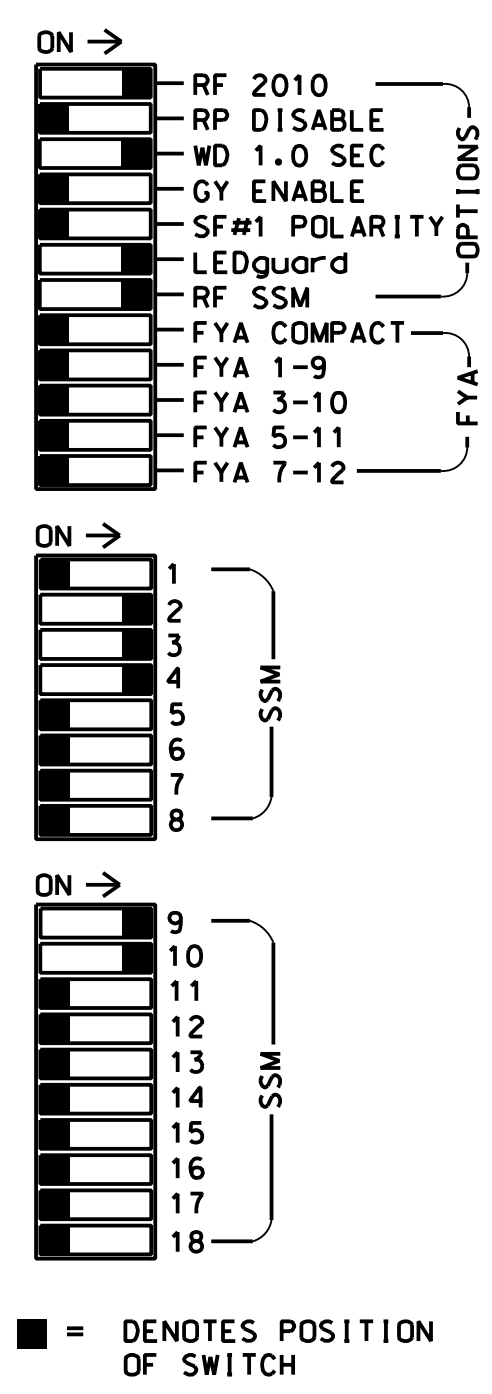
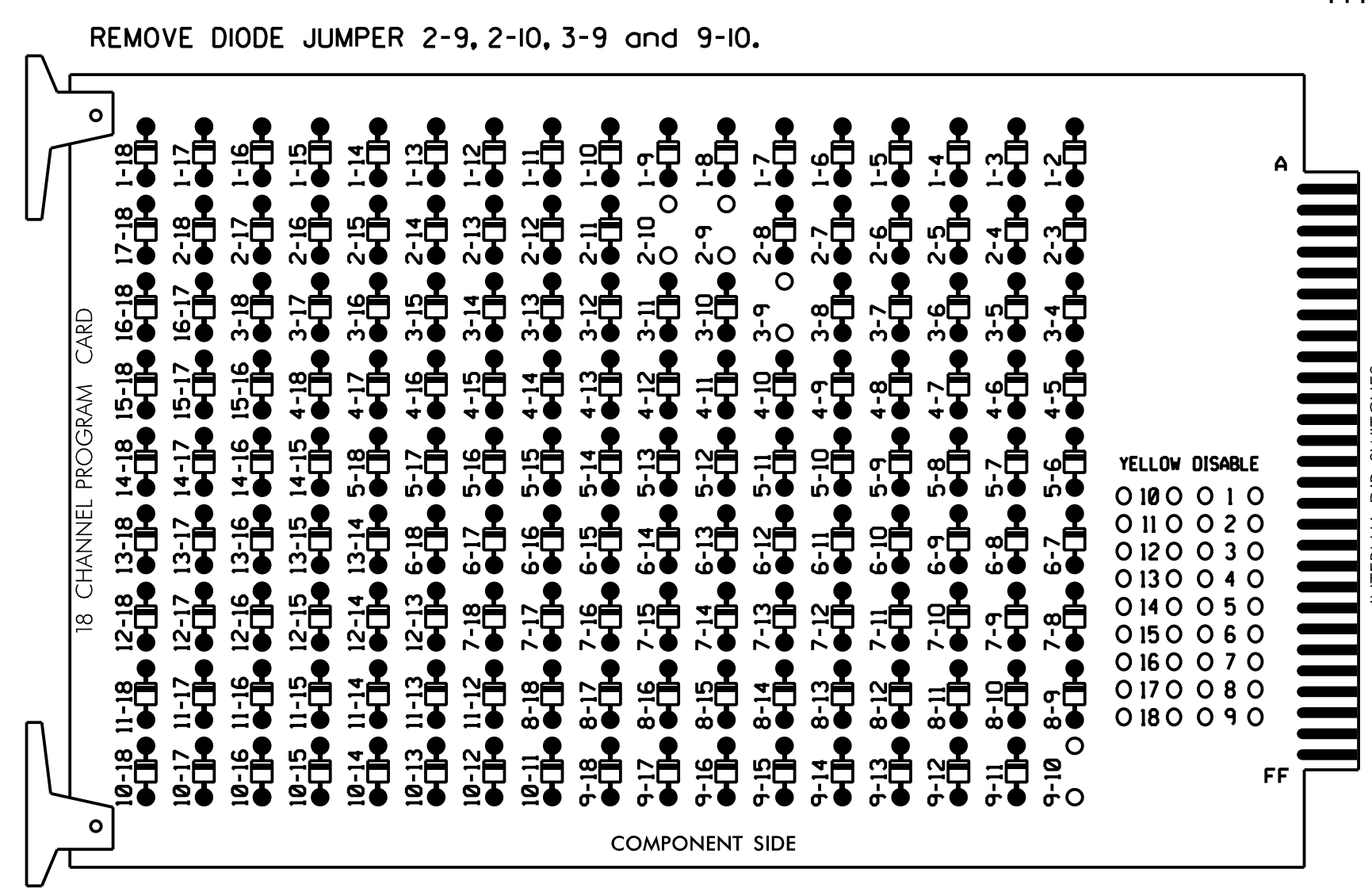


### EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(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 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. Enable Simultaneous Gap-Out for all Phases.
3. Program phase 2 for Startup In Green.
4. Program phase 2 for Yellow Flash, and overlaps 1 and 2 as Wag Overlaps.
5. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
6. 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.....S2,S4,S5,AUX S1,AUX S2  
 PHASES USED.....2,3,4  
 OVERLAP "A".....2+3  
 OVERLAP "B".....2  
 OVERLAP "C".....NOT USED  
 OVERLAP "D".....NOT USED

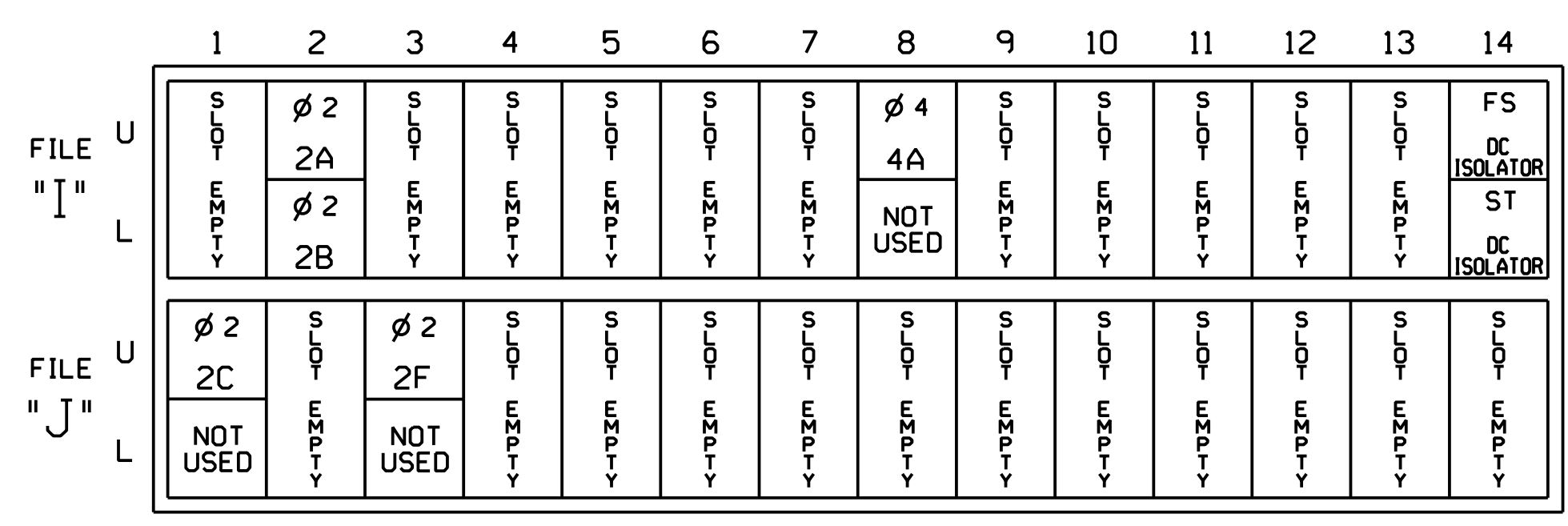
### SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	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	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	6	6 PED	7	8	8 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	NU	42	NU	31	32	41,42	NU	NU	NU	NU	NU	22,23	21	NU	NU	NU	NU
RED		*		116	116	101						A121	A124				
YELLOW				117	117	102											
GREEN				118	118	103											
RED ARROW																	
YELLOW ARROW			129										A122	A125			
FLASHING YELLOW ARROW														A126			
GREEN ARROW		130		118									A123				

