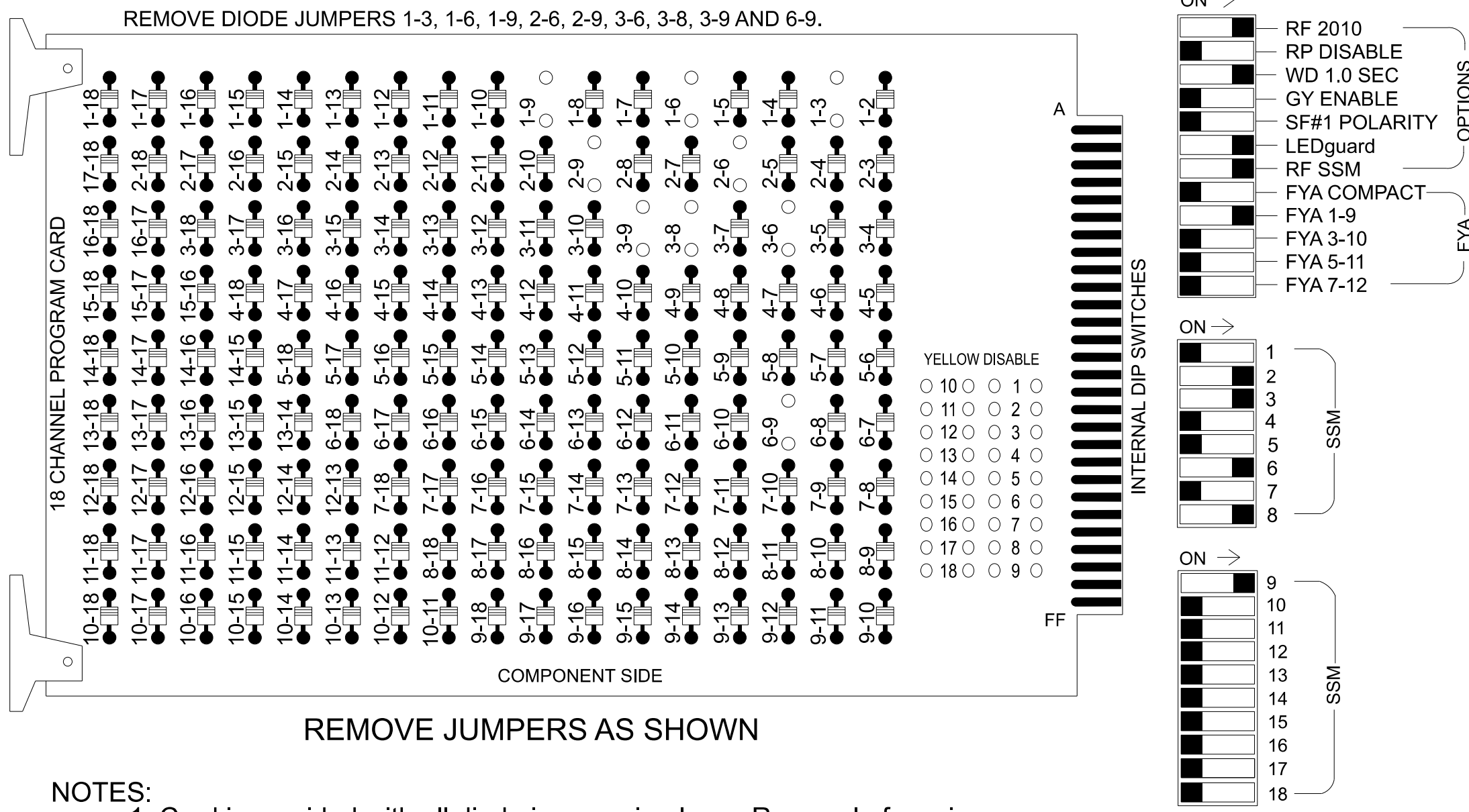


22-AUG-2025, 10:30
D:\p\drmp\usgs01\hqr_usgs01\07\documents\NCDOT\NCDOT_Mechanisms\NCDOT_14-0727\14-0727T1_sm.e_2024mcdcd.dgn
Fernando Vozquez AT CHA-FAZ01EZ

18 CHANNEL IP CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



NOTES:

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- Ensure that the Red Enable is active at all times during normal operation.
- Integrate monitor with Ethernet network in cabinet.

NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- The cabinet and controller are part of the NC 107 Time Based System.

