

**NOTES:**

- FOR GENERAL ABBREVIATIONS SEE DWG. NO. E-2.
- THE MCC SHALL BE EQUIPPED WITH A NEMA-12 ENCLOSURE.
- THE MCC SHALL BE AN ALLEN BRADLEY NEMA CENTERLINE 2100 MCC OR APPROVED EQUAL.
- THE MCC SHALL BE PROVIDED IN 6 SHIPPING SPLITS CONSISTING OF ONE VERTICAL STACK EACH. PROVIDE SPLICE KITS TO ASSEMBLE THE MCC IN THE FIELD.
- EACH MCC FVNR SHALL BE EQUIPPED WITH A DISCONNECT SWITCH THAT SHALL DISCONNECT THE CONTROL POWER.
- SPARE MCC BUCKETS SHALL BE USED FOR DEVICES SUCH AS TERMINAL BLOCKS, PHASE FAILURE RELAYS, CURRENT TRANSFORMERS, POTENTIAL TRANSFORMER, FUSES, CIRCUIT BREAKERS, AND OTHER MISCELLANEOUS DEVICES AS REQUIRED IN ADDITION TO EMPTY SPARE BUCKETS FOR FUTURE PROVISIONS.
- ALL WIRING INTERNAL TO THE MCC'S, ATS, AND CONTROL CABINETS SHALL BE SIS TYPE SWITCH BOARD WIRE.
- MCC SHALL HAVE NAMEPLATES ON EACH BUCKET IDENTIFYING THE DEVICE BEING CONTROLLED AS WELL AS THE VARIOUS CONTROL DEVICES ON EACH MCC BUCKET. ALL NAMEPLATES SHALL BE WHITE WITH BLACK LETTERING UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL FIELD VERIFY THE MCC INSTALLATION IN THE ELECTRICAL ROOM. THE CONTRACTOR SHALL FIELD VERIFY THE INSTALLATION PATH AND SIZE OF THE MCC FOR INSTALLATION. THE CONTRACTOR MAY SELECT TO PROVIDE REDUCED HEIGHT MCC (71 INCHES TALL) TO PROVIDE FOR AN EASIER FIT PROVIDED THE LENGTH OF THE UNITS FIT IN THE ROOM.
- EACH MCC BUCKET WITH A MOTOR STARTER, EXCLUDING THE SPAN DRIVE, SHALL BE EQUIPPED WITH A PUSHBUTTON TO RESET THE OVERLOAD MANUALLY.
- EACH MCC BUCKET WITH A STARTER, EXCLUDING THE SPAN DRIVE, SHALL BE EQUIPPED WITH AN ETHERNET ENABLED OVERLOAD RELAY SHALL BE EQUIPPED WITH A "HAND-OFF-AUTO" MAINTAINED CONTROL SWITCH. THE CONTROL SWITCH BE WIRED TO ALLOW AN ETHERNET HMI TO BE CONNECTED TO THE ETHERNET ENABLED OVERLOAD THROUGH THE ETHERNET PORT ON THE OVERLOAD. THE HMI SHALL ALLOW THE OPERATOR TO MANUALLY START (IN FORWARD OR REVERSE) OR MANUALLY STOP ANY MOTOR. IF PLC FAILS, MANUAL OPERATION SHALL RELY UPON OPERATOR MONITORING OF THE EQUIPMENT AS THE INTERLOCKS ARE NOT ENABLED IN MANUAL CONTROL.

PROJECT NO. B-5936  
TYRRELL COUNTY  
 BRIDGE NO: 7

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

MOTOR CONTROL  
 CENTER: LAYOUT  
 ALLIGATOR RIVER  
 SWING SPAN

REVISIONS

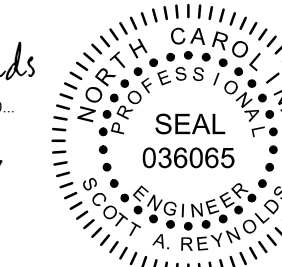
NO	BY	DATE	NO	BY	DATE
1			3		
2			4		

SHEET NO.  
**E-27**  
 TOTAL SHEETS  
 51

DRAWN BY: \_QIV DATE: 8/8/2016  
 CHECKED BY: \_MJT DATE: 8/8/2016  
 DESIGN ENGINEER OF RECORD: \_CHS DATE: 8/8/2016



Designed by  
 Scott Reynolds  
 PROFESSIONAL ENGINEER  
 SEAL 036065  
 1/11/2017



DWG NUMBER  
 43

TOTAL DWGS  
 90

DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED

\*\*\*\*\*DTG\*\*\*\*\*  
 \*\*\*\*\*DGN\*\*\*\*\*  
 \*\*\*\*\*USERNAME\*\*\*\*\*