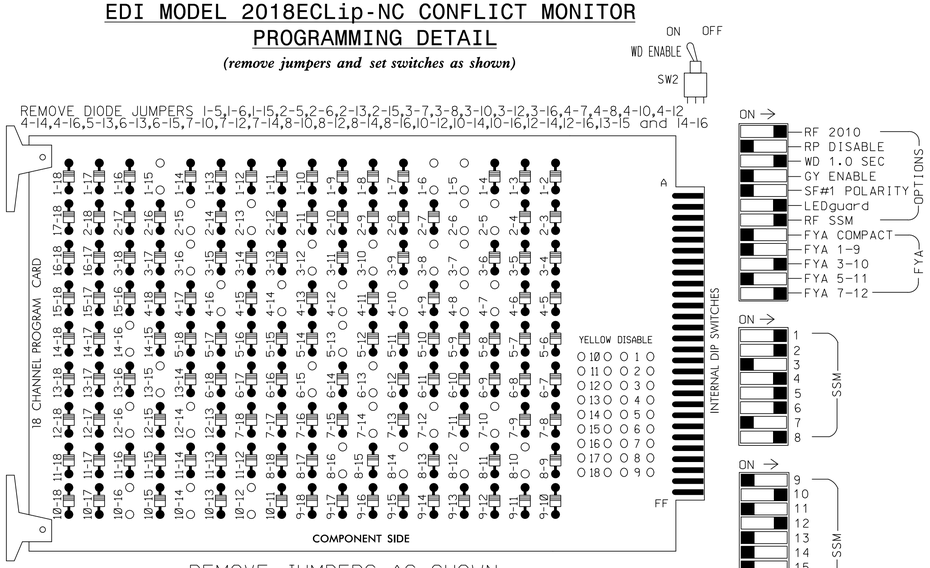
PROJECT REFERENCE NO.	SHEET NO.
U-5742	Sig. 13.1

EDI MODEL 2018ECLip-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



■ = DENOTES POSITION OF SWITCH

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. Integrate monitor with Ethernet network in cabinet.

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 controller to start up in phase 2 Walk and 6 Walk.
5. The cabinet and controller are part of the Fayetteville Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
CABINET.....332 W/AUX
SOFTWARE.....ECONOLITE ASC/3-2070
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11, S12,AUX S2,AUX S5
PHASES USED.....1,2,2PED,3,4,4PED,5,6,6PED,7,8,8PED
OVERLAP "A".....NOT USED
OVERLAP "B".....*
OVERLAP "C".....NOT USED
OVERLAP "D".....*

* See overlap programming detail on sheet 2

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	P21, P22	31★	41,42	P41, P42	51	61,62	P61, P62	71★	81,82	P81, P82	NU	31★	NU	NU	71★	NU
RED		128			101			134			107							
YELLOW		129		*	102			135		*	108							
GREEN		130			103			136			109							
RED ARROW	125						131							A124			A101	
YELLOW ARROW	126						132							A125			A102	
FLASHING YELLOW ARROW														A126			A103	
GREEN ARROW	127			118			133			124								
✋			113			104			119			110						
🚶			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 this sheet.

INPUT FILE POSITION LAYOUT

(front view)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	Ø1 1A	Ø2 2A,2B	SLOT EMPTY	SLOT EMPTY	Ø3 3A	Ø4 4A	SLOT EMPTY	WIRED INPUT ⊗	SYS. DET. S2A	SLOT EMPTY	SLOT EMPTY	Ø2 PED DC ISOLATOR	Ø6 PED DC ISOLATOR	FS DC ISOLATOR
	L	NOT USED	NOT USED			NOT USED	Ø4 4B			SYS. DET. S2B			Ø4 PED DC ISOLATOR	Ø8 PED DC ISOLATOR	ST DC ISOLATOR
FILE "J"	U	Ø5 5A	Ø6 6A,6B, 6C	SLOT EMPTY	SLOT EMPTY	Ø7 7A	Ø8 8A	SLOT EMPTY	WIRED INPUT ⊗	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L	NOT USED	NOT USED			NOT USED	Ø8 8B								

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.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND TIME	DELAY TIME	DETECTOR TYPE
1A	TB2-1,2	I1U	56	1	1	YES		3	S
2A,2B	TB2-5,6	I2U	39	2	2	YES			S
3A[1]	TB4-5,6	I5U	58	3	3	YES		15	S
		J8U	50	28	8	YES		3	S
4A	TB4-9,10	I6U	41	4	4	YES			S
4B	TB4-11,12	I6L	45	14	4	YES		5	S
5A	TB3-1,2	J1U	55	5	5	YES		3	S
6A,6B,6C	TB3-5,6	J2U	40	6	6	YES			S
7A[2]	TB5-5,6	J5U	57	7	7	YES		15	S
	-	I8U	49	24	4	YES		3	S
8A	TB5-9,10	J6U	42	8	8	YES			S
8B	TB5-11,12	J6L	46	18	8	YES		5	S
*S2A	TB6-9,10	I9U	60	11	SYS	NO			N
*S2B	TB6-11,12	I9L	62	13	SYS	NO			N
PED PUSH BUTTONS									
P21,P22	TB8-4,6	I12U	67	PED 2	2 PED				
P41,P42	TB8-5,6	I12L	69	PED 4	4 PED				
P61,P62	TB8-7,9	I13U	68	PED 6	6 PED				
P81,P82	TB8-8,9	I13L	70	PED 8	8 PED				

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

[1] Add jumper from I5-W to J8-W, on rear of input file.

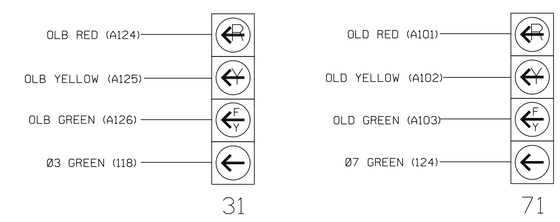
[2] Add jumper from J5-W to I8-W, on rear of input file.

* System detector only. Remove any assigned vehicle phase.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)

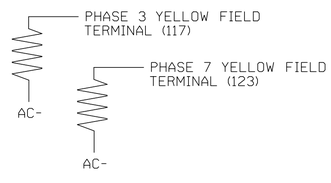


LOAD RESISTOR INSTALLATION DETAIL

(install resistors 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: 06-0029
DESIGNED: April 2016
SEALED: 7/20/2016
REVISED:

Electrical Detail Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared For:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signals Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

I-95 Bus. - US 301 (Eastern Boulevard) at SR 1006 (Person Street)

Division 6 Cumberland County Fayetteville

PLAN DATE:	August 2016	REVIEWED BY:	SL Phillips
PREPARED BY:	SP Pennington	REVIEWED BY:	KP Baumann

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 032607 ENGINEER JACK L. PHILLIPS
DocuSigned by: DC87A59ED608437... 9/22/2016
DATE
SIG. INVENTORY NO. 06-0029

PLANS PREPARED IN THE OFFICE OF:
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9/21/2016
K:\RAL_TPTD*_SIGNALS\4011036345 Fayetteville Electricals\54 - Signal Design\5th Submittal*131.060029-2016e1.dgn
susan.pennington