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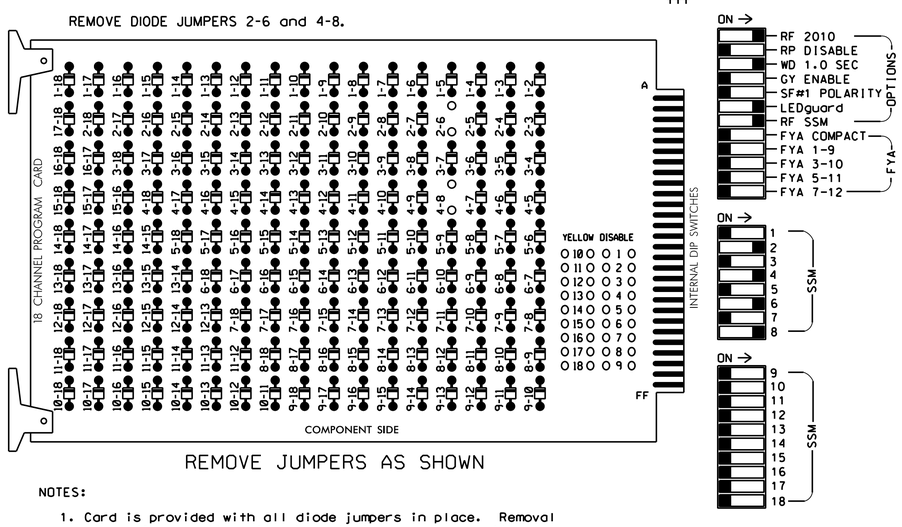
PROJECT REFERENCE NO.	SHEET NO.
I-5714 / U-5114	Sig. 17.1

EDI MODEL 2018ECLip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



REMOVE 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. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that Red Enable is active at all times during normal operation.

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. Restore controller to factory defaults before programming per this electrical detail.
3. Program phases 2, 4, 6, 7, and 8 for Dual Entry.
4. Enable Simultaneous Gap-Out for all Phases.
5. Program phases 2 and 6 for Startup In Green.
6. Program phases 2, 4, 6, 7, and 8 for Red Rest.
7. The cabinet and controller are part of the Gilead Road Closed Loop System.

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED
SIGNAL HEAD NO.	NU	21,22	NU	NU	41,42	NU	NU	61,62, 63	NU	NC	81,82	NU
RED		128			101			134				
YELLOW		129			102			135				
GREEN		130										
RED ARROW											107	
YELLOW ARROW											108	
GREEN ARROW					103			136			109	
✋												
🚶												

NU = Not Used
NC = Not Connected

EQUIPMENT INFORMATION

CONTROLLER.....2070E
CABINET.....336
SOFTWARE.....ECONOLITE OASIS
CABINET MOUNT.....POLE
OUTPUT FILE POSITIONS...12
LOAD SWITCHES USED.....S2,S5,S8,S11
PHASES USED.....2,4,6,*7,8
OVERLAPS.....NONE

* PHASE USED FOR TIMING PURPOSES ONLY

DYNAMIC OMIT CONTROL PROGRAMMING

(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 and 2.
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   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     ¦
```

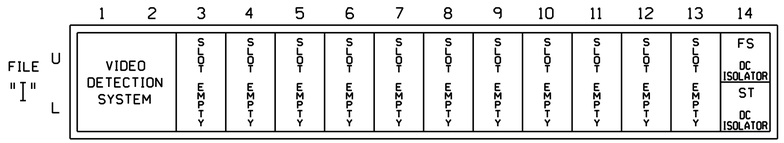
DYNAMIC OMIT PROGRAMMING COMPLETE

NOTE: THIS PROGRAMMING ENSURES THAT PHASE 7 WILL BE SERVED PRIOR TO PHASE 8 WHEN CONTROLLER IS ADVANCING FROM 2+6.

PHASE 7 IS USED TO PROVIDE EXTENDED RED CLEARANCE BEFORE SERVING PHASE 8.

INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE
ST = STOP TIME

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  ¦0     2     0     0   ¦0     4     0     0
2  ¦0     6     0     0   ¦7     8     0     0
3  ¦0     0     0     0   ¦0     0     0     0
4  ¦0     0     0     0   ¦0     0     0     0
```

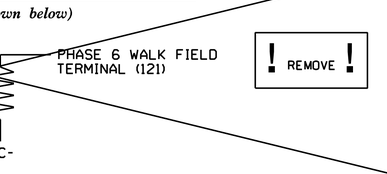
SPECIAL DETECTOR NOTE

Install a video detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

ACCEPTABLE VALUES	
VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 10-1619T3-T4
DESIGNED: December 2017
SEALED: 04-23-2018
REVISED: N/A

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Electrical Detail
Signal Upgrade
Temporary Designs 3,4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

SR 2136 (Gilead Road)
at
I-77 NB Ramps

Division 10 Mecklenburg Co. Huntersville

PLAN DATE:	December 2017	REVIEWED BY:	A.D. Klinksiek
PREPARED BY:	A.H. Thornburg	REVIEWED BY:	N.R. Simmons

REVISIONS	INIT.	DATE

Prepared in the Offices of: Transportation Mobility and Safety Division, Traffic Engineering & Signals Management Section, STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
750 N.Greenfield Pkwy,Garner,NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 031464 ENGINEER NATASHA R. SIMMONS

DocuSigned by: Natasha R. Simmons 4/23/2018
SIGNATURE DATE

SIG. INVENTORY NO. 10-1619T3-T4