

ELEVATION
NO SCALE

TASK NO.	TASK
1	INSTALL NEW 600V MAIN DISCONNECT IN AUXILIARY HOUSE SECTION OF THE CONTROL HOUSE.
2	INSTALL NEW 600A MANUAL TRANSFER SWITCH IN AUXILIARY HOUSE.
3	INSTALL NEW 10HP GEARMOTORS AND ASSOCIATED MACHINERY IN THE TOWER TOPS. INSTALL TEMPORARY WIRING AND TEST RUN BRIDGE WITH GEARMOTORS.
4	RELOCATE THE TWO FIXED SECONDARY RESISTOR ASSEMBLIES WITHIN THE ELECTRICAL ROOMS.
5	INSTALL NEW MECHANICAL SPAN HEIGHT INDICATORS.
6	DISCONNECT THE VARIABLE (SWITCHED) SECONDARY RESISTORS AND RELOCATE WITHIN THE ELECTRICAL ROOM.
7	INSTALL NEW SERVICE DISCONNECT, METERING CABINET, CONDUIT AND CABLE FROM SERVICE POLE TO ELECTRICAL ROOM ON BRIDGE.
8	INSTALL THE NEW MOTOR CONTROL CENTER IN THE ELECTRICAL ROOM.
9	RECONNECT INCOMING POWER TO NEW MAIN CIRCUIT BREAKER DISCONNECT AND THE NEW 600A TRANSFER SWITCH. INSTALL TEMPORARY CONNECTION FROM TRANSFER SWITCH TO THE OLD 480V BUS.
10	MAKE PERMANENT CONNECTION, FROM THE NEW TRANSFER TO THE NEW MOTOR CONTROL CENTER. (OLD 480V BUS REMAINS CONNECTED).
11	MAKE PERMANENT CONNECTION FROM THE 300KW GENERATOR TO THE NEW TRANSFER SWITCH.
12	INSTALL THE NEW PLC CABINET IN THE ELECTRICAL ROOM.
13	INSTALL NEW DRIVES IN TEMPORARY LOCATION OPPOSITE THE MCC AND MAKE TEMPORARY CONNECTION TO MCC AND PLC.
14	CONNECT AND TEST ALL POWER, CONTROL AND FIBER OPTIC CONDUCTORS FROM THE MCC AND PLC TO THE WEST MACHINERY ROOM TERMINAL CABINETS AND PLC I/O'S.
15	CONNECT AND TEST NEW POWER AND CONTROL CIRCUITS TO EAST MACHINERY ROOM AND PLC I/O'S.

BRIDGE REMAINS FULLY OPERABLE ON EXISTING DRIVE SYSTEMS.

CONCURRENT TASKS (THIS WORK MAY BE PERFORMED PRIOR TO, OR DURING THE PRECEDING 15 TASKS.)	
TASK NO.	TASK
16	INSTALL AERIAL CABLE SUPPORTS ON THE TOWERS AND LIFT SPAN.
17	INSTALL TERMINAL CABINETS ON THE TOWER PLATFORMS.
18	INSTALL TERMINAL BOX ON LIFT SPAN AND POWER AND CONTROL TERMINAL CABINETS IN THE MACHINERY ROOMS.
19	INSTALL NEW AERIAL CABLE SYSTEM, TERMINATE IN THE NEW CABINETS
20	INSTALL NEW CABLE SUPPORTS, CABLE TRAY AND CONDUCTORS FROM MACHINERY ROOMS TO TOWER PLATFORM TERMINAL CABINETS.
21	INSTALL CONDUCTORS FROM ELECTRICAL ROOM (MOTOR CONTROL CENTER) TO AERIAL CABLE TERMINAL CABINETS.
22	INSTALL THE NEW STRUCTURE GROUNDING SYSTEM.
23	REMOVE EXISTING BARRIERS AND INSTALL NEW BARRIER GATES.
24	INSTALL NEW WIRING TO ALL TRAFFIC CONTROL DEVICES (GATES, SIGNAL, GONGS).
25	INSTALL (BUT DO NOT CONNECT) CONDUCTORS FROM WEST ROADWAY AND SPAN LOCK AREA TO WEST AERIAL CABLE TERMINAL CABINETS.
26	INSTALL OPTICAL ENCODERS ON SOUTHEAST AND SOUTHWEST DRIVE MOTORS.
27	INSTALL NEW ROTARY CAM LIMIT SWITCHES. ADJUST, CONNECT TO EXISTING CIRCUITS.
28	INSTALL, BUT DO NOT CONNECT, NEW CIRCUITS FROM BRAKE LIMIT SWITCHES TO PLC I/O'S.
29	INSTALL AND CONNECT CIRCUIT FROM SOUTH MOTOR ENCODER.
30	INSTALL AND CONNECT RESOLVERS TO PLC I/O'S.

