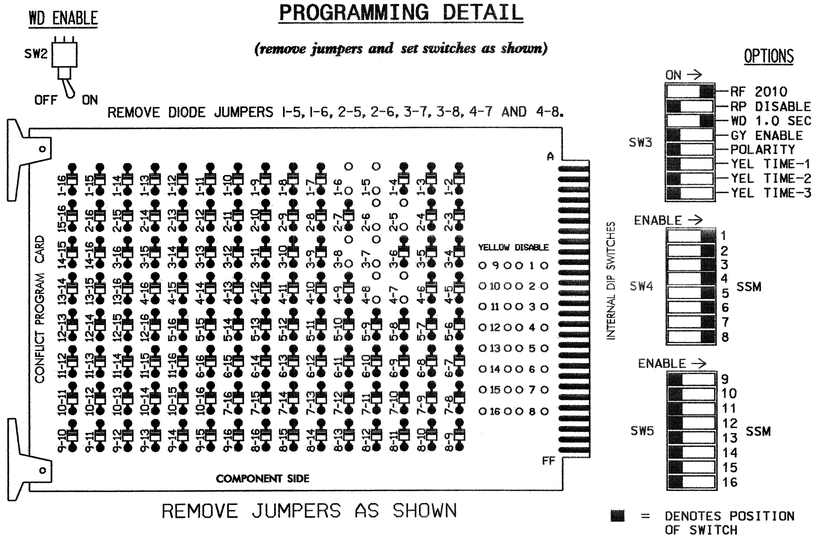
PROJECT REFERENCE NO.	SHEET NO.
U-4736	SIG.16O

EDI MODEL 2010ECL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



REMOVE JUMPERS AS SHOWN

■ = DENOTES POSITION OF SWITCH

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.

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 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 PHASES 2 AND 6 GREEN.
4. ENABLE SIMULTANEOUS GAP-OUT FEATURE, ON CONTROLLER UNIT, FOR ALL PHASES.
5. PROGRAM PHASES 4 AND 8, ON CONTROLLER UNIT, FOR DUAL ENTRY.
6. THE CABINET AND CONTROLLER ARE PART OF THE GASTONIA CITY SIGNAL SYSTEM.

EQUIPMENT INFORMATION

CONTROLLER.....CONTRACTOR SUPPLIED 2070L
CABINET .....CONTRACTOR SUPPLIED 332
SOFTWARE .....ECONOLITE OASIS 3.00.92
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...12
LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S6,S7,S8
PHASES USED.....1,2,3,4,5,6,7,8
OVERLAPS.....NONE

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.	61	21,22	NU	81	41,42	NU	21,42	61,62	NU	41	81,82	NU
GREEN		130			103			136			109	
YELLOW		129			102			135			108	
RED	*	128		*	101		*	134		*	107	
RED ARROW												
YELLOW ARROW	126			117			132			123		
GREEN ARROW	127			118			133			124		

NU = NOT USED

* DENOTES INSTALL LOAD RESISTOR. SEE LOAD RESISTOR INSTALLATION DETAIL THIS PAGE.

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, AND 4.
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:¦123456789101112131415 16
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:¦123456789101112131415 16
IF PHASES ARE ON¦  X
OMIT PHASES     ¦ X
CALL PHASES     ¦
```

PRESS 'NEXT'

