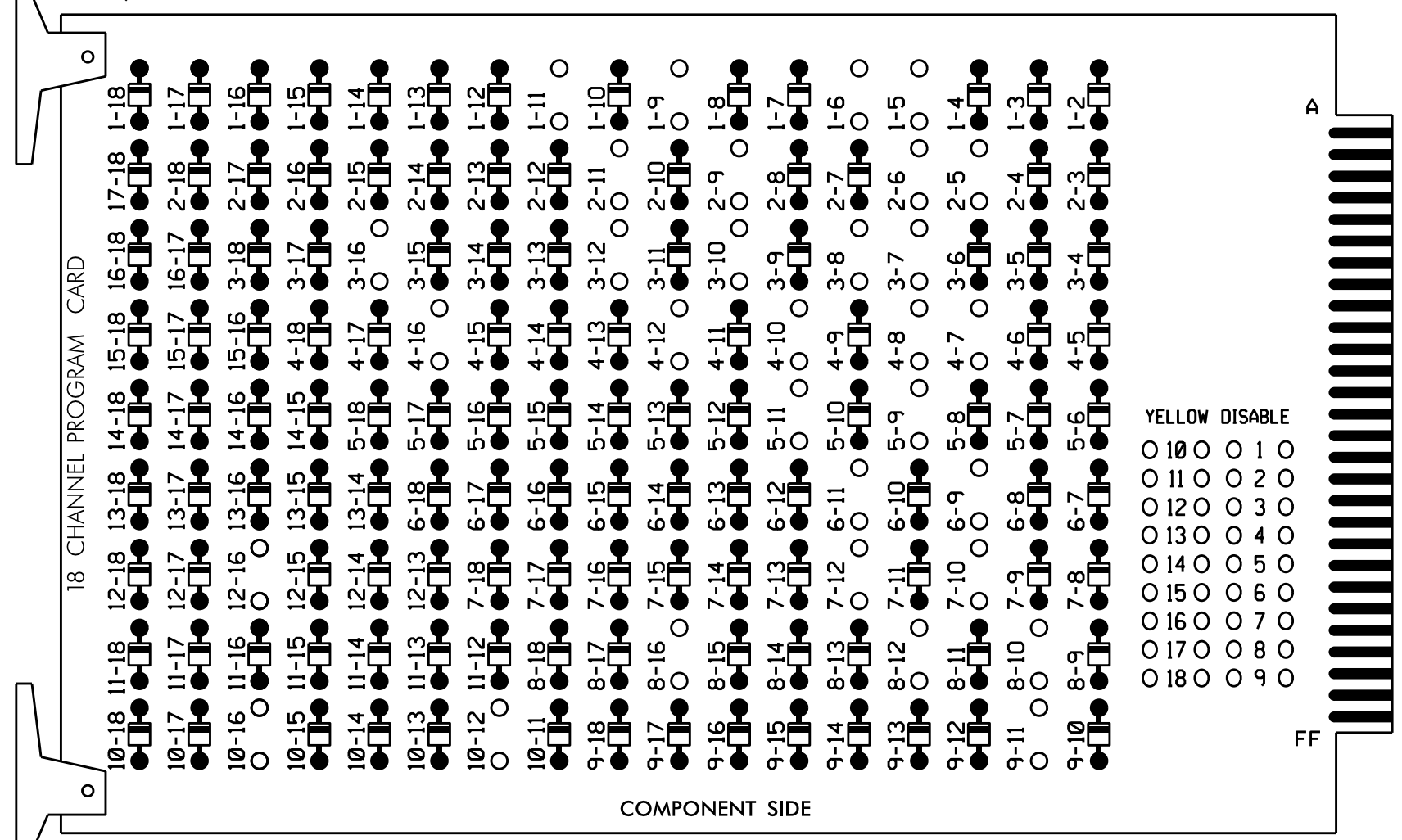


EDI MODEL 2018ECL-NC CONFLICT MONITOR

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, 3-16, 4-7, 4-8, 4-10, 4-12, 4-16, 5-9, 5-11, 6-9, 6-11, 7-10, 7-12, 8-10, 8-12, 8-16, 9-11, 10-12, 10-16 and 12-16.



REMOVE JUMPERS 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.
- Program phases 4 and 8 for Dual Entry.
- Enable Simultaneous Gap-Out for all Phases.
- Program phases 2 and 6 for Variable Initial and phases 2, 4, 6 and 8 for Gap Reduction.
- Program phases 2 and 6 for Startup In Green.
- Program phase 8 for Startup Ped Call.
- Program phases 2 and 6 for Yellow Flash, and overlaps 1 and 2 as Wag Overlaps.
- The cabinet and controller are part of the Booker Dairy Road Closed Loop System.

