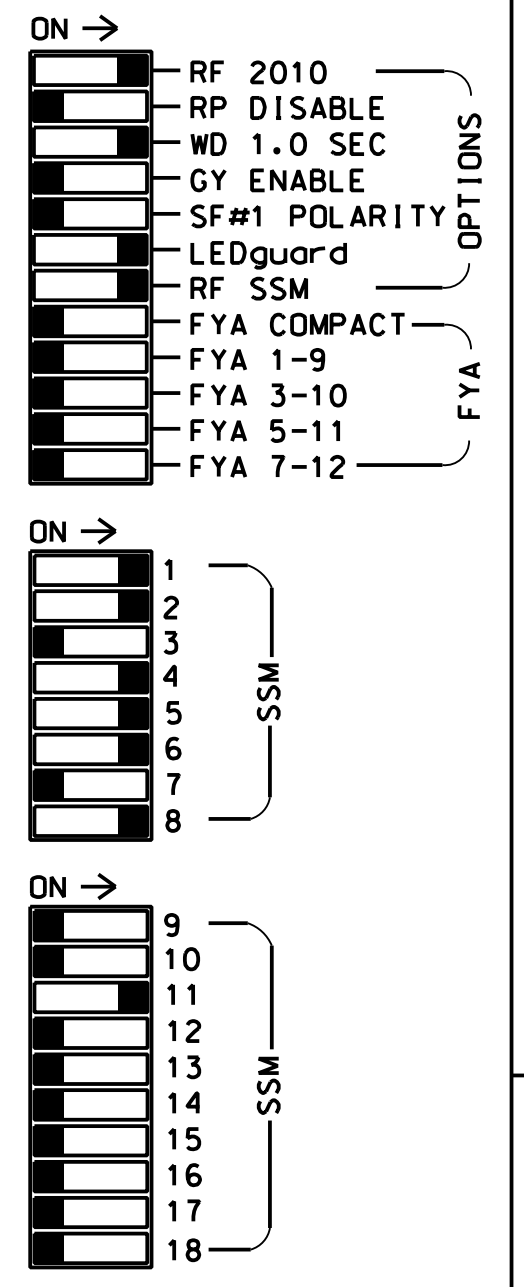
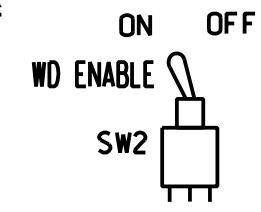
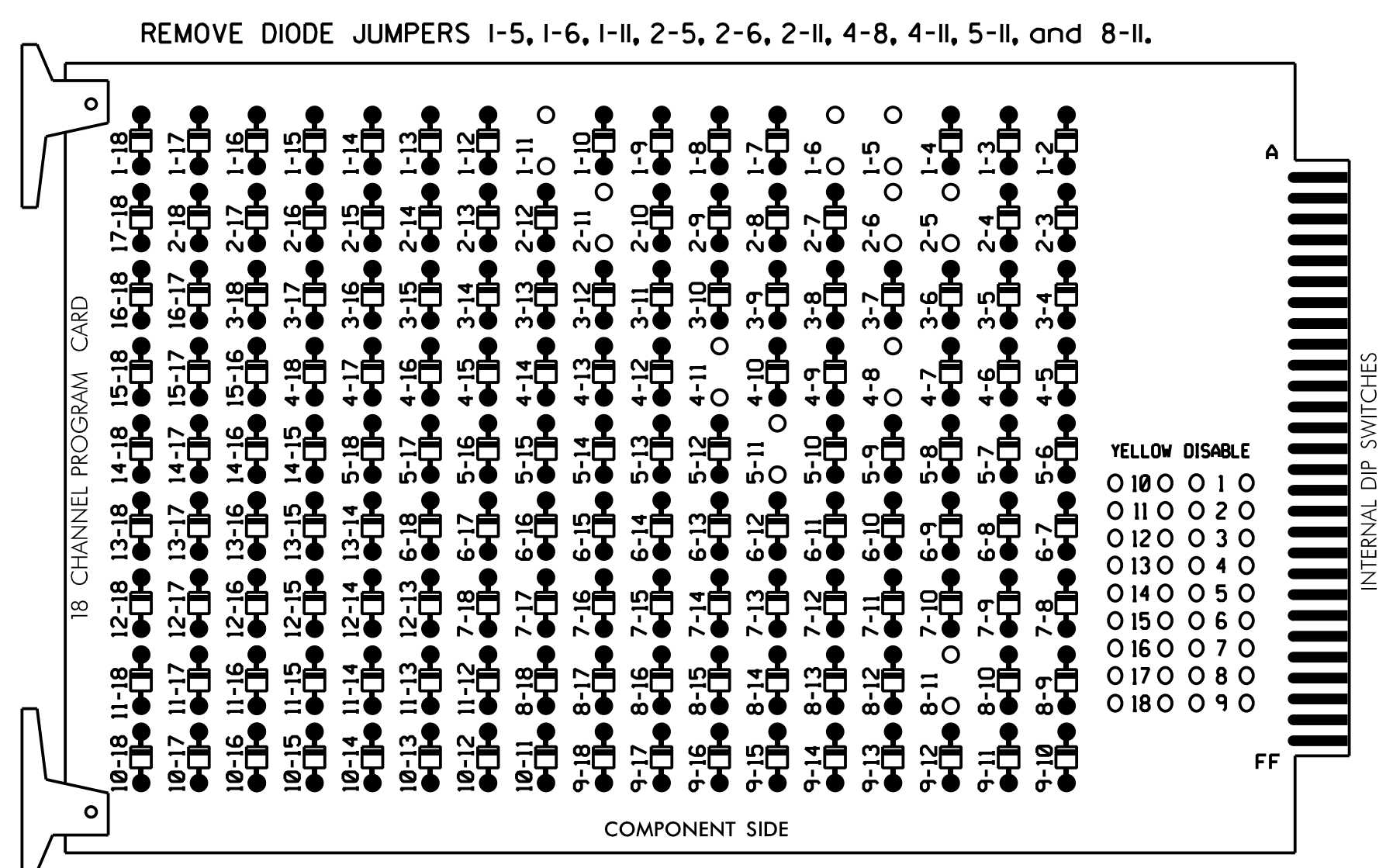


### EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(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 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.

■ = DENOTES POSITION OF SWITCH

### 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.
- Enable Simultaneous Gap-Out for all Phases.
- Program phases 4 and 8 for Dual Entry.
- Program phases 2 and 6 for Variable Initial and Gap Reduction.
- Program phases 2 and 6 for Startup In Green.
- Program phases 2 and 6 for Yellow Flash.
- The cabinet and controller are part of the Havelock US 70 Business Closed Loop Signal System.

### 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	NU	41,42	NU	51,52	61,62	NU	NU	81,82	NU	NU	NU	NU	43,44	NU	NU
RED		128			101			134			107					A114		
YELLOW		129			102			135			108							
GREEN		130			103			136			109							
RED ARROW	125							131										
YELLOW ARROW	126							132								A115		
FLASHING YELLOW ARROW																		
GREEN ARROW	127							133								A116		

NU = Not Used

### 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,S5,S7,S8,S11,AUX S4  
 PHASES USED.....1,2,4,5,6,8  
 OVERLAP "A".....NOT USED  
 OVERLAP "B".....NOT USED  
 OVERLAP "C".....4+5  
 OVERLAP "D".....NOT USED

### OVERLAP PROGRAMMING DETAIL

(program controller as shown below)  
 FROM MAIN MENU PRESS '8' (OVERLAPS), THEN '1' (VEHICLE OVERLAP SETTINGS).  
 PRESS '+' TWICE

PAGE 1: VEHICLE OVERLAP 'C' SETTINGS  
 PHASE: :12345678910111213141516  
 VEH OVL PARENTS: : XX  
 VEH OVL NOT VEH: :  
 VEH OVL NOT PED: :  
 VEH OVL GRN EXT: :  
 STARTUP COLOR: - RED - YELLOW - GREEN  
 FLASH COLORS: - RED - YELLOW - GREEN  
 SELECT VEHICLE OVERLAP OPTIONS: (Y/N)  
 FLASH YELLOW IN CONTROLLER FLASH?...N  
 GREEN EXTENSION (0-255 SEC).....0  
 YELLOW CLEAR (0=PARENT,3-25.5 SEC)...3.9  
 RED CLEAR (0=PARENT,0.1-25.5 SEC)...3.4  
 OUTPUT AS PHASE # (0=NONE, 1-16).....0

OVERLAP PROGRAMMING COMPLETE

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 02-0227  
 DESIGNED: March 2018  
 SEALED: 12-7-18  
 REVISED: N/A

### INPUT FILE POSITION LAYOUT

(front view)

FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
∅ 1	∅ 2	∅ 3	∅ 4	∅ 5	∅ 6	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14	FS
1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A	13A	14A	DC ISOLATOR
NOT USED	2B	3B	4B	5B	6B	7B	8B	9B	10B	11B	12B	13B	14B	ST
														DC ISOLATOR

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

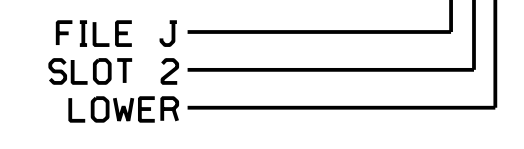
FS = FLASH SENSE  
 ST = STOP TIME

### INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A	TB2-1,2	I1U	56	18	1	1	Y	Y			
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			
* S13	TB6-9,10	I9U	60	22	11	SYS					
* S14	TB6-11,12	I9L	62	24	13	SYS					
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			
5B	TB3-3,4	J1L	55	17	5	5	Y	Y			
5C	TB3-5,6	J2U	40	2	6	5	Y	Y			
5D	TB3-7,8	J2L	44	6	16	5	Y	Y			
6A	TB3-9,10	J3U	64	26	36	6	Y	Y			
6B	TB3-11,12	J3L	77	39	46	6	Y	Y			
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			
8B	TB5-11,12	J6L	46	8	18	8	Y	Y			10

\* System detector only. Remove the vehicle phase assigned to this detector in the default programming.

#### INPUT FILE POSITION LEGEND: J2L



### Electrical Detail Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	Prepared for: US 70 Business (Main Street) at NC 101 (Fontana Boulevard)/ SR 1763 (Miller Boulevard)	SEAL 
	Division 02 Craven Co. Havelock PLAN DATE: March 2018 REVIEWED BY: A.D. Klinksiek PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons	
HNTB HNTB NORTH CAROLINA, P.C. 343 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997	REVISIONS INIT. DATE 12/7/2018 Natasha R. Simmons DATE SIG. INVENTORY NO. 02-0227	SEAL NATASHA R. SIMMONS ENGINEER No. 031464