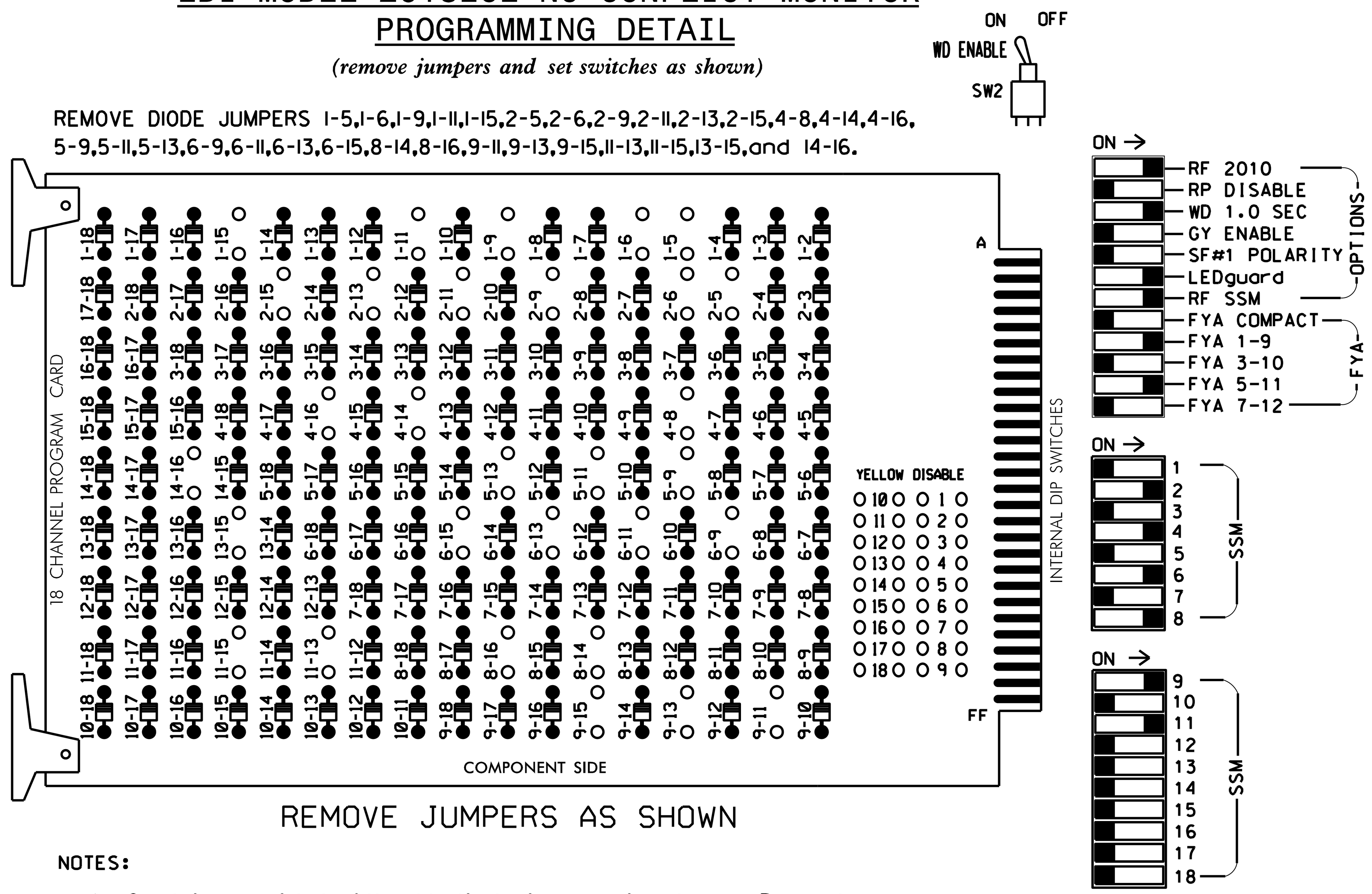
EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5,1-6,1-9,1-11,1-15,2-5,2-6,2-9,2-11,2-13,2-15,4-8,4-14,4-16, 5-9,5-11,5-13,6-9,6-11,6-13,6-15,8-14,8-16,9-11,9-13,9-15,11-13,11-15,13-15,and 14-16.