SOUTH DRIVE MOTORS, ASSOCIATED ENCODERS AND RESOLVERS ARE NOW CONNECTED TO THE NEW MCC AND PLC. BRIDGE IS OPERATIONAL ON THE OLD DRIVE OR ON THE NEW GEARMOTOR.

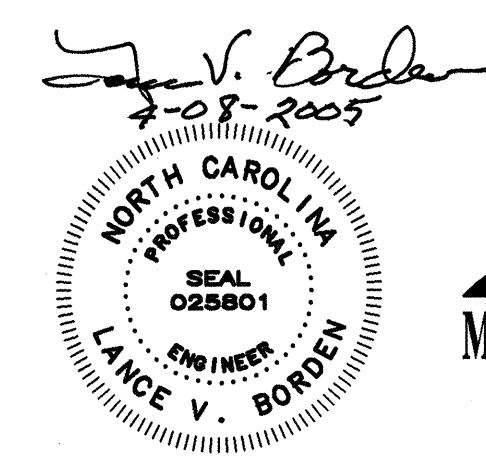
TASK NO.	TASK
31	CONNECT EAST AND WEST SPAN LOCKS TO THE NEW MCC. (LOCKS CAN NOW BE MANUALLY ACTUATED FROM MCC TO OPERATE BRIDGE ON THE GEARMOTOR).
32	CONNECT REMAINING DEVICES TO THE NEW MCC INCLUDING BRAKES, GATES, BARRIERS, HEATERS AND ELEVATOR.
33	REMOVE OLD CONTROL CONSOLE. INSTALL NEW CONSOLE, MAKING ALL INTERCONNECTIONS TO NEW CONTROL EQUIPMENT.
34	ENERGIZE, TEST AND ADJUST THE SOUTH MOTOR DRIVE SYSTEM INCLUDING PLC SKEW CONTROL.

BRIDGE IS NOW OPERATIONAL USING THE NEW DRIVE SYSTEM AND THE SOUTHEAST AND SOUTHWEST MOTORS.

TASK NO.	TASK
35	REMOVE NORTHEAST AND NORTHWEST MOTORS TO MOTOR SHOP FOR REBURBISHING.
36	REINSTALL NORTHEAST AND NORTHWEST MOTORS AND ENCODERS.
37	ENERGIZE, TEST, AND ADJUST THE NORTH MOTOR DRIVE SYSTEM.
38	ENERGIZE, TEST AND ADJUST THE SKEW CONTROL SYSTEM.
39	REMOVE SOUTHEAST AND SOUTHWEST MOTORS TO MOTOR SHOP FOR REBURBISHING.
40	REINSTALL SOUTHEAST AND SOUTHWEST MOTORS.
41	REMOVE - OLD AUXILIARY CONTROL CABINETS IN WEST TOWER AND IN AUXILIARY HOUSE. - OLD 480 VOLT SWITCHGEAR IN AUXILIARY HOUSE. - OLD CONTROL BOARD IN AUXILIARY HOUSE.
42	RELOCATE THE NEW FLUX VECTOR DRIVES TO PERMANENT LOCATION.
43	FINAL TEST ENTIRE SYSTEM PER SPECIFICATIONS.

NOTES:

- THIS DRAWING LISTS THE MAJOR ITEMS OF WORK TO BE PERFORMED. TASKS ARE LISTED IN SEQUENCE ILLUSTRATING THE LEVEL OF SCHEDULING THAT WILL BE NECESSARY TO MINIMIZE BRIDGE OPERATIONAL DOWN TIME. THE CONTRACTOR IS ADVISED THE PERMITTED CONDITIONS UNDER WHICH DOWNTIME OR OUTAGES OF BRIDGE OPERATIONS MAY OCCUR ARE STRICTLY LIMITED. A DETAILED AND REQUIRED SEQUENCE OF CONSTRUCTION, APPROVED BY NCDOT AND THE UNITED STATES COAST GUARD, IS LISTED IN THE SPECIFICATIONS.
- REQUIRED SPAN BALANCING IS NOT INCLUDED IN THE TASK OUTLINE ADDRESSED ON THIS DRAWING. SEE DETAILED SPAN BALANCING REQUIREMENTS IN THE SPECIFICATIONS.



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH			
CAPE FEAR RIVER CROSSING WILMINGTON, NORTH CAROLINA CONSTRUCTION STAGING			
DESIGNED	G.L. FASICK	DATE	APRIL, 2005
CHECKED	N.E. ALGER	DRAWING NO.	3 OF 53
DRAWN BY	R.L. REED	SCALE	NONE
CHECKED	G.L. FASICK	DATE	APRIL, 2005