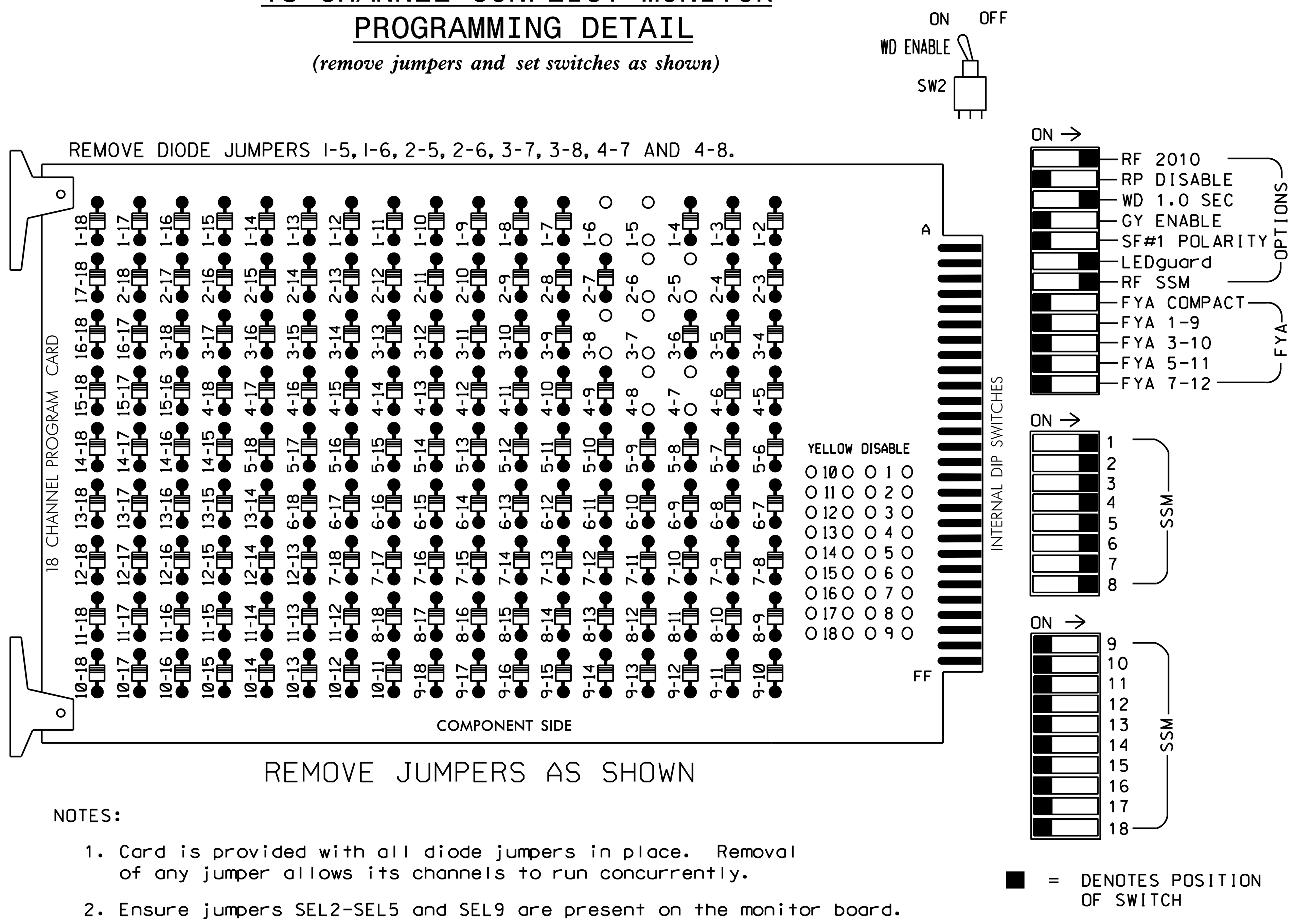
18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(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.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

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. Program controller to start up in phases 2 and 6 Green/ Don't Walk.
3. Enable simultaneous gap-out feature for all phases.
4. Program phases 2 and 6 for volume density operation.
5. The cabinet and controller are part of the Raleigh Signal System.

