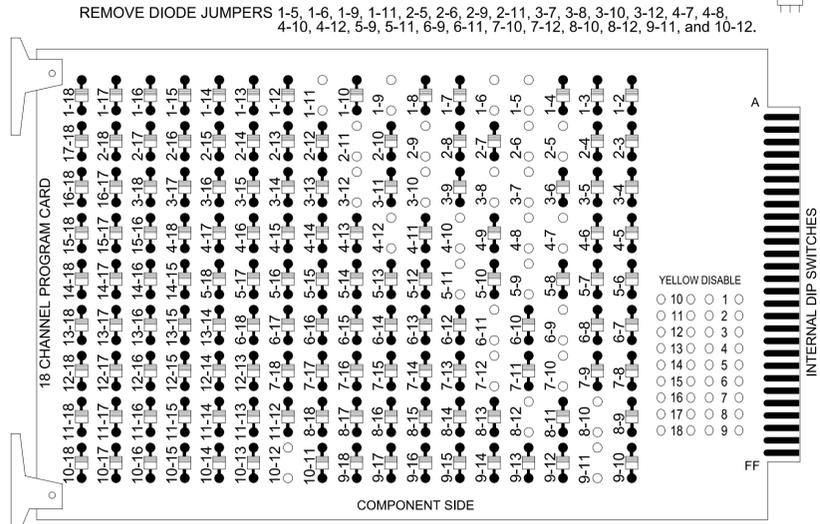


### 18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

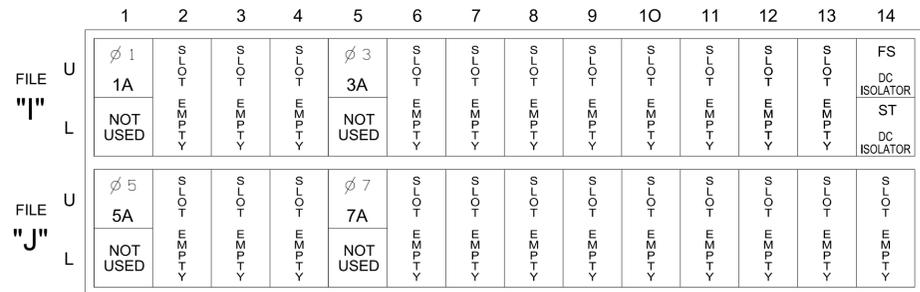


**NOTES:**

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 the 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.

### INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE  
ST = STOP TIME

### NOTES

1. 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.
2. Program phases 4 and 8 for Dual Entry.
3. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
4. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
5. The cabinet and controller are part of the SR 1700 (Covered Bridge Road) 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, S5, S7, S8, S10, S11,  
AUX S1, AUX S2, AUX S4, AUX S5  
Phases Used.....1, 2, 3, 4, 5, 6, 7, 8  
Overlap "1".....\*  
Overlap "2".....\*  
Overlap "3".....\*  
Overlap "4".....\*

\*See overlap programming detail on sheet 2

### 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	11U	56	18	1★	1	15		X		X	
				-	29★	6	3		X		X	
3A	TB4-5,6	15U	58	20	7★	3	15		X		X	
				-	30★	8	3		X		X	
5A	TB3-1,2	J1U	55	17	15★	5	15		X		X	
				-	31★	2	3		X		X	
7A	TB5-5,6	J5U	57	19	21★	7	15		X		X	
				-	32★	4	3		X		X	

★ For the detectors to work as shown on the signal design plan, see the Detector Programming Detail for Alternate Phasing on Sheet 2 of this plan.

### INPUT FILE POSITION LEGEND: J2L



### SPECIAL DETECTOR NOTE

Install a multizone 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.

### SIGNAL HEAD HOOK-UP CHART

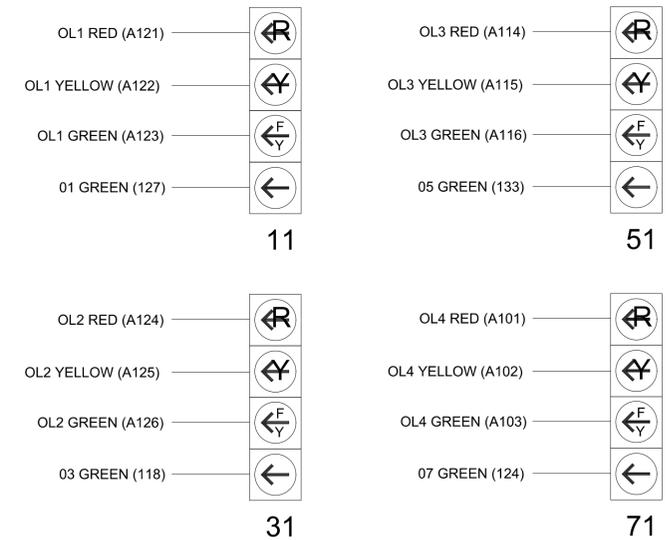
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6		
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18		
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE		
SIGNAL HEAD NO.	11★	21,22	NU	31★	22	41,42	NU	51★	42	61,62	NU	71★	81,82	NU	11★	31★	NU	51★	71★	NU
RED		128		*	101			*	134			107								
YELLOW	*	129			102				135		*	108								
GREEN		130			103				136			109								
RED ARROW													A121	A124				A114	A101	
YELLOW ARROW					117				132				A122	A125				A115	A102	
FLASHING YELLOW ARROW													A123	A126				A116	A103	
GREEN ARROW	127				118	118			133	133		124								

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

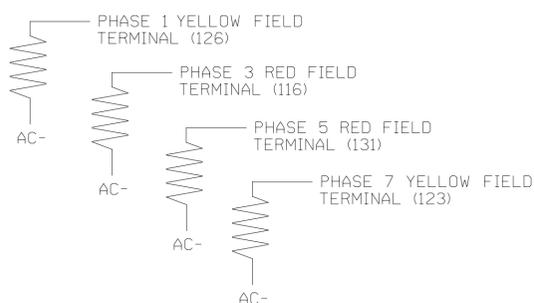
(wire signal heads as shown)



### LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

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



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 04-1473  
DESIGNED: February 2025  
SEALED: 02/04/25  
REVISED: N/A



Electrical Detail - Sheet 1 of 3 - Final Design

ELECTRICAL AND PROGRAMMING DETAILS FOR:

SR 1700 (Covered Bridge Road) at SR 1702 (Archer Lodge Road) / SR 1703 (S Murphrey Road)



Division 4 Johnston County Archer Lodge  
PLAN DATE: February 2025 REVIEWED BY: M.L. Stygles  
PREPARED BY: L. Gottlieb REVIEWED BY: J. Ma/J.L. Lewis

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DocuSigned by: 2/4/2025  
994661E84487460  
DATE  
SIG. INVENTORY NO. 04-1473