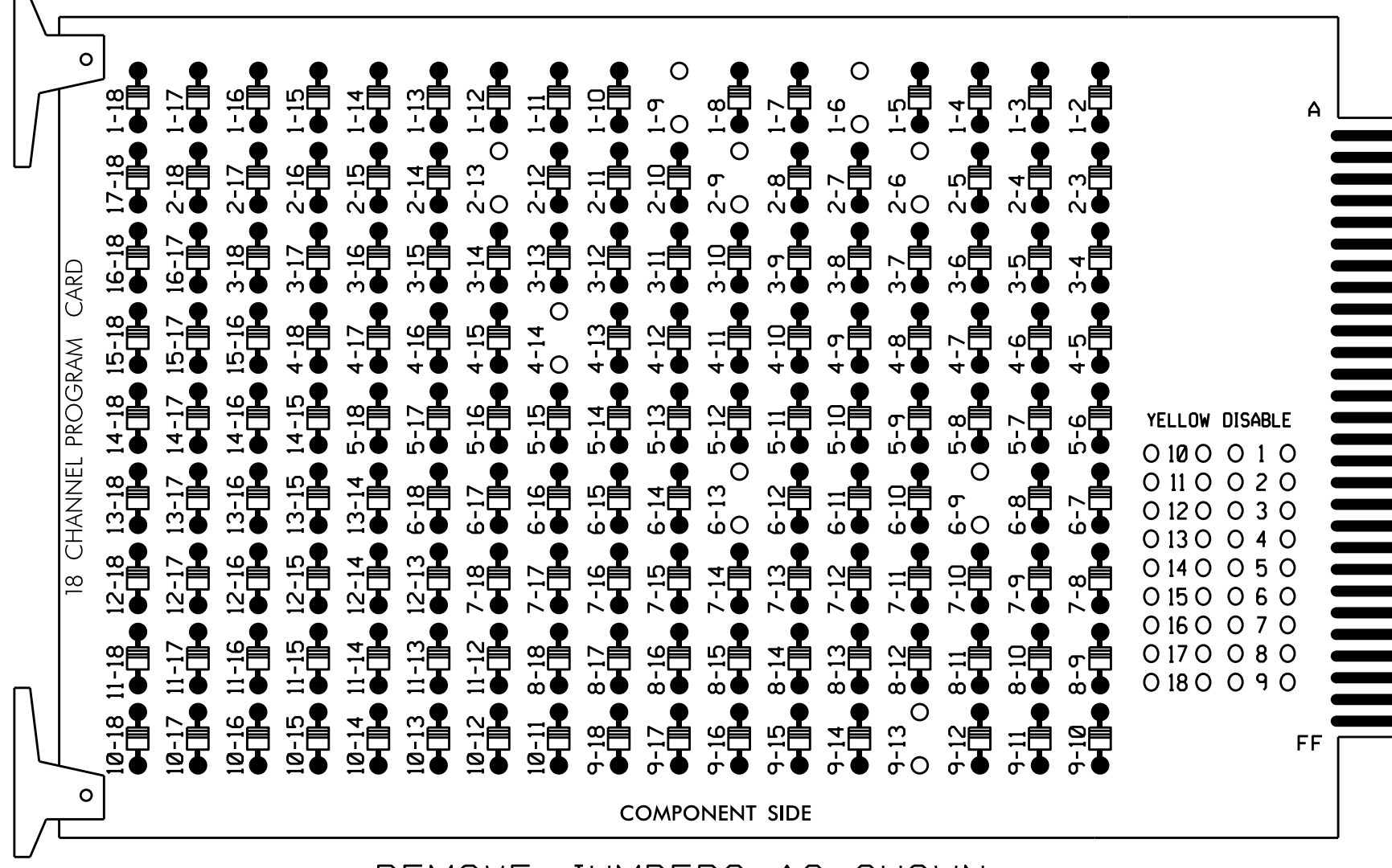


### EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-6, 1-9, 2-6, 2-9, 2-13, 4-14, 6-9, 6-13, and 9-13.

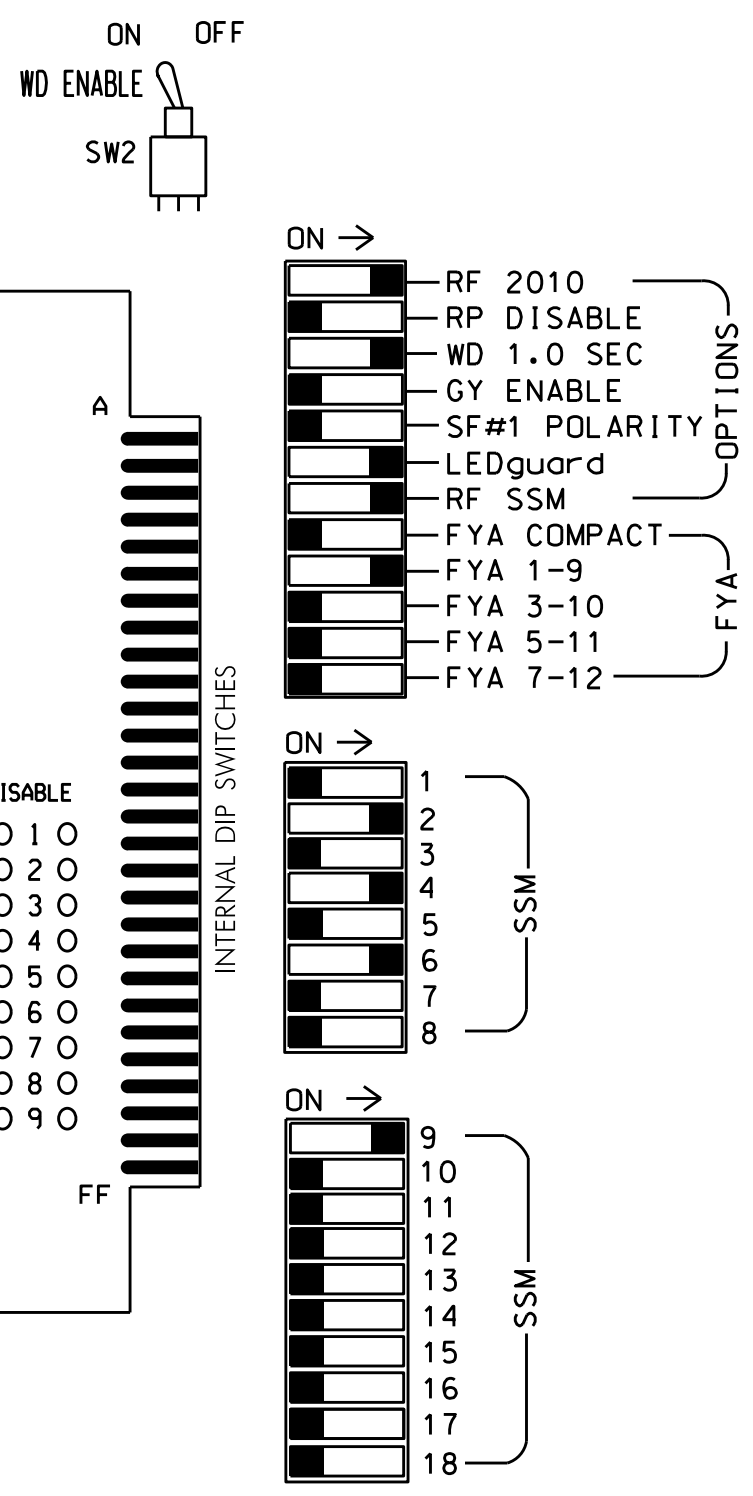


REMOVE JUMPERS AS SHOWN

**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.
- 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. Verify that signal heads flash in accordance with the signal plans.
- Program controller to Start Up in phases 2 and 6 green.
- Set power-up flash time to 0 seconds within the controller programming. The conflict monitor will govern startup flash. Ensure STARTUP "RED START" is set to 0 seconds.
- Enable Simultaneous Gap-Out feature for all phases.
- Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
- Set phase bank 3 maximum limit to 250 seconds for phases used.
- Ensure start up flash phases are coordinated with flash program block assignments.
- Program Startup Ped Calls for phases 2 and 4.
- Set the Red Revert interval on the controller to 1 second.
- This cabinet and controller are part of the Durham Signal System.

### EQUIPMENT INFORMATION

CONTROLLER.....2070E  
 CABINET.....332 W/ AUX  
 SOFTWARE.....McCain 2033  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...18 WITH AUX FILE  
 LOAD SWITCHES USED.....S1,S2,