REMOVE JUMPERS 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. Program phases 4 and 8 for Dual Entry.
3. Enable Simultaneous Gap-Out for all phases.
4. Program phases 2 and 6 for Variable Initial and Gap Reduction.
5. Program phases 2 and 6 for Start Up In Green.
6. Program phases 2, 4, 6 and 8 for 'STARTUP PED CALL'.
7. Program phases 2 and 6 for Yellow Flash and overlap 1 as Wag Overlaps.
8. The cabinet and controller are part of the Fayetteville Signal 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,S3,S5,S6,S7,S8,S9,S11,S12, AUX S1,AUX S4

PHASES USED.............1,2,2 PED,4,4 PED,5,6,6 PED,8,8 PED
OVERLAP "A".............1+2
OVERLAP "B".............NOT USED
OVERLAP "C".............5+6
OVERLAP "D".............NOT USED

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, 23	P21, P22	NU	41,42	P41, P42	51 ★	61,62, 63	P61, P62	NU	81,82	P81, P82	11 ★	NU	NU	51 ★	NU	NU
RED		128			101			134			107							
YELLOW	*	129			102		*	135			108							
GREEN		130			103			136			109							
RED ARROW													A121			A114		
YELLOW ARROW													A122			A115		
FLASHING YELLOW ARROW													A123			A116		
GREEN ARROW	127						133											
(hand symbol)			113			104			119			110						
(walking person symbol)			115			106			121			112						

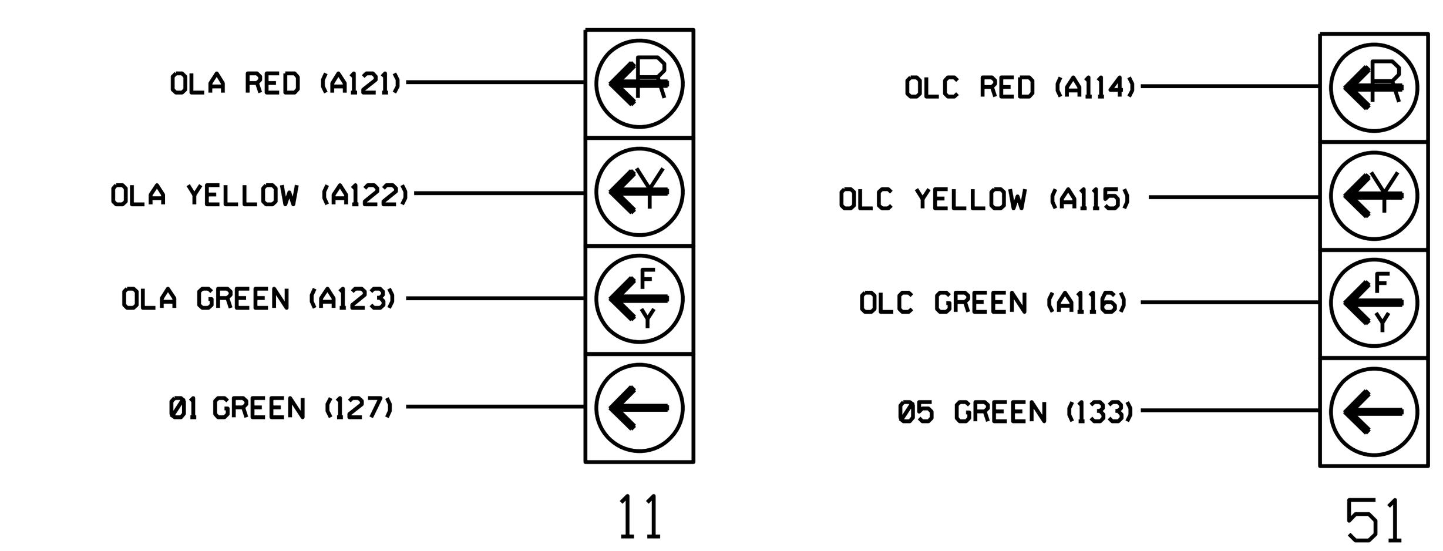
NU = NOT USED

* Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail below.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

