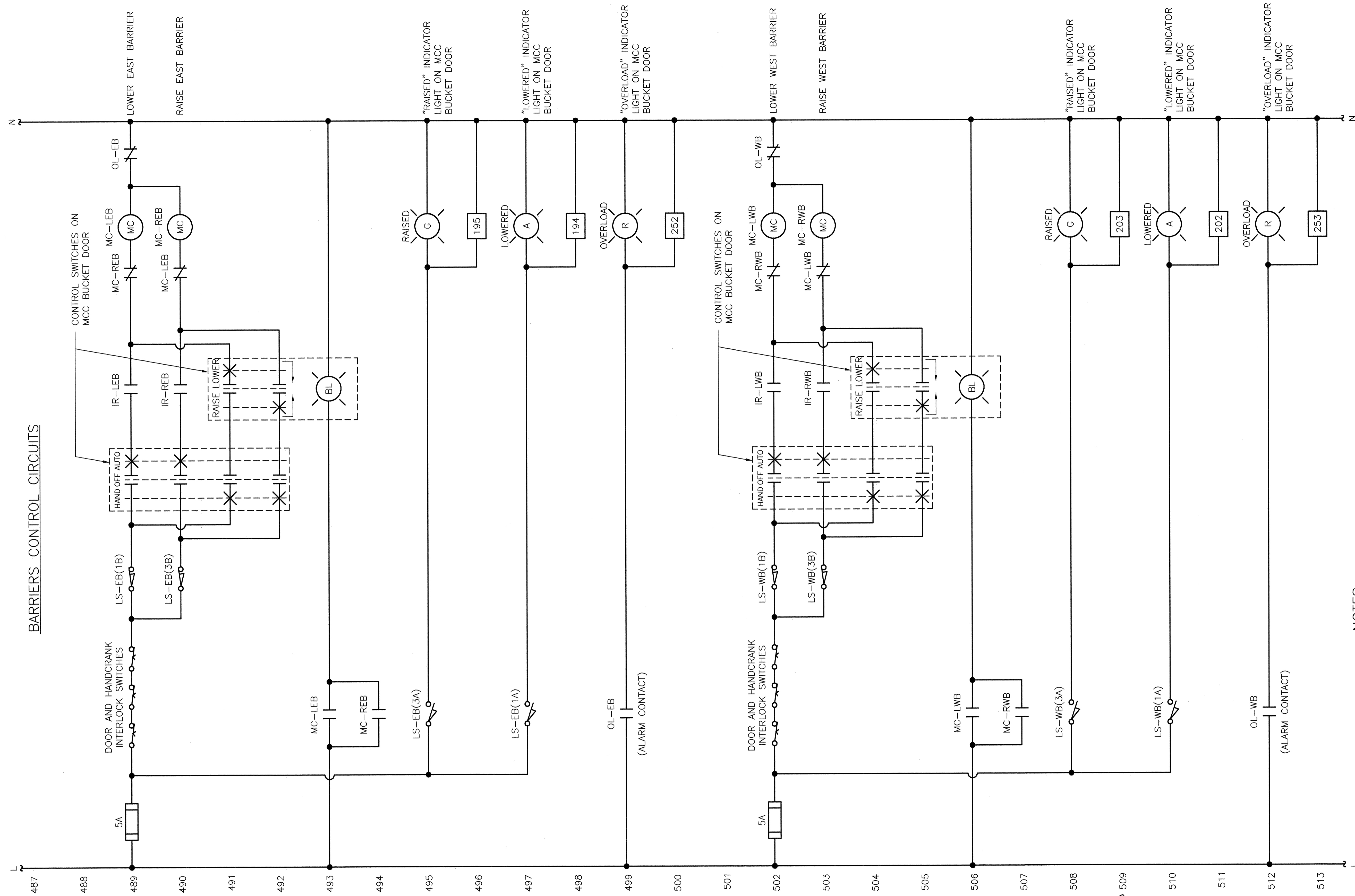


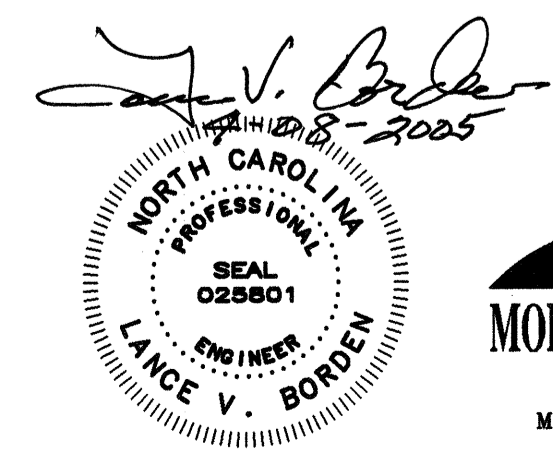
HARDWIRED LOGIC

BARRIERS CONTROL CIRCUITS



NOTES:

1. ALL "HAND-OFF-AUTO" SWITCHES SHALL INCLUDE LOCKABLE COVERS AND MINATURE BRASS LOCKS (MASTERLOCK NO. 120, OR APPROVED EQUAL). ALL LOCKS FOR HOA SWITCHES SHALL BE KEYED ALIKE. PROVIDE 10 SPARE LOCKS AND KEYS.
2. ALL PILOT LIGHTS ARE (4B) TYPE (SEE DRAWING NO. 11 FOR FUNCTION CODES). PUSH-TO-TEST CIRCUITRY NOT SHOWN.
3. ALL FUSES SHALL BE SLOW-BLOW TYPE AND INCLUDE BLOWN FUSE INDICATOR.
4. ALL GATE, BARRIER, AND SPAN LOCK MCC BUCKET DOORS SHALL INCLUDE AN ENGRAVED PLASTIC WARNING LABEL (WHITE TEXT ON RED BACKGROUND) WITH THE FOLLOWING TEXT: "WARNING! USE OF LOCAL CONTROL CIRCUITS DEFEATS ALL OPERATING SEQUENCE INTERLOCKING. USE WITH EXTREME CAUTION." LABEL TEXT SHALL BE 1/4 INCH HIGH.
5. IF BARRIER GATES ARE EQUIPPED WITH ELECTRIC ACTUATOR DRIVEN ARM LOCKS, BARRIER CONTROL CIRCUITS SHALL INCLUDE PROVISIONS FOR CONTROL OF THE ACTUATOR(S) IN BOTH "HAND" AND "AUTO" MODES. ANY RELAYS REQUIRED FOR CONTROL OF THE ACTUATORS SHALL BE MOUNTED IN THE MCC BUCKET FOR THE BARRIER GATE SERVED. RELAYS SHALL BE "CONTROL RELAY" TYPE AS DESCRIBED IN THE SPECIAL PROVISIONS. POWER AND CONTROL CIRCUITS FOR ACTUATOR(S) SHALL BE FUSED SEPARATELY FROM THE REST OF THE BARRIER CONTROL CIRCUIT(S).



STATE OF NORTH CAROLINA			
DEPARTMENT OF TRANSPORTATION			
RALEIGH			
CAPE FEAR RIVER CROSSING			
WILMINGTON, NORTH CAROLINA			
CONTROL CIRCUIT - 19			
DESIGNED G.L. FASICK		DRAWN BY R.L. REED	
CHECKED N.E. ALGER		SCALE NONE	
DETAILED R.L. REED		DATE APRIL, 2005	
CHECKED G.L. FASICK		DRAWING NO. 33 OF 53	