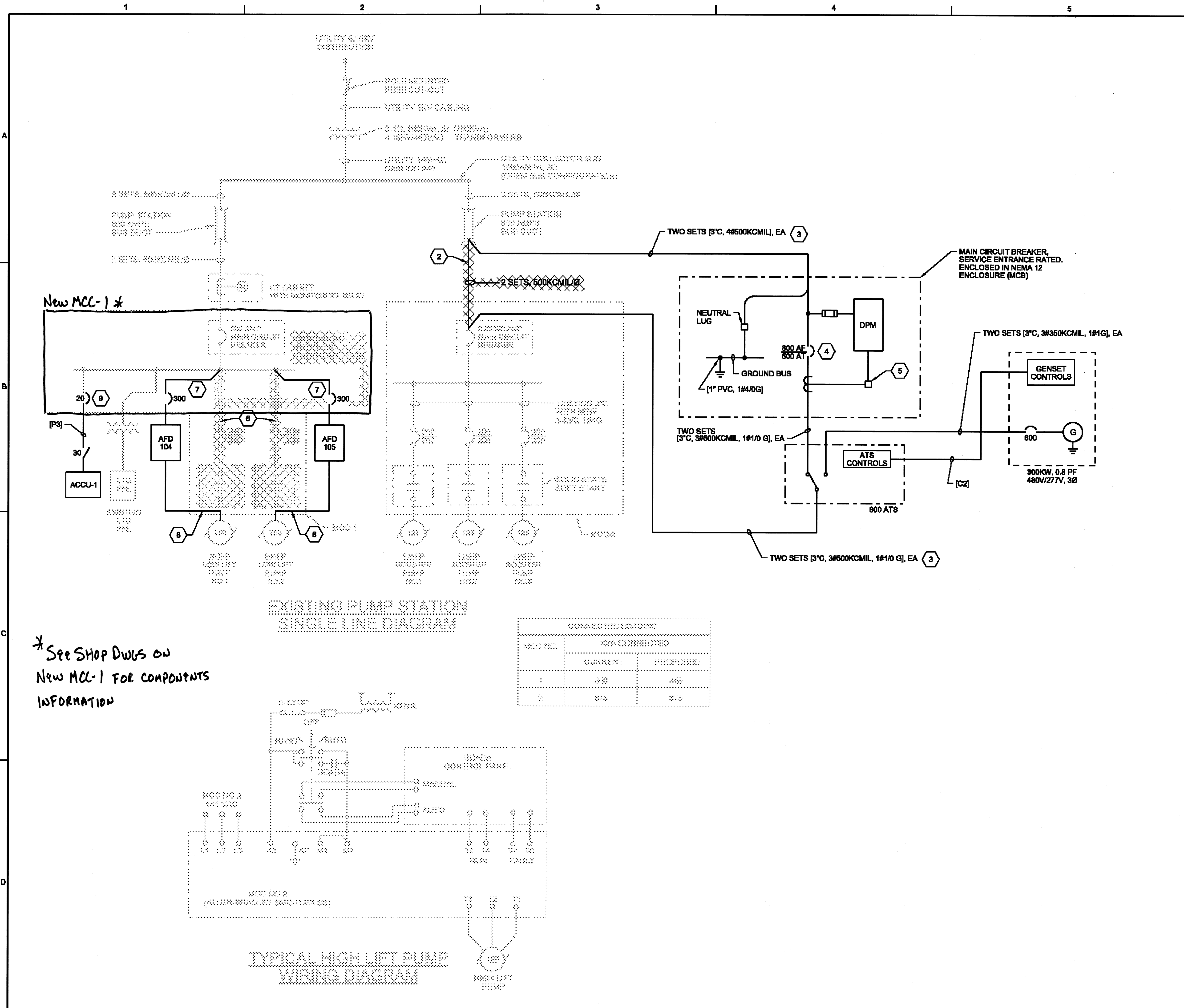
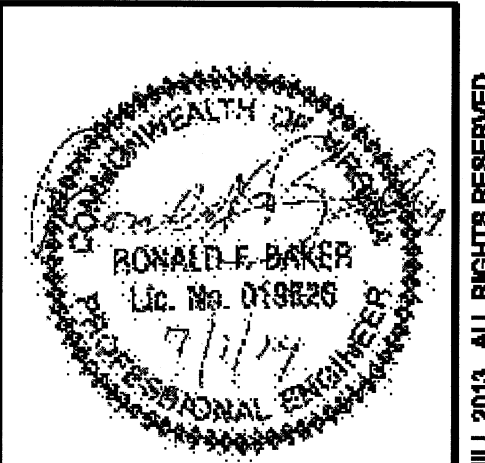