EQUIPMENT INFORMATION

CONTROLLER.....2070  
 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,S12,  
 AUX S1,AUX S2,AUX S4,AUX S5  
 PHASES USED.....1,2,3,4,5,6,7,8,8 PED  
 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	22	31	41,42	NU	51	61,62	NU	71	81,82	P81, P82	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										A122	A125		A115	A102	
FLASHING YELLOW ARROW														A123	A126		A116	A103	
GREEN ARROW	127			118	118			133			124								
Hand													110						
Person																			

NU = 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

(front view)

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	∅ 1	∅ 2/SYS	∅ 3	∅ 4	∅ 5	∅ 6/SYS	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14
L	1A	2A/S01	3A	4A	5A	6A/S03	7A	8A	9A	10A	11A	12A	13A	14A
U	NOT USED	∅ 2/SYS	NOT USED	∅ 4	∅ 5	∅ 6/SYS	∅ 7	∅ 8	∅ 9	∅ 10	∅ 11	∅ 12	∅ 13	∅ 14
L	2B/S02	2B/S02	NOT USED	4B	5A	6B/S04	7A	8B	9A	10A	11A	12A	13A	14A

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

FS = FLASH SENSE  
 ST = STOP TIME

⊗ Wired Input - Do not populate slot with detector card

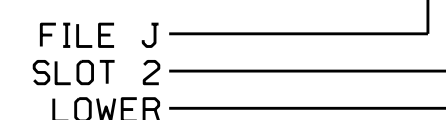
INPUT FILE CONNECTION & PROGRAMMING CHART

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
1A <sup>1</sup>	TB2-1,2	I1U	56	18	1	1	Y	Y			15
	-	J4U	48	10	26	6	Y	Y	Y		3
2A/S01	TB2-5,6	I2U	39	1	2	2/SYS	Y	Y			
2B/S02	TB2-7,8	I2L	43	5	12	2/SYS	Y	Y			
3A <sup>2</sup>	TB4-5,6	I5U	58	20	3	3	Y	Y			15
	-	J8U	50	12	28	8	Y	Y			3
4A	TB4-9,10	I6U	41	3	4	4		Y			
4B	TB4-11,12	I6L	45	7	14	4	Y	Y	Y	2.0	5
5A <sup>3</sup>	TB3-1,2	J1U	55	17	5	5	Y	Y			15
	-	I4U	47	9	22	2	Y	Y	Y		3
6A/S03	TB3-5,6	J2U	40	2	6	6/SYS	Y	Y			
6B/S04	TB3-7,8	J2L	44	6	16	6/SYS	Y	Y			
7A <sup>4</sup>	TB5-5,6	J5U	57	19	7	7	Y	Y			15
	-	I8U	49	11	24	4	Y	Y			3
8A	TB5-9,10	J6U	42	4	8	8		Y			
8B	TB5-11,12	J6L	46	8	18	8	Y	Y	Y	2.0	5
PED PUSH BUTTONS											
P81,P82	TB8-8,9	I13L	70	32	PED 8	8 PED					

NOTE:  
 INSTALL DC ISOLATORS IN INPUT FILE SLOT 113.

- 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.

