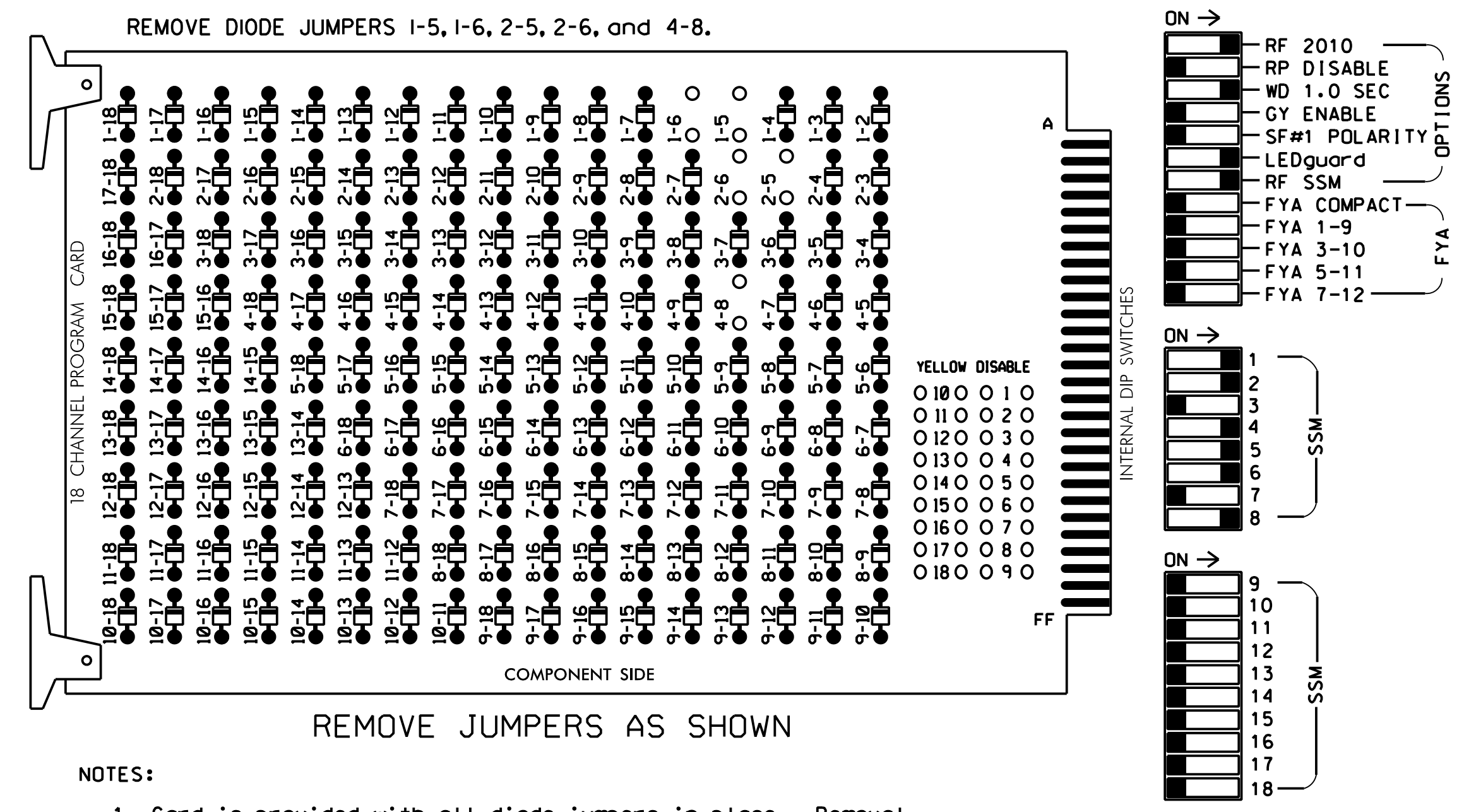


EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(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.

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	61,62	NU	NU	81,82	NU	NU	NU	NU	NU	NU	NU
RED		128			101			134			107							
YELLOW		129			102			135			108							
GREEN		130			103			136			109							
RED ARROW	125							131										
YELLOW ARROW	126							132										
FLASHING YELLOW ARROW																		
GREEN ARROW	127							133										

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
 PHASES USED.....1,2,4,5,6,8
 OVERLAPS.....NONE

INPUT FILE POSITION LAYOUT

(front view)

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

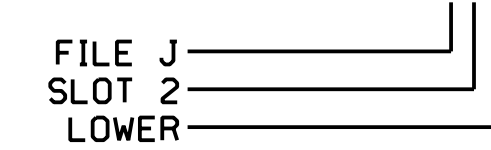
EX. : 1A, 2A, ETC. = LOOP NO.'S

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			3
4B	TB4-11,12	I6L	45	7	14	4	Y	Y		2.0	5
4C	TB6-1,2	I7U	65	27	34	4	Y	Y		2.0	15
4D	TB6-3,4	I7L	78	40	44	4	Y	Y		2.0	15
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			
6A	TB3-5,6	J2U	40	2	6	6	Y	Y			
6B	TB3-7,8	J2L	44	6	16	6	Y	Y			
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			3
8B	TB5-11,12	J6L	46	8	18	8	Y	Y		2.0	15
8C	TB7-1,2	J7U	66	28	38	8	Y	Y		2.0	15

INPUT FILE POSITION LEGEND: J2L



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 02-0193
 DESIGNED: March 2018
 SEALED: 12-7-18
 REVISED: N/A

Electrical Detail Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	Prepared for: US 70 Business (W Main Street) at Chadwick Avenue / SR 1775 (W Main Street)		
	Division 02 Craven Co. Havelock	SEAL NORTH CAROLINA PROFESSIONAL ENGINEER NATASHA R. SIMMONS	
PLAN DATE: March 2018	REVIEWED BY: A.D. Klinksiek	PREPARED BY: A.H. Thornburg	REVIEWED BY: N.R. Simmons
REVISIONS	INIT.	DATE	DocuSigned by: Natasha R. Simmons 12/7/2018
HNTB NORTH CAROLINA, P.C. 343 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997			SIG. INVENTORY NO. 02-0193