EQUIPMENT INFORMATION

Controller.....2070LX
Cabinet.....332 w/ Aux
Software.....Q-Free MAXTIME
Cabinet Mount.....Base
Output File Positions.....18 With Aux. Output File
Load Switches Used.....S1, S2, S4, S8, S11, AUX S1
Phases Used.....1, 2, 6, 8
Overlap "1".....*
Overlap "2".....NOT USED
Overlap "3".....NOT USED
Overlap "4".....NOT USED
Overlap "5".....NOT USED
Overlap "6".....NOT USED
Overlap "7".....*

*See overlap programming detail on sheet 2

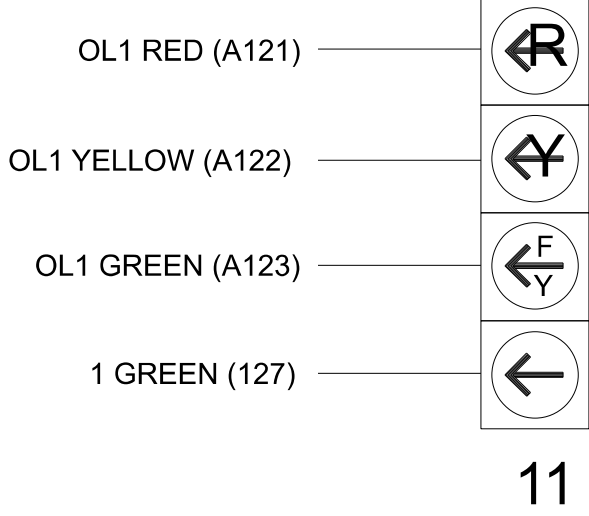
SIGNAL HEAD HOOK-UP CHART

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	OL7	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11★	22,23 24	NU	82,83	NU	NU	NU	61,62	NU	NU	81	NU	11★	NU	NU	NU	NU	NU
RED		128		116				134										
YELLOW	★	129						135										
GREEN		130						136										
RED ARROW											107		A121					
YELLOW ARROW				117							108		A122					
FLASHING YELLOW ARROW													A123					
GREEN ARROW	127			118							109							
⚠																		
🚶																		

NU = Not Used
★ Denotes install load resistor. See load resistor installation detail this sheet.
★ See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal head as shown)



INPUT FILE POSITION LAYOUT
(front view)

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅ 1	S	S	S	S	S	S	S	S	S	S	S	S	FS
L	1A	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	DC ISOLATOR
U	S	S	S	S	S	S	S	S	S	S	S	S	S	ST
L	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	DC ISOLATOR

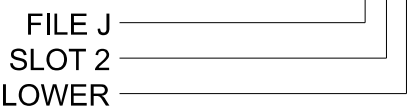
EX. : 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

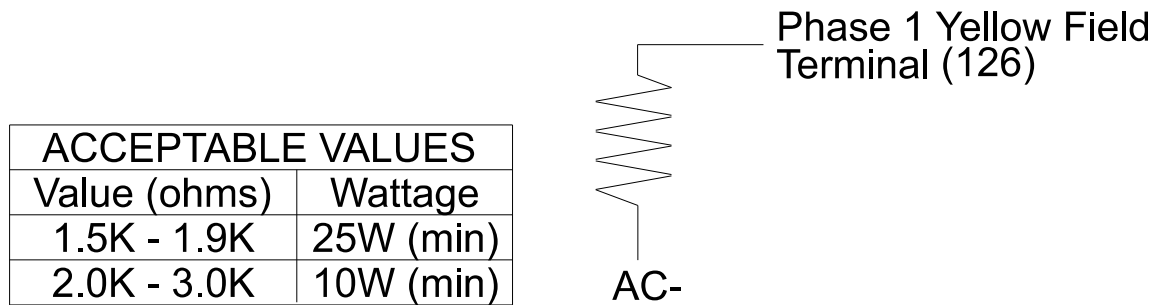
LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
1A	TB2-1,2	I1U	56	18 -	1 29	1 6	15.0 -		X X		X X	

INPUT FILE POSITION LEGEND: J2L



LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown)



SPECIAL DETECTOR NOTE

- Install a multi-zone microwave 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.
- For Detection Zones 1A and 5A, the equipment placement is typical for a NCDOT installation.



THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 14-0727T1
DESIGNED: Aug 2025
SEALED: 8/26/2025
REVISED: N/A

Electrical Detail - Sheet 1 of 2
Temporary Design 1 - TMP Ph1, S2

Electrical and Programming Details For:	US 23 Bus. (Asheville Hwy) at SR 1432 (Skyland Drive) / SR 1438 (Dillardtown Road)	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
	Division 14 Jackson County Sylva PLAN DATE: August 2025 REVIEWED BY: ZM Esposito PREPARED BY: DJ White REVIEWED BY: BN Groome	SEAL NORTH CAROLINA PROFESSIONAL ENGINEER BRITANNY N GROOME 8/26/2025
750 N. Greenfield Pkwy, Garner, NC 27529	REVISIONS INIT. DATE	SIG. INVENTORY NO. 14-0727T1