GENERAL SHEET NOTES

1. SEE DWG E-0003 FOR CIRCUIT CALLOUTS.

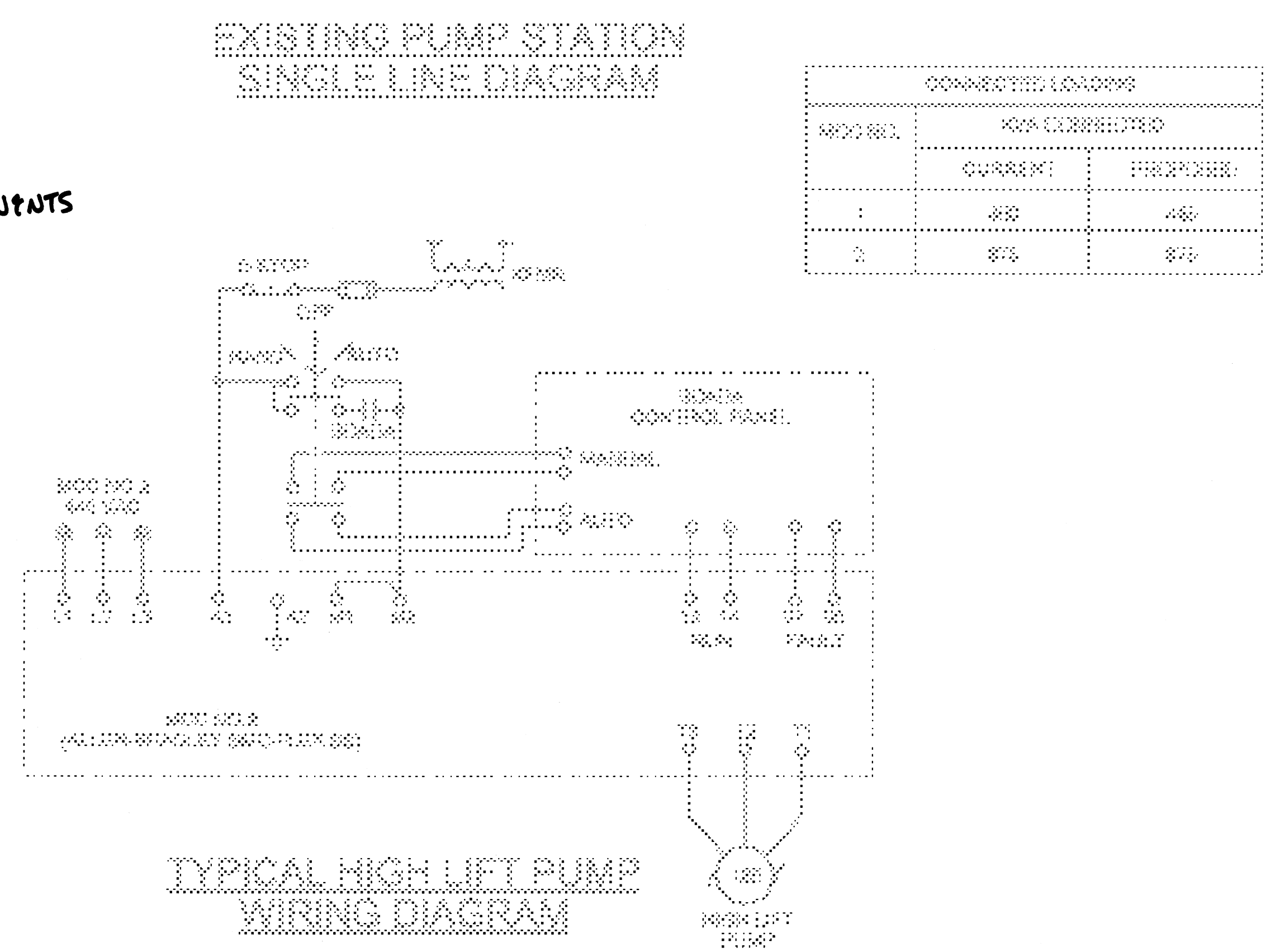


NO.	DATE	DR	REVISION	BY	APVD
1				J. ALLEN	
2				R. BAKER	
3				J. C. HALEC	
4					
5					
6					
7					
8					
9					

SHEET KEYNOTES

- REFER TO DWG E-0001 FOR GENERAL ELECTRICAL NOTES AND SYMBOLS.
- DISCONNECT AND REMOVE EXISTING FEEDER CABLES FROM PUMP STATION 800A BUS DUCT TO MCC-2.
- INSTALL NEW RACEWAYS AS SHOWN BETWEEN PUMP STATION BUS DUCT AND NEW MAIN CIRCUIT BREAKER. INSTALL NEW RACEWAYS AS SHOWN BETWEEN NEW AUTOMATIC TRANSFER SWITCH AND EXISTING MCC-2.
- CIRCUIT BREAKER WITH LSI SOLID STATE TRIP UNIT.
- PROVIDE CT SHORTING OR TEST BLOCK.
- DISCONNECT AND REMOVE EXISTING SOLID STATE SOFT STARTER, ASSOCIATED CIRCUIT BREAKER AND DELIVER TO THE OWNER. REMOVE EXISTING 3#350 KCMIL, 1#2 GND CONDUCTORS ROUTED FROM MCC-1 TO THE EXISTING LOW LIFT PUMP AND DELIVER TO THE OWNER. EXISTING 3" CONDUIT ROUTED BETWEEN MCC-1 AND LOW LIFT PUMP SHALL REMAIN IN PLACE (SEE SHEET KEYNOTE 8).
- UTILIZE SPACE OF THE EXISTING STARTER AND BREAKER DESCRIBED IN SHEET KEYNOTE 6 (ABOVE) AND INSTALL A NEW 300A, 600V, 3-POLE THERMAL-MAGNETIC CIRCUIT BREAKER WITH LSI SOLID STATE TRIP UNIT. NEW CIRCUIT BREAKER SHALL HAVE THE SAME AIC RATINGS AS THE EXISTING CIRCUIT BREAKERS. EXISTING MCC-1 IS SERIES 8000, MANUFACTURED BY GENERAL-ELECTRIC. INSTALL A NEW 3" CONDUIT WITH 3#350, 1#2 GND FROM EXISTING MCC-1 TO NEW AFD TO FEED 480V POWER FROM NEW CIRCUIT BREAKER TO NEW AFD.