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

INPUT FILE POSITION LAYOUT

(front view)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U	ø1 1A	ø2 2A	ø2 2C	WIRED INPUT ⊗	SLOT EMPTY	ø4 4A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	ø2 PED DC ISOLATOR	ø6 PED DC ISOLATOR	FS DC ISOLATOR
"I"	L	NOT USED	ø2 2B	NOT USED			NOT USED						ø4 PED DC ISOLATOR	ø8 PED DC ISOLATOR	ST DC ISOLATOR
"J"	U	ø5 5A	ø6 6A	ø6 6C	WIRED INPUT ⊗	SLOT EMPTY	ø8 8A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
"J"	L	NOT USED	ø6 6B	NOT USED			NOT USED								

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[1]	TB2-1,2	I1U	56	18	1	1	Y	Y	-	---	15
	-	J4U	48	10	26	6	Y	Y	Y	---	3
2A	TB2-5,6	I2U	39	1	2	2	Y	Y	-	---	--
2B	TB2-7,8	I2L	43	5	12	2	Y	Y	-	---	--
2C	TB2-9,10	I3U	63	25	32	2	Y	Y	-	---	--
4A	TB4-9,10	I6U	41	3	4	4	Y	Y	-	---	5
5A[2]	TB3-1,2	J1U	55	17	5	5	Y	Y	-	---	15
	-	I4U	47	9	22	2	Y	Y	Y	---	3
6A	TB3-5,6	J2U	40	2	6	6	Y	Y	-	---	--
6B	TB3-7,8	J2L	44	6	16	6	Y	Y	-	---	--
6C	TB3-9,10	J3U	64	26	36	6	Y	Y	-	---	--
8A	TB5-9,10	J6U	42	4	8	8	Y	Y	-	---	5
PED PUSH BUTTONS											
P21,P22	TB8-4,6	I12U	67	29	PED 2	2 PED					
P41,P42	TB8-5,6	I12L	69	31	PED 4	4 PED					
P61,P62	TB8-7,9	I13U	68	30	PED 6	6 PED					
P81,P82	TB8-8,9	I13L	70	32	PED 8	8 PED					

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

INPUT FILE POSITION LEGEND: I2L

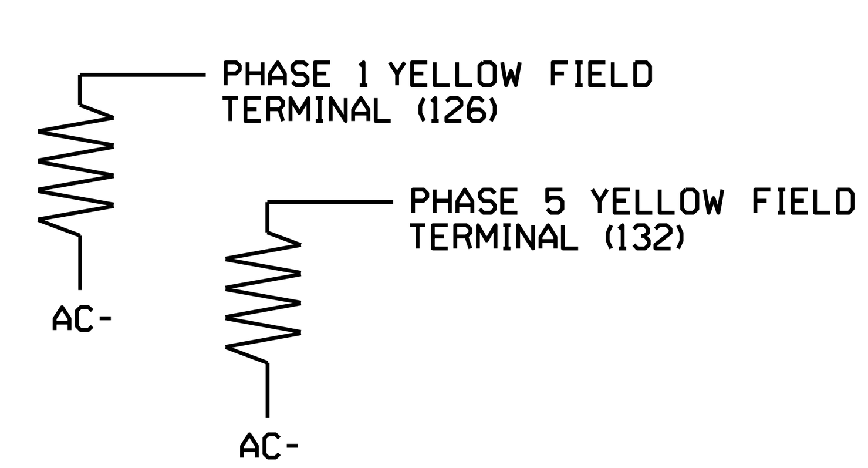
FILE I
SLOT 2
LOWER

1. Add jumper from I1-W to J4-W (on rear of input file).
2. Add jumper from J1-W to I4-W (on rear of input file).

LOAD RESISTOR INSTALLATION DETAIL

ACCEPTABLE VALUES

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.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 06-0221
DESIGNED: September 2015
SEALED: September 28, 2015
REVISED: ____________

Signal Upgrade - Sheet 1 of 2

CDM Smith
5400 GLENWOOD AVENUE
Suite 400
RALEIGH, NC 27612

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:
Traffic Engineering and Safety Systems Branch
State of North Carolina Department of Transportation
Signals Management Section
122 N. McDowell St., Raleigh, NC 27603

NC 24-87 (Bragg Boulevard)
at
Pearl Street

Division 06 Cumberland County Fayateville

PLAN DATE: September 2015 REVIEWED BY: D. Clodgo
PREPARED BY: B. Wan REVIEWED BY: ______________

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 034589 BAOHONG WAN
Baohong Wan
2015.09.28 10:02:46 -04'00'
SIGNATURE DATE

SIG. INVENTORY NO. 06-0221