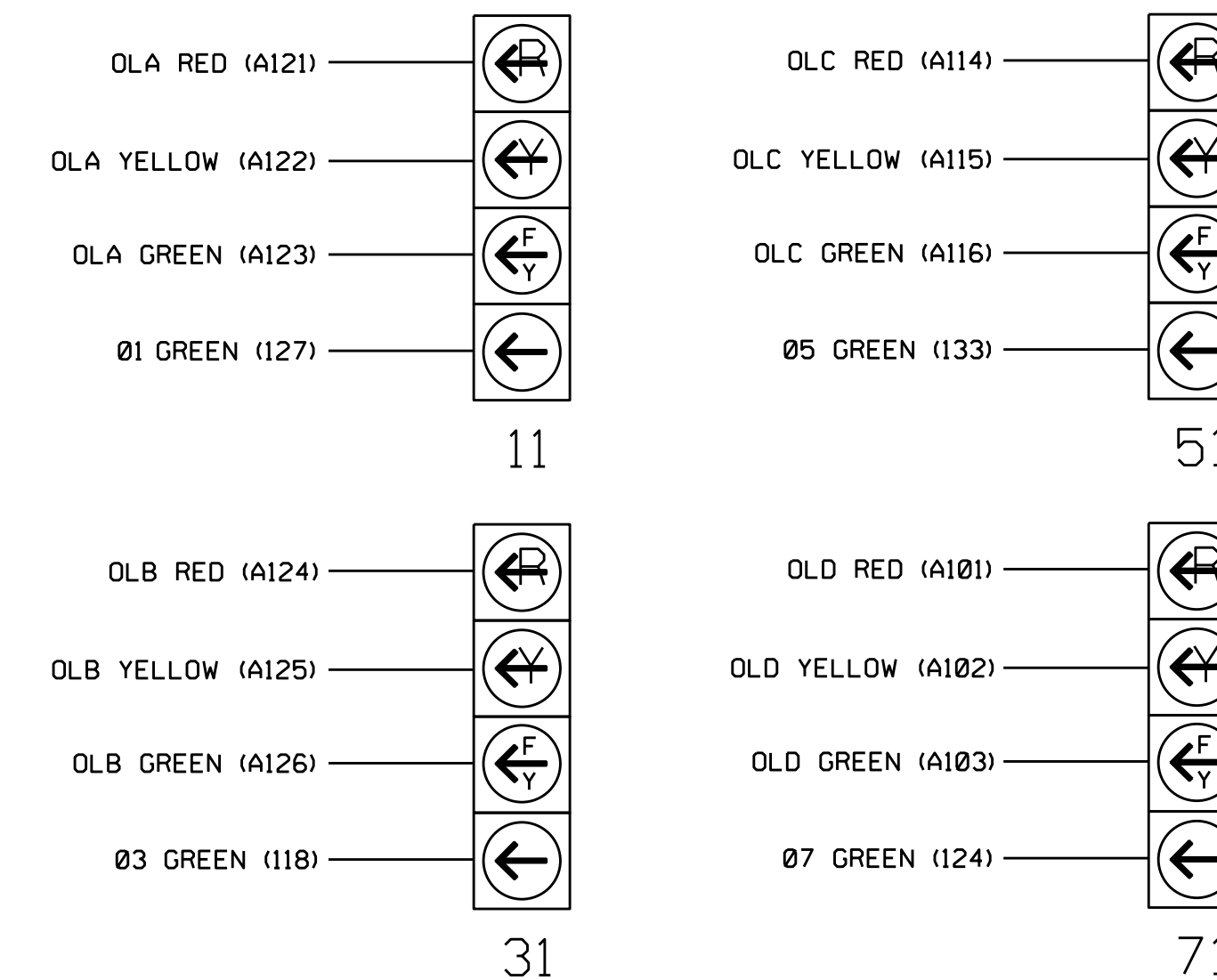
INPUT FILE POSITION LEGEND: J2L



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 04-0444  
 DESIGNED: June 2017  
 SEALED: 9/8/2017  
 REVISED:

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



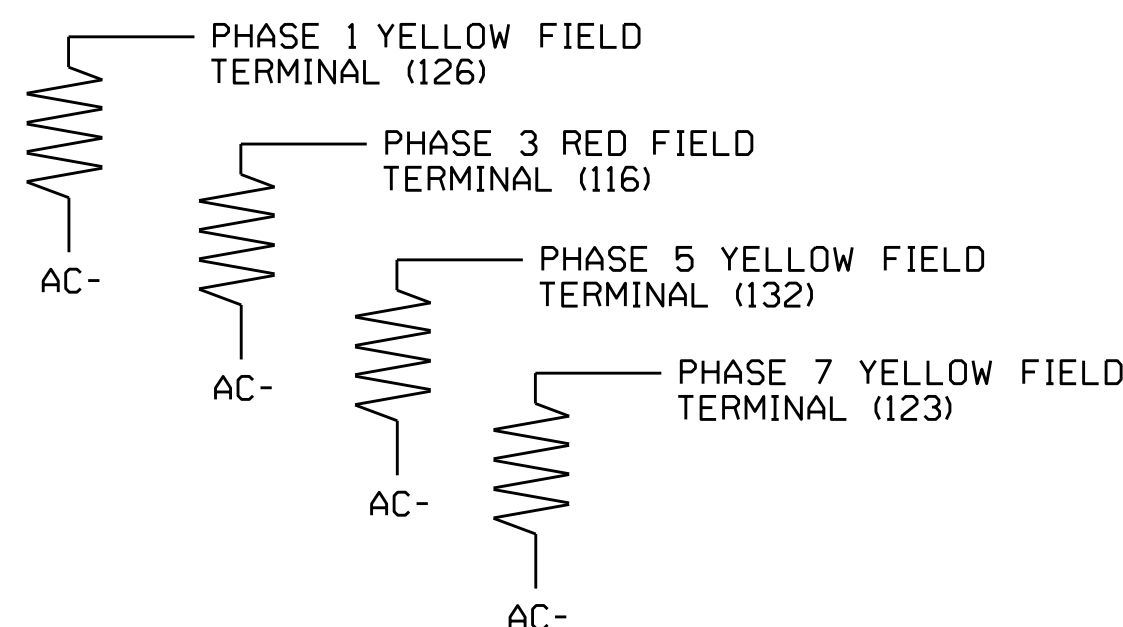
NOTE

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

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

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



COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

Electrical Detail - Final - Sheet 1 of 2

Prepared In the Offices of:  
 G.L. Transportation, Mobility and Safety Division  
 Signal Management Section  
 750 N. Greenfield Pkwy, Garner, NC 27529

SR 1923 (Booker Dairy Road) at SR 1003 (Buffalo Road)

Division 4 Johnston County Smithfield  
 PLAN DATE: August 2017 REVIEWED BY: T. Joyce  
 PREPARED BY: C. Strickland REVIEWED BY:

REVISIONS: INIT. DATE

DocuSigned by: D. Todd Joyce 9/13/2017  
 ARCCADPDR04241D DATE

SIG. INVENTORY NO. 04-0444

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 T. CAROL M. JOYCE  
 PROFESSIONAL ENGINEER  
 SEAL 031001  
 D. TODD JOYCE