- INSTALL A NEW 3" CONDUIT FROM EXISTING MCC-1 TO NEW AFD. UTILIZE EXISTING 3" CONDUIT LISTED IN SHEET KEYNOTE 6 (ABOVE) WITH THE NEW 3" CONDUIT AND ROUTE 3#350 KCMIL, 1#2 GND AND 4#12 NEW CONDUCTORS FROM NEW AFD TO THE EXISTING LOW LIFT PUMP MOTOR VIA MCC-1. THESE CONDUCTORS WILL BE USED FOR: A) 480V POWER TO THE PUMP MOTOR. B) 120 V POWER TO THE PUMP MOTOR SPACE HEATER. 3) TO RECEIVE PUMP MOTOR HIGH WINDING TEMPERATURE SIGNAL FROM EXISTING LIFT PUMP MOTOR TO NEW AFD. SEE PUMP CONTROL SCHEMATICS ON DRAWING E-6002.
- UTILIZE EXISTING CUBICLE IN MCC-1 AND INSTALL A NEW 20A, 600V, 3-POLE CIRCUIT BREAKER TO FEED 480V, 3-PHASE POWER TO THE NEW ACCU-1 UNIT LOCATED OUTDOORS ON THE SOUTHWEST SIDE OF THE PUMP STATION. THE NEW CIRCUIT BREAKER SHALL HAVE THE SAME AIC RATINGS AS THE EXISTING CIRCUIT BREAKERS. EXISTING MCC-1 IS 8000 SERIES, MANUFACTURED BY GENERAL-ELECTRIC.

* See SHOP DWGS ON
New MCC-1 FOR COMPONENTS
INFORMATION



CRYSTAL SPRING WATER TREATMENT PLANT
CLEARWELL REPLACEMENT
WESTERN VIRGINIA WATER AUTHORITY
CITY OF ROANOKE, VIRGINIA

CH2MHILL®
ELECTRICAL
LOW LIFT AND HIGH ZONE PUMP STATION
DIAGRAMS

VERIFY SCALE
BAR IS ONE INCH ON
ORIGINAL DRAWING.
0 1"

DATE: JUNE 2014
PROJ: 475481
DWG: E-8001
SHEET: 32 of 37