

**NOTES**

1. TO PREVENT "FLASH-CONFLICT" PROBLEMS, INSERT RED FLASH PROGRAM BLOCKS FOR ALL UNUSED VEHICLE LOAD SWITCHES IN THE OUTPUT FILE. THE INSTALLER SHALL VERIFY THAT SIGNAL HEADS FLASH IN ACCORDANCE WITH THE SIGNAL PLANS.
2. ENSURE THAT RED ENABLE IS ACTIVE AT ALL TIMES DURING NORMAL OPERATION. TO PREVENT RED FAILURES ON UNUSED MONITOR CHANNELS, TIE UNUSED RED MONITOR INPUTS 3,4,6,8, 9,10,11,12,13,14,15 & 16 TO LOAD SWITCH AC+ PER THE CABINET MANUFACTURER'S INSTRUCTIONS.
3. PROGRAM CONTROLLER TO START UP IN PHASE 8 GREEN.
4. ENABLE SIMULTANEOUS GAP-OUT FEATURE, ON CONTROLLER UNIT, FOR ALL PHASES.
5. PROGRAM PHASES 1, 2, 3, 4, 5, 6, 7 AND 8 FOR "RED REST".
6. PROGRAM PHASE 8 AS A START UP CALL.

**BACK-UP PROTECTION PROGRAMMING DETAIL**  
(program controller as shown below)

1. FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE DYNAMIC/BACKUP CONTROL FUNCTIONS 1,2,3,4,5,6,7 AND 8.
2. FROM PHASE CONTROL FUNCTIONS MENU PRESS '2' (DYNAMIC/BACKUP CONTROL FUNCTIONS).

DYNAMIC/BACKUP CONTROL FUNCTION #01  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #02  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #03  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #04  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #05  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #06  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #07  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : XX  
CALL PHASES : X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #08  
OVERLAPS: ABCDEFGHIJKLMNOP  
IF OVERLAPS ARE ACTIVE :  
OR PHASES: 12345678910111213141516  
IF PHASES ARE ON: X  
OMIT PHASES : X X  
CALL PHASES : X

PRESS 'NEXT'

BACKUP PROTECTION PROGRAMMING COMPLETE

**FIELD CONNECTION HOOK-UP CHART**

LOAD SWITCH NO.	S1	S2	S2P	S3	S4	S4P	S5	S6	S6P	S7	S8	S8P
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED
SIGNAL HEAD NO.	11,12	21,22 23,24	NU	NC	NC	NU	51,52	NC	NU	71,72	NC	NU
GREEN	127	130					133			124		
YELLOW	126	129					132			123		
RED	125	128					131			122		
RED ARROW												
YELLOW ARROW												
GREEN ARROW												

NU = NOT USED  
NC = NO CONNECTION, PHASES USED FOR TIMING PURPOSES ONLY.

**PHASE SEQUENCE PROGRAMMING DETAIL**  
(program controller as shown below)

FROM OASIS LOCAL CONTROLLER MAIN MENU  
SELECT: 4 PHASE SEQUENCE

PHASE SEQUENCE: PAGE 1 NEXT: PAGES)


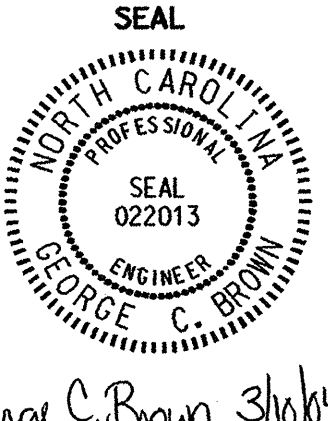
RNG	LEAD	BARRIER 1	X-LAG	LEAD	BARRIER 2	X-LAG
1	:1	2	3	4	5	6
2	:0	0	0	:0	0	0
3	:0	0	0	:0	0	0
4	:0	0	0	:0	0	0

**EQUIPMENT INFORMATION**

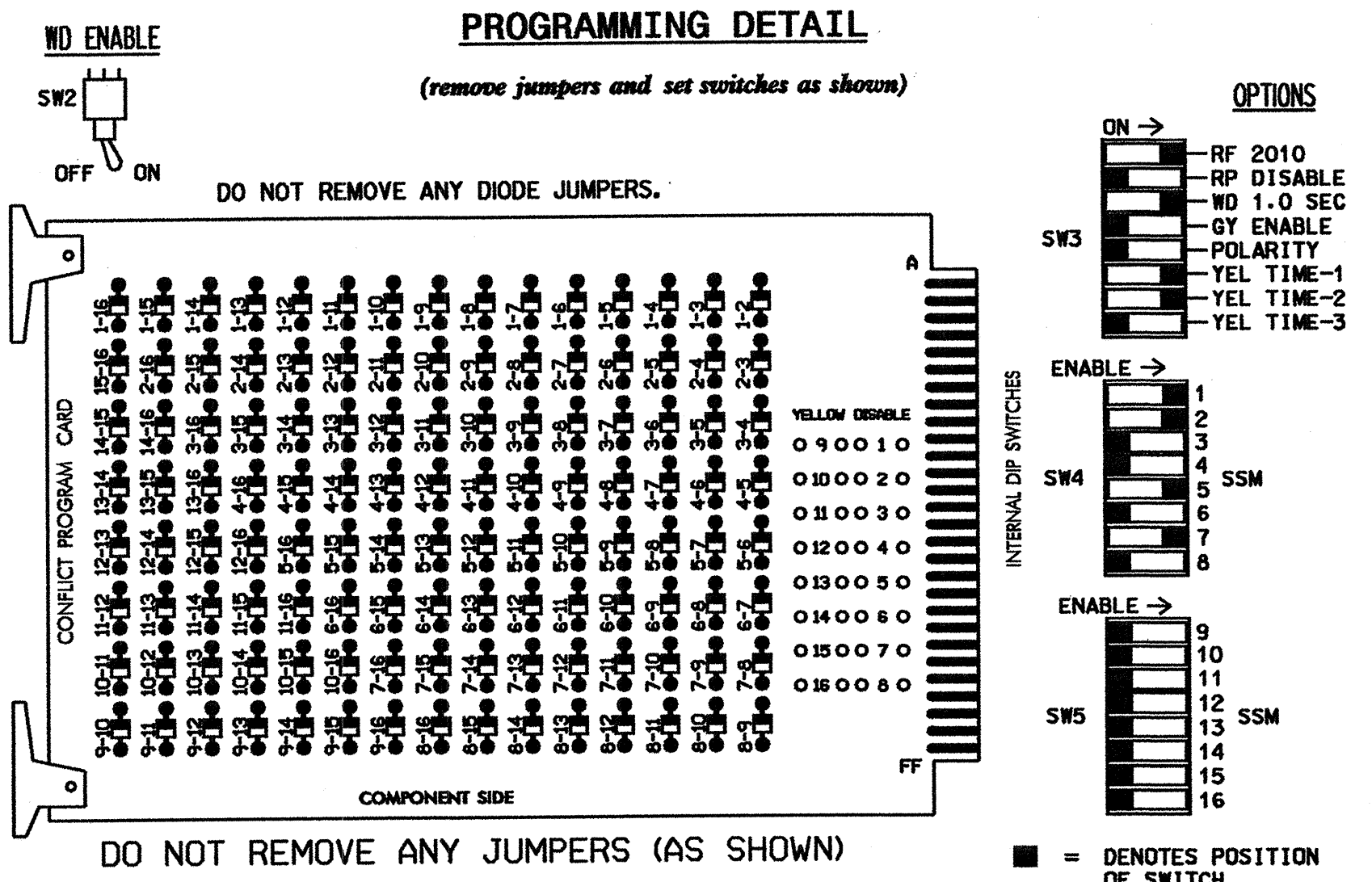
CONTROLLER.....CONTRACTOR SUPPLIED 2070L  
CABINET .....CONTRACTOR SUPPLIED 336  
SOFTWARE .....ECONOLITE OASIS  
CABINET MOUNT.....POLE  
OUTPUT FILE POSITIONS...12  
LOAD SWITCHES USED.....S1,S2,S5,S7  
PHASES USED.....1,2,3,4,5,6,7,8  
OVERLAPS.....NONE

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 01-0738T1, 01-0738T2 AND 01-0738T3.  
DESIGNED: JANUARY 2004  
SEALED: 02/19/04  
REVISED:

NEW INSTALLATION - TEMPORARYS 1, 2 & 3 - SHEET 1 OF 2

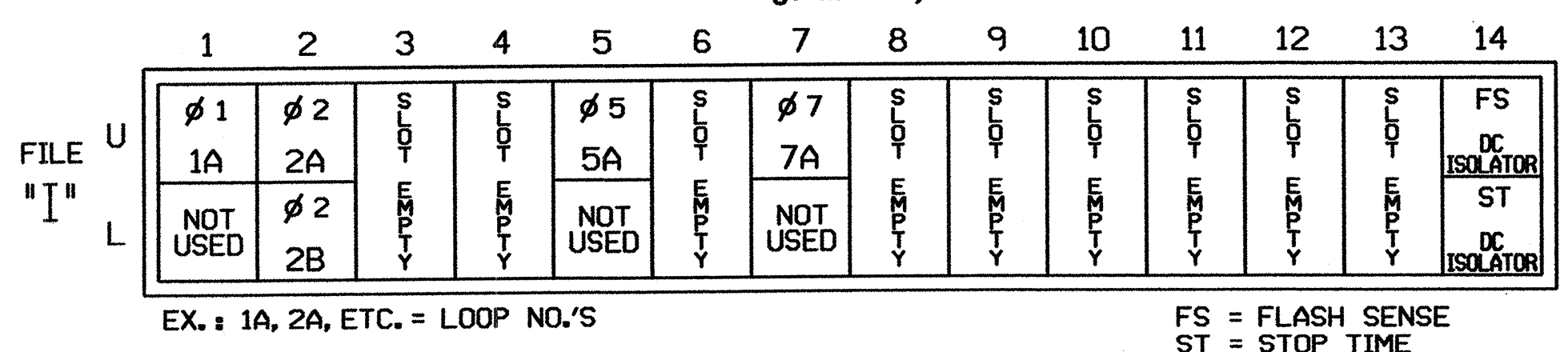
<p>Prepared in the Office of:                    STATE OF NORTH CAROLINA                  DEPARTMENT OF TRANSPORTATION                  Signal Management Section                  122 N. McDowell St., Raleigh, NC 27603</p>	<p><b>US 264</b> AT <b>SR 1315 (SWAMP ROAD) AND BRIDGES 52 AND 54</b></p>		<p>SEAL                    GEORGE C. BROWN                  ENGINEER                  022013</p>			
	<p>ELECTRICAL AND PROGRAMMING DETAILS FOR:</p>	<p>DIVISION 01 HYDE COUNTY NEAR ENGELHARD</p> <p>PLAN DATE: FEBRUARY 2004 REVIEWED BY: <i>R. V. [Signature]</i></p> <p>PREPARED BY: JAMES PETERSON REVIEWED BY:</p>		<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table> <p><i>James C. Brown</i> SIGNATURE DATE</p> <p>SIG. INVENTORY NO. 01-0738</p>	INIT.	DATE
INIT.	DATE					

**EDI MODEL 2010ECL CONFLICT MONITOR PROGRAMMING DETAIL**



- DO NOT REMOVE ANY DIODE JUMPERS.
- DO NOT REMOVE ANY JUMPERS (AS SHOWN)
- NOTES:  
1. CARD IS PROVIDED WITH ALL DIODE JUMPERS IN PLACE. REMOVAL OF ANY JUMPER ALLOWS ITS CHANNELS TO RUN CONCURRENTLY.  
2. MAKE SURE JUMPERS SEL1-SEL5 ARE PRESENT ON THE MONITOR BOARD.

**INPUT FILE POSITION LAYOUT**  
(front view)



**INPUT FILE CONNECTION & PROGRAMMING CHART**

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A	TB21-1,2	I1U	56	18	1	1	Y	Y			
2A	TB21-3,4	I2U	39	1	2	2	Y	Y			3
2B	TB23-3,4	I2L	43	5	12	2	Y	Y			3
5A	TB21-9,10	I5U	55	17	5	5	Y	Y			
7A	TB21-13,14	I7U	57	19	7	7	Y	Y			5

INPUT FILE POSITION LEGEND: I2L

FILE 1  
SLOT 2  
LOWER