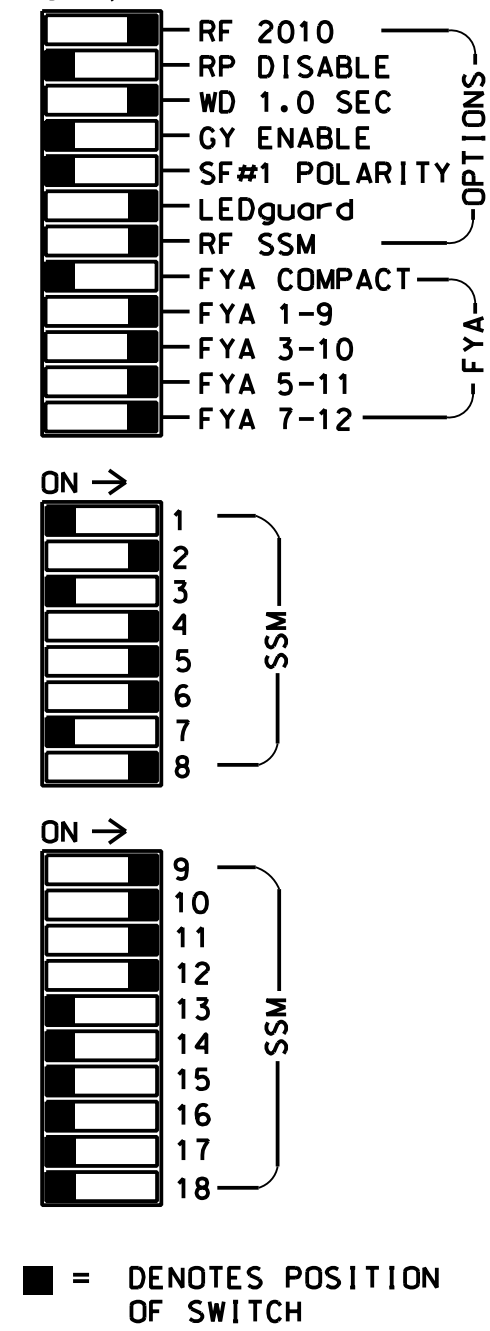