EQUIPMENT INFORMATION

```
CONTROLLER.............2070LX
CABINET................332 W/ AUX
SOFTWARE...............SE-PAC2070 ver 5.5 or later
CABINET MOUNT..........BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED......S1,S2,S4,S5,S7,S8,S10,S11
PHASES USED............1,2,3,4,5,6,7,8
OVERLAP "A"............NOT USED
OVERLAP "B"............NOT USED
OVERLAP "C"............NOT USED
OVERLAP "D"............NOT USED
```

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1		S2	S3	S4		S5	S6	S7	S8	S9	S10		S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1		2	13	3		4	14	5	6	15	7		8	16	9	10	17	11	12	18
PHASE	1		2	2 PED	3		4	4 PED	5	6	6 PED	7		8	8 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	82	21,22	NU	31,32	22	41,42, 43	NU	51,52	61,62	NU	71,72, 73	62	81,82, 83	NU	NU	NU	NU	NU	NU	NU
RED			128				101			134				107							
YELLOW			129				102			135				108							
GREEN			130				103			136				109							
RED ARROW	125				116				131			122									
YELLOW ARROW	126	126			117	117			132			123	123								
GREEN ARROW	127	127			118	118			133			124	124								

NU = Not Used

YELLOW-RED FLASH STARTUP PROGRAMMING DETAIL

(program controller as shown below)

1. From Main Menu select [4 - UNIT DATA]
2. From UNIT DATA Submenu select [1 - STARTUP & MISC]

```
EPAC STARTUP & MISC
STARTUP TIME.:  0 (SEC) STATE: 0 (0-FL
RED REV/10...: 40 (TSEC)          1-RED
AUTO PED CLR.:  0 (0-NO  1-YES)   2-RAF)
STOP T RESET.:  0 (0-NO  1-YES)
SEQUENCE.....:  1 (1-19)
SPECIAL SEQ  :  0 (SEE HELP)
A-UP B-DN C-LT D-RT E-ENTER F-PRIOR MENU
```

STARTUP PROGRAMMING COMPLETE

PRESS 'F' TO RETURN TO UNIT DATA

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	FS DC ISOLATOR
	L														ST DC ISOLATOR
FILE "J"	U	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L														

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

FS = FLASH SENSE
ST = STOP TIME

REMOTE FLASH PROGRAMMING DETAIL

(program controller as shown below)

1. From Main Menu select [4 - UNIT DATA]
2. From UNIT DATA Submenu select [2 - REMOTE FLASH]
3. From FLASH Submenu select [1 - FLASH SETTINGS]

```
FLASH SETTINGS          TEST-A AS FLASH: 0

 LDSW: 123456789 0123456789 0123456789 012
 FLSH: 120110120 1100000000 0000000000 000
  ALT: 100100010 0100000000 0000000000 000

0-DARK   1-RED   2-YELLOW  3-STEADY YELLOW
A-UP  B-DN  C-LT  D-RT         F-PRIOR MENU
```

PRESS 'F' TO RETURN TO FLASH

4. From REMOTE FLASH Submenu select [2 - ENTRY/EXIT PHASES]

```
FLASH ENTRY/EXIT PHASES

     PHASES: 12345678 90123456
      ENTRY: 01000100 00000000
       EXIT: 01000100 00000000

0-DARK   1-RED   2-YELLOW  3-STEADY YELLOW
A-UP  B-DN  C-LT  D-RT         F-PRIOR MENU
```

REMOTE FLASH PROGRAMMING COMPLETE

SPECIAL DETECTOR NOTE

Install a non-intrusive 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.

INIT & N.A. RESP PROGRAMMING DETAIL

1. From Main Menu select [3 - PHASE DATA]
2. From PHASE DATA Submenu select [4 - INIT & N.A RESP]

```
PHASE......1...2...3...4...5...6...7...8
 INITIAL   1   6   1   1   1   6   1   1
 NA RESP   0   1   0   2   0   1   0   2
 UPDT GRN  0   0   0   0   0   0   0   0

CODES.....0....1....2....3....4....5...6
 INITL  NONE  INACT  RED  YEL  GRN  DRK  G/DW
 NA RSP NONE  NA1    NA2  1&2  ---  ---  ---
                                         ***
```

INIT & N.A. RESP PROGRAMMING COMPLETE

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-1174T1
DESIGNED: February 2025
SEALED: 03/27/2025
REVISED: N/A

Temporary Design 1 (TMP Phase I & II)
Electrical Detail

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:

Transportation Mobility and Safety Division
ITS & Signals Management Section
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

750 N.Greenfield Pkwy,Garner,NC 27529

US 401 (Fayetteville Road) at Purser Drive and Pinewinds Drive

Division 5 | Wake County | Raleigh

PLAN DATE: March 2025	REVIEWED BY:
PREPARED BY: S.Kirkpatrick	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 036833 ENGINEER RYAN W. HOUGH

Signed by: Ryan W. Hough
430320FAA2654C3...

SIGNATURE: Ryan W. Hough DATE: 03/27/2025

SIG. INVENTORY NO. 05-1174T1