NU = Not Used  
 \* Denotes install load resistor. See load resistor installation detail this sheet.  
 ★ See pictorial of head wiring in detail this sheet.  
 NOTE: Signal heads 11,61,62, and 71 have been bagged and disconnected.

### INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE  
 ST = STOP TIME

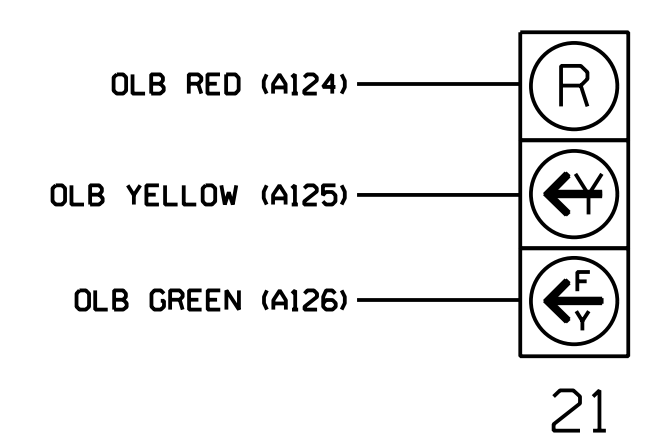
### INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
2C	TB3-1,2	J1U	55	17	5	2	Y	Y			
2F	TB3-9,10	J3U	64	26	36	2	Y	Y			
4A	TB6-5,6	I8U	49	11	24	4	Y	Y			

INPUT FILE POSITION LEGEND: J2L  
 FILE J  
 SLOT 2  
 LOWER

### FYA SIGNAL WIRING DETAIL

(wire signal head as shown)



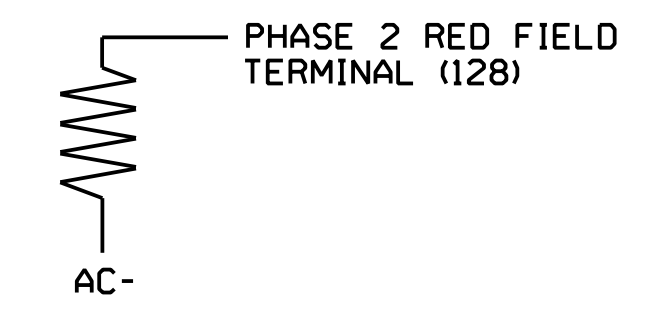
### SPECIAL DETECTOR NOTE

Install a microwave detection system for detection zones 2D,2E,3A, and 3B. Install 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 resistor as shown)

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: 03-1035T1  
 DESIGNED: June 2017  
 SEALED: 9/10/2021  
 REVISED: N/A

Electrical Detail - Sheet 1 of 2  
 Signal Upgrade  
 Temporary Design 1

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for:

NC 133 (Long Beach Road) at SR 1969 (Old Long Beach Road) / Long Beach Crossing Entrance

Division 03 Brunswick Co. Southport

PLAN DATE: June 2017 REVIEWED BY: A.D. Klinksiek

PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons

REVISIONS	INIT.	DATE

SEAL

DocuSigned by:  
 Natasha Simmons  
 9/10/2021

SIGNATURE DATE

SIG. INVENTORY NO. 03-1035T1

**HNTB**

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