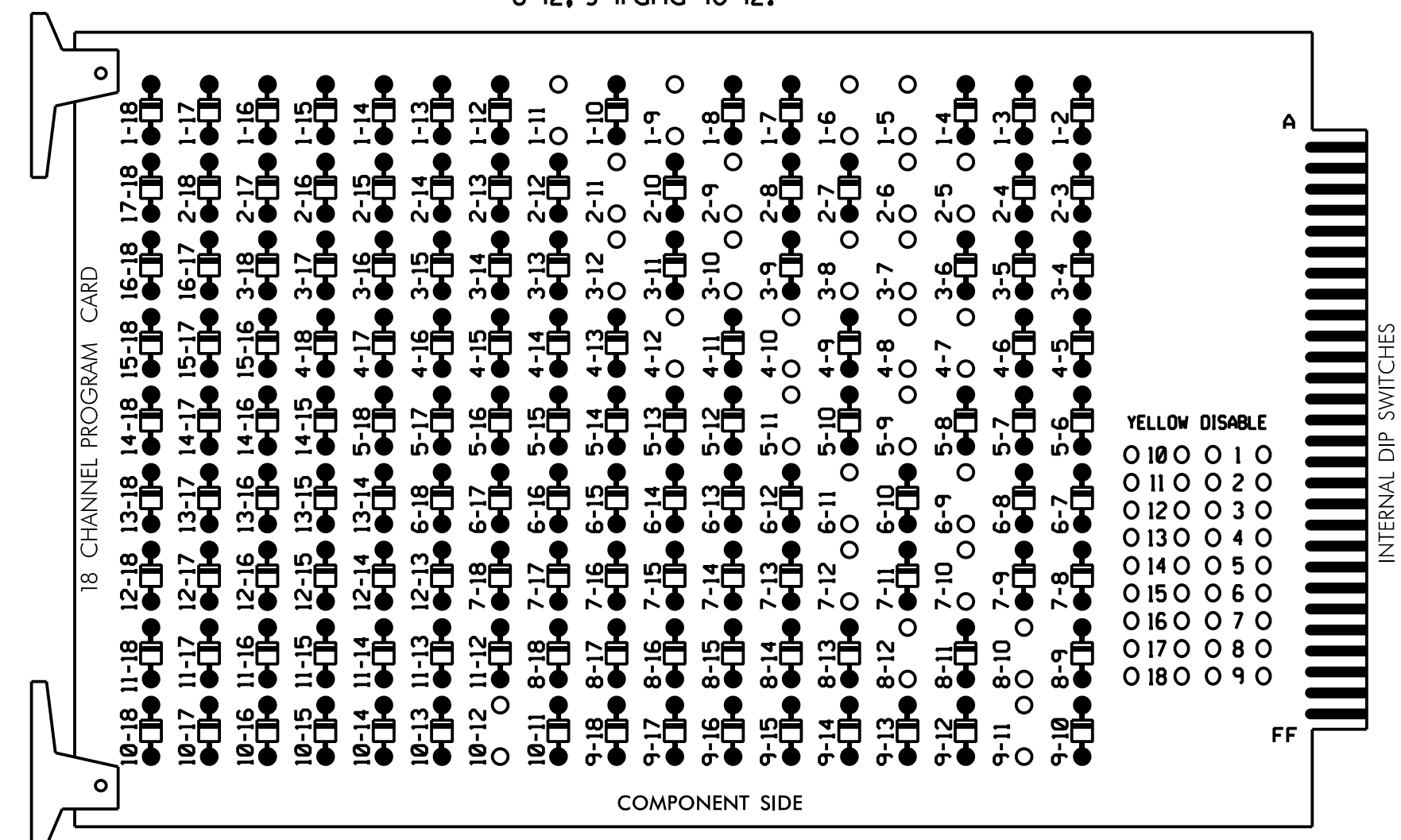


### EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 2-5, 2-6, 2-9, 2-11, 3-7, 3-8, 3-10, 3-12, 4-7, 4-8, 4-10, 4-12, 5-9, 5-11, 6-9, 6-11, 7-10, 7-12, 8-10, 8-12, 9-11 and 10-12.



- 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 Red Enable is active at all times during normal operation.
  - Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

### NOTES

- 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.
- Program phases 4 and 8 for Dual Entry.
- Enable Simultaneous Gap-Out for all Phases.
- Program phases 2 and 6 for Startup In Green.
- Program phases 2 and 6 for Yellow Flash, and overlaps 1 and 2 as Wag Overlaps.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
- The cabinet and controller are part of the NC 133 Closed Loop System.

### EQUIPMENT INFORMATION

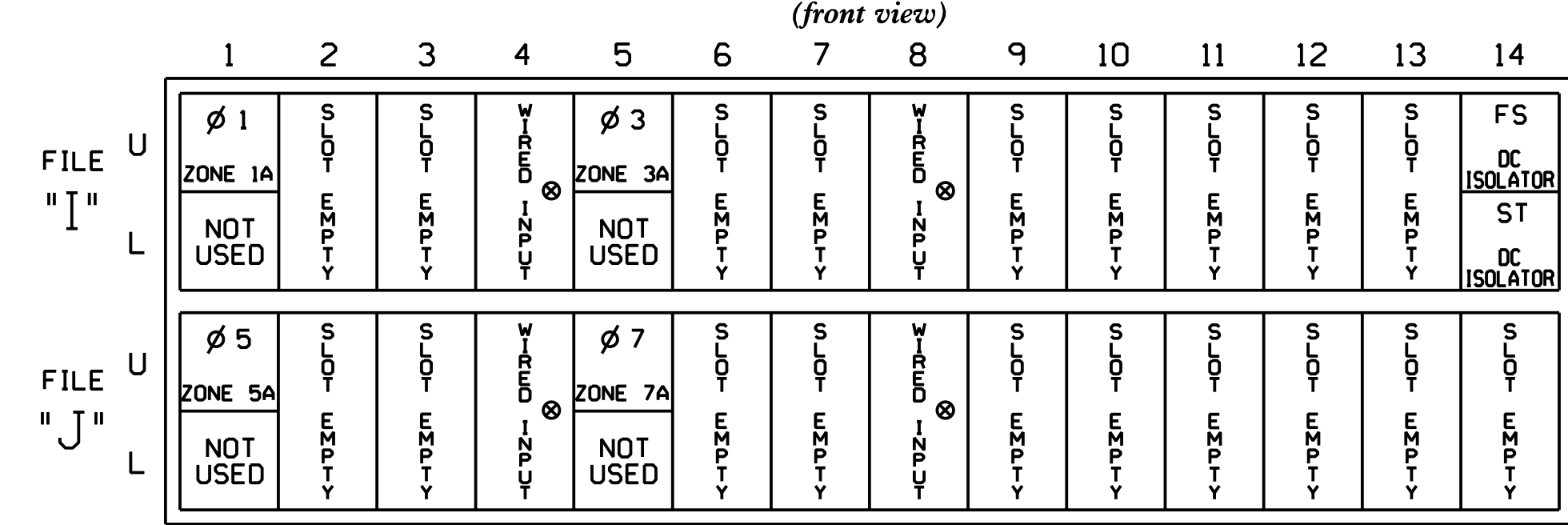
CONTROLLER.....2070E  
 CABINET.....332 W/ AUX  
 SOFTWARE.....ECONOLITE OASIS  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE LOAD SWITCHES USED.....S1,S2,S4,S5,S7,S8,S10,S11, AUX S1,AUX S2,AUX S4,AUX S5  
 PHASES USED.....1,2,3,4,5,6,7,8  
 OVERLAP "A".....1+2  
 OVERLAP "B".....3+4  
 OVERLAP "C".....5+6  
 OVERLAP "D".....7+8

### 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	21,22	NU	31	41,42	NU	42	51	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																A122	A125	A115	A102
FLASHING YELLOW ARROW																A123	A126	A116	A103
	127			118			133	133			124								

GREEN ARROW = Not Used  
 \* Denotes install load resistor. See load resistor installation detail this sheet.  
 ★ See pictorial of head wiring in detail this sheet.

### INPUT FILE POSITION LAYOUT



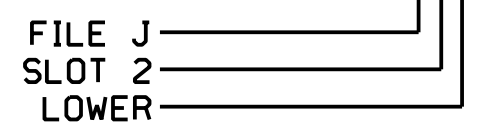
EX.: 1A, 2A, ETC. = LOOP NO.'S  
 FS = FLASH SENSE  
 ST = STOP TIME  
 ⊗ Wired Input - Do not populate slot with detector card

### 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
ZONE 1A <sup>1</sup>	TB2-1,2	I1U	56	18	1	1	Y	Y			15
	-	J4U	48	10★	26	6	Y	Y			
ZONE 3A <sup>2</sup>	TB4-5,6	I5U	58	20	3	3	Y	Y			15
	-	J8U	50	12★	28	8	Y	Y			3
ZONE 5A <sup>3</sup>	TB3-1,2	J1U	55	17	5	5	Y	Y			15
	-	I4U	47	9★	22	2	Y	Y			
ZONE 7A <sup>4</sup>	TB5-5,6	J5U	57	19	7	7	Y	Y			15
	-	I8U	49	11★	24	4	Y	Y			

- Add jumper from I1-W to J4-W, on rear of input file.
  - Add jumper from I5-W to J8-W, on rear of input file.
  - Add jumper from J1-W to I4-W, on rear of input file.
  - Add jumper from J5-W to I8-W, on rear of input file.
- \* See Input Page Assignment programming details on sheets 4, 5, 6, and 7.

### INPUT FILE POSITION LEGEND: J2L

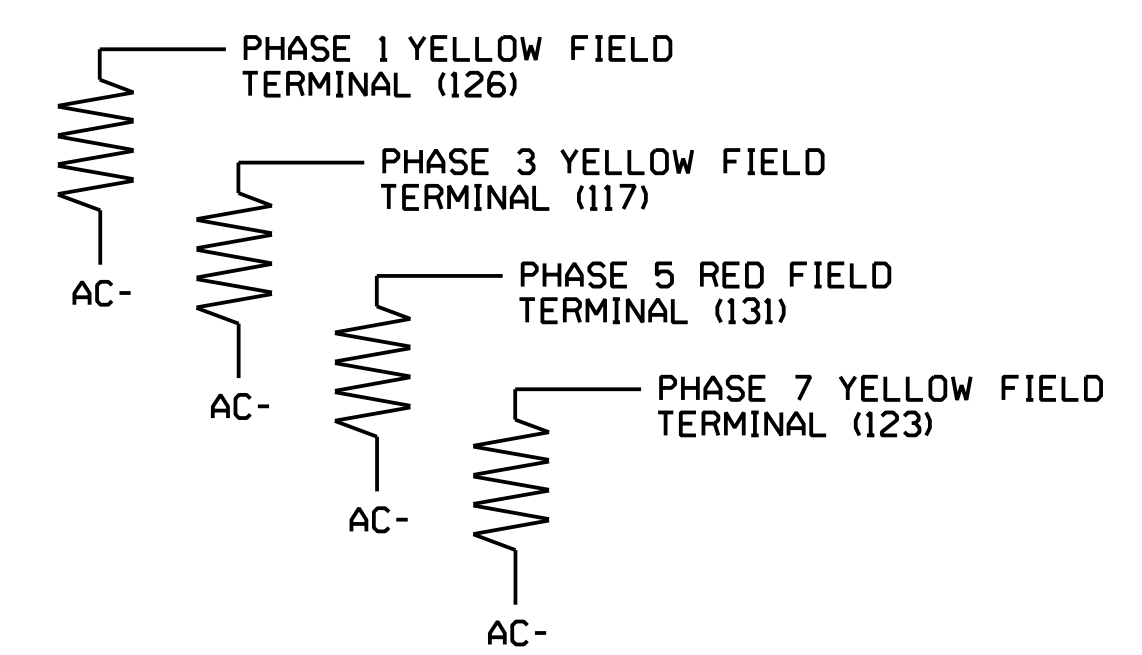


### LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

ACCEPTABLE VALUES

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



### SPECIAL DETECTOR NOTE

Install a 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.

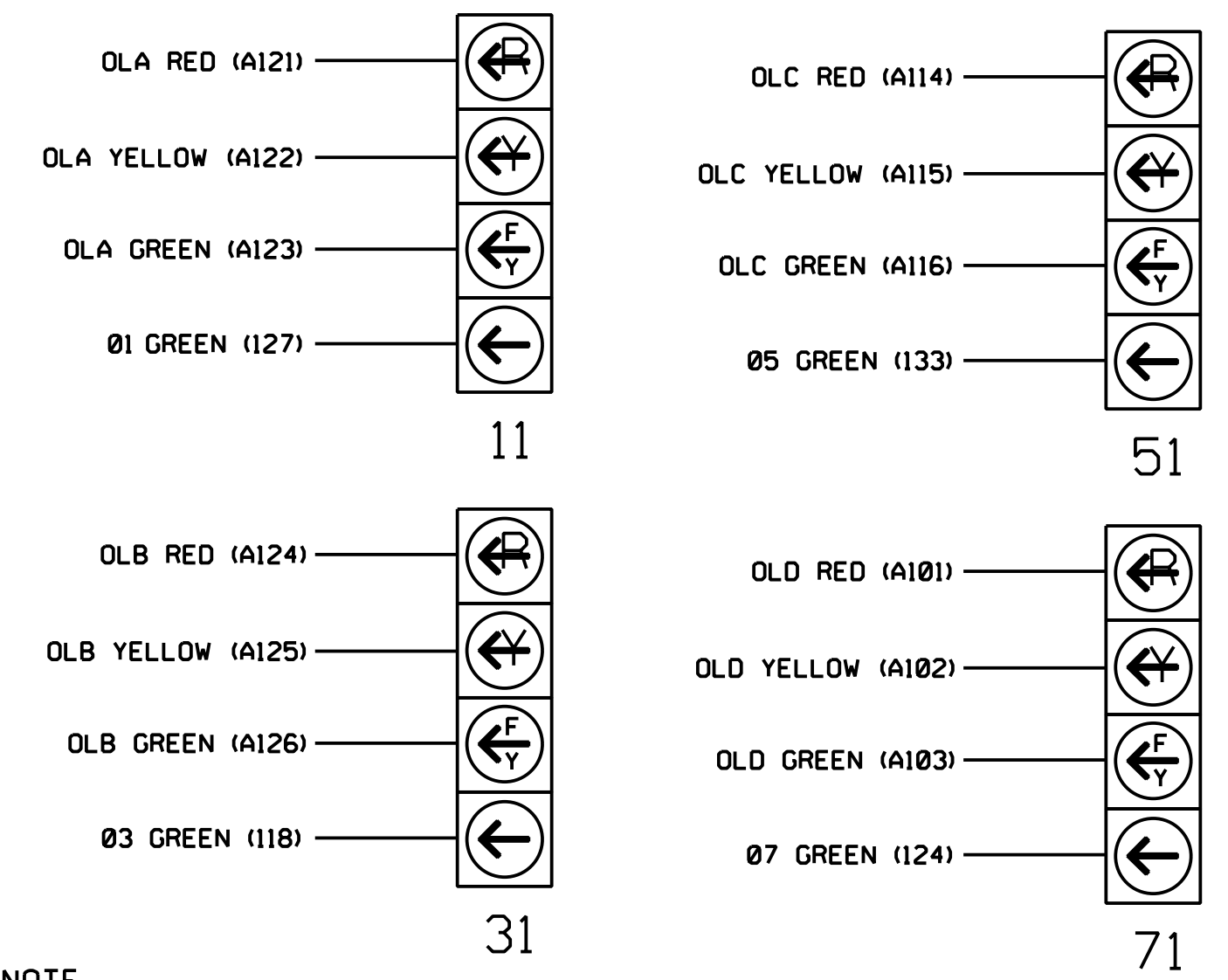
For loops 1A, 3A, 5A, and 7A, detector card placement and slots reserved for wired inputs are typical for a NCDOT installation. Inputs associated with these slots are compatible with time of day instructions located on sheets 4, 5, 6, 7, and 8 of this electrical detail.



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### FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



### NOTE

The sequence display for signal heads 11, 31, 51, and 71 requires special logic programming. See sheet 2 for programming instructions.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0215T5  
 DESIGNED: June 2017  
 SEALED: 9/10/2021  
 REVISED: N/A

Electrical Detail - Sheet 1 of 8  
 Signal Upgrade  
 Temporary Design 5

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	Prepared for: North Carolina Department of Transportation Division 03 SR 1852 (Robert Ruark Drive)	NC 211 (Howe Street) at NC 87 (River Road) Brunswick Co. Southport	SEAL 
	PLAN DATE: June 2017 PREPARED BY: A.H. Thornburg	REVIEWED BY: A.D. Klinskiak REVIEWED BY: N.R. Simmons	REVISIONS INIT. DATE