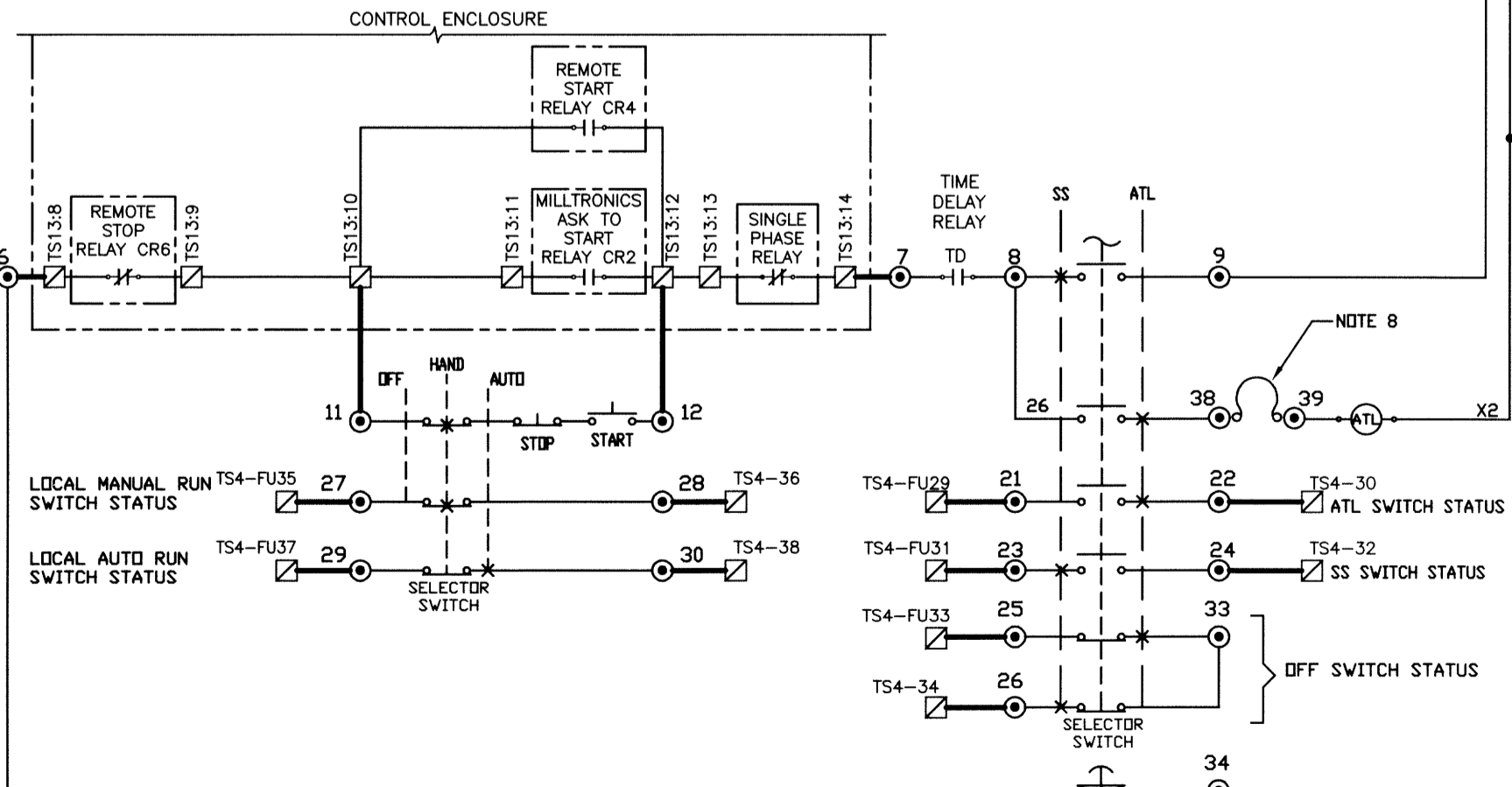
***** IMPORTANT *****

PASSCODE # - - - -

CUSTOMER TERMINALS

- L1
- L2
- L3
- T1
- T2
- T3

- NOTES:**
- INCOMING POWER THROUGH CT'S. SEE CT FASTENING DIAGRAM IN INSTRUCTION MANUAL FOR DETAILS.
 - SOLID-STATE TIMER WITH PROGRAMMABLE ON-DELAY TIME RANGE SETTABLE FROM 0.05 SEC TO 300 HOURS.
 - MAXIMUM RAMP DOWN TIME SHALL BE 10 SECONDS AND THE VOLTAGE SHALL NOT BE ALLOWED TO RAMP BELOW 60% OF FULL VOLTAGE BEFORE SOFT START IS DEACTIVATED TO ALLOW PUMP MOTOR TO COME TO A COMPLETE STOP. VERIFY DECELERATION SETTINGS WITH PUMP MANUFACTURER.
 - THIS CONTACT IS NORMALLY OPEN AND CLOSING ON AN ACROSS THE LINE OVERLOAD FAULT WHEN THE STARTER IS IN ACROSS THE LINE MODE.
 - PROGRAMMABLE RELAY R1 IS ENERGIZED WHEN SOFT START IS FUNCTIONING AND DE-ENERGIZED WHEN SOFT START HAS A FAULT.
 - PROGRAMMABLE RELAY R2 & R3 IS ENERGIZED WHEN PUMP IS ON AND DE-ENERGIZED WHEN PUMP IS OFF. CONTACTS CLOSE TO INDICATE PUMP RUNNING.
 - ANALOG OUTPUT TO BE PROGRAMMED TO PROVIDE A 4-20mA SIGNAL FOR LOAD CURRENT DRAW TO THE CITY SCADA PANEL.
 - PROVIDE JUMPER CABLE TO ENABLE ATL MODE.
 - EMERGENCY STOP PUSHBUTTONS SHALL BE PUSH-PULL, CORROSION RESISTANT, ALLEN BRADLEY 800H-FPX6D4 OR APPROVED EQUAL IN ACCORDANCE WITH B6 IN BID OPPORTUNITY 1196-2014.



NO.	REVISIONS	DATE	BY
0	ISSUED FOR CONSTRUCTION	14/12/15	AP

DESIGNED BY	CHECKED BY
DDW	[Signature]
DRAWN BY	APPROVED BY
GCN	[Signature]
HDR. SCALE	RELEASED FOR CONSTRUCTION
N.T.S.	
VERTICAL	DATE
N.T.S.	2014 01 13

ENGINEER'S SEAL

D-E05.1

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

FLOOD PUMPING STATION UPGRADES
DUMOULIN STATION
ELECTRICAL
FLOOD PUMP P-F02
SCHEMATIC/WIRING DIAGRAM

SHEET 1 OF 2
CITY DRAWING NUMBER
1-0139F-A0002-001