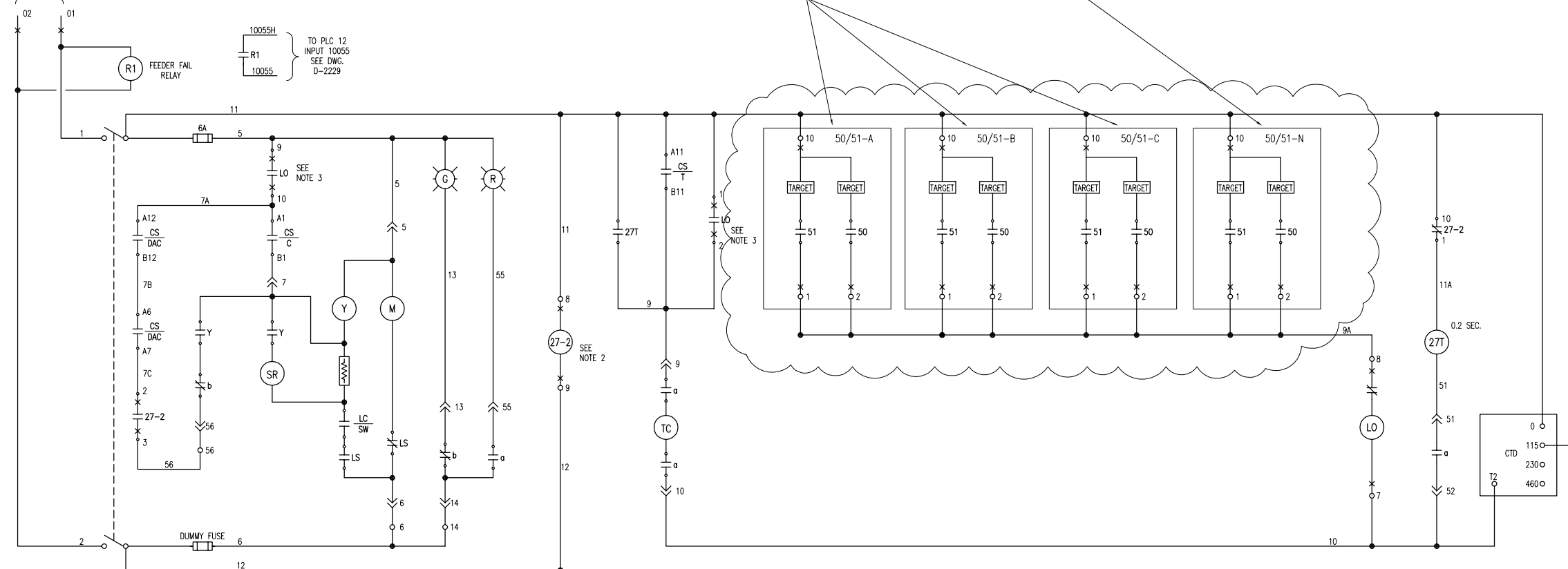
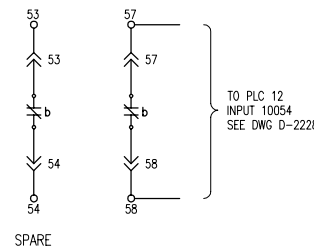
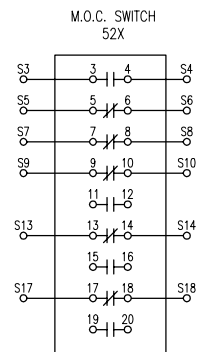


MAIN BREAKER
CONTROL POWER
SEE DRAWING
1-0640M-E0017



WORK REQUIRED

- 1 INSTALL NEW BASLER RELAY INTO THE EXISTING RELAY CASE.
- 2 INSTALL NEW BASLER RELAY AND CASE, NEW CUT-OUT REQUIRED.



DEVICE DETAILS	
ID	MANUFACTURER & MODEL
50/51-A	BASLER BE1-50/51B-219
50/51-B	BASLER BE1-50/51B-219
50/51-C	BASLER BE1-50/51B-219
50/51-N	BASLER BE1-50/51B-205
27-1	BASLER BE27-1
27-2	WESTINGHOUSE SV

LEGEND:

- DEVICE IDENTIFIERS:**
- 27 UNDERVOLTAGE RELAY
 - 27T UNDERVOLTAGE TIME-DELAY RELAY
 - 50 TIME OVERCURRENT
 - 51 INSTANTANEOUS OVERCURRENT
 - CS CONTROL SWITCH
 - CTD CAPACITOR TRIP DEVICE
 - LC-SW BELIEVED TO BE TRIP LATCH CHECKING SWITCH; CLOSED WHEN LATCH IS RESET (UNCONFIRMED)
 - LO LOCK-OUT COIL
 - LS SPRING CHARGED CONTRACT
 - M SPRING CHARGING MOTOR
 - SR SPRING RELEASE COIL
 - TC TRIP COIL
 - Y ANTI-PUMP RELAY; PREVENTS RECLOSING ON A SUSTAINED CLOSE COMMAND

- DEVICE SUFFIXES:**
- a NORMALLY OPEN BREAKER POSITION, CONTACT IS CLOSED WHEN BREAKER IS CLOSED
 - aa CONTACT IS OPEN WHEN THE OPERATING MECHANISM IS IN THE NON-OPERATED POSITION.
 - b NORMALLY CLOSED BREAKER POSITION, CONTACT IS CLOSED WHEN BREAKER IS OPEN
 - C CLOSE
 - CC CLOSING COIL
 - DAC CONTROL SWITCH POSITION (UNKNOWN)
 - T TRIP

NOTES:

1. THIS DRAWING SUPERCEDES PART OF THE ORIGINAL WESTINGHOUSE SHOP DRAWING 739C329.
2. ALL EXISTING WIRING HAS NOT BEEN FIELD VERIFIED. DESIGN RESPONSIBILITY IS LIMITED TO THE MODIFICATIONS SHOWN.
3. THE 27-2 RELAY WAS ORIGINALLY IDENTIFIED AS 27.
4. THE CONTACT TERMINALS FOR THE LO RELAY MAY NOT BE CORRECT.



NO.	ISSUED FOR TENDER	DATE	BDK	CJR
00	ISSUED FOR TENDER	2009/08/17	BDK	CJR
01	REVISIONS	DATE	DESIGN	CHECK

SNC-LAVALIN INC.
148 Hutter Park Way
Winnipeg, MB, Canada R3P 0X7
204-786-8080

DESIGNED BY: B. KING
DRAWN BY: S. HAILU
SCALE: NTS
DATE: 2009/08/17

CHECKED BY: C. REIMER
APPROVED BY: C. REIMER
RELEASED FOR CONSTRUCTION BY:
DATE:

ENGINEER'S SEAL

ORIGINAL DRAWING
SEALED BY:
B. D., KING
2009/08/14
REV. 00

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

MCPHILLIPS PUMPING STATION

CONTROL SCHEMATIC
4160V MAIN BREAKER

CITY DRAWING NUMBER: 1-0640M-E0016
SHEET: 001
REV: 00
SIZE: A1

DRAWING NUMBER	REFERENCE DRAWINGS