```
DYNAMIC/BACKUP CONTROL FUNCTION #03
            OVERLAPS:¦ABCDEFGHIJKLMNOP
IF OVERLAPS ARE ACTIVE ¦
OR        PHASES:¦123456789101112131415 16
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:¦123456789101112131415 16
IF PHASES ARE ON¦      X
OMIT PHASES     ¦     X
CALL PHASES     ¦
```

BACKUP PROTECTION PROGRAMMING COMPLETE

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	SLOT 1	Ø1 1A	Ø2 2A,2B	SLOT 1	SLOT 1	Ø3 3A	Ø4 4A	SLOT 1	SLOT 1	SLOT 1	SLOT 1	SLOT 1	SLOT 1	FS DC ISOLATOR
	L	EMPTY	Ø6 1A	Ø2 2C,2D	EMPTY	EMPTY	Ø8 3A	NOT USED	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	ST DC ISOLATOR
FILE "J"	U	Ø5 5B	Ø5 5A	Ø6 6A,6B	SLOT 1	SLOT 1	Ø7 7A	Ø8 8A	SLOT 1	SLOT 1	SLOT 1	SLOT 1	SLOT 1	SLOT 1	PRE1 AC ISOLATOR
	L	NOT USED	Ø2 5A	Ø6 6C,6D	EMPTY	EMPTY	Ø4 7A	NOT USED	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	NOT USED

EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME
PRE = PREEMPT

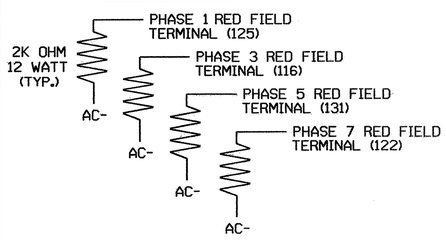
INPUT FILE CONNECTION & PROGRAMMING CHART

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[1]	TB2-5,6	I2U	39	1	2	1	Y	Y			15
	TB2-7,8	I2L	43	5	12	6	Y	Y			
2A,2B	TB2-9,10	I3U	63	25	32	2	Y	Y		1.8	
2C,2D	TB2-11,12	I3L	76	38	42	2	Y	Y			
3A[2]	TB4-9,10	I6U	41	3	4	3	Y	Y			15
	TB4-11,12	I6L	45	7	14	8	Y	Y			3
4A	TB6-1,2	I7U	65	27	34	4	Y	Y			
5B	TB3-1,2	J1U	55	17	5	5	Y	Y			15
5A[3]	TB3-5,6	J2U	40	2	6	5	Y	Y			15
	TB3-7,8	J2L	44	6	16	2	Y	Y			
6A,6B	TB3-9,10	J3U	64	26	36	6	Y	Y		1.8	
6C,6D	TB3-11,12	J3L	77	39	46	6	Y	Y			
7A[4]	TB5-9,10	J6U	42	4	8	7	Y	Y			15
	TB5-11,12	J6L	46	8	18	4	Y	Y			3
8A	TB7-1,2	J7U	66	28	38	8	Y	Y			10

[1] ADD JUMPERS FROM TB2-5 TO TB2-7, AND FROM TB2-6 TO TB2-8.
[2] ADD JUMPERS FROM TB4-9 TO TB4-11, AND FROM TB4-10 TO TB4-12.
[3] ADD JUMPERS FROM TB3-5 TO TB3-7, AND FROM TB3-6 TO TB3-8.
[4] ADD JUMPERS FROM TB5-9 TO TB5-11, AND FROM TB5-10 TO TB5-12.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

LOAD RESISTOR INSTALLATION DETAIL



NOTE: THE PURPOSE OF THESE RESISTORS IS TO LOAD THE CHANNEL RED MONITOR INPUTS IN ORDER FOR THE SIGNAL SEQUENCE MONITOR TO USE THE FULL SIGNAL SEQUENCE MONITORING CAPABILITY ON CHANNELS THAT DO NOT USE THE RED DISPLAY IN THE FIELD.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 12-0335
DESIGNED: February 2005
SEALED: 3/14/05
REVISED:

SIGNAL UPGRADE - SHEET 1 OF 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:
Traffic Engineering and Safety Systems Branch
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Management Section
122 N. McDowell St., Raleigh, NC 27603

NC 274 (BESSEMER CITY ROAD) AT SR 1334 (JENKINS DAIRY ROAD) & SR 1135 (SHANNON BRADLEY ROAD)

DIVISION 12 GASTON COUNTY GASTONIA

PLAN DATE: MARCH 2005 REVIEWED BY: T. Joyce
PREPARED BY: WILLIAM HAIRSTON REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 022013 ENGINEER GEORGE C. BROWN
George C. Brown 3/28/05
SIGNATURE DATE
SIG. INVENTORY NO. 12-0335

15-MAR-2005 15:26
U-4736 SIG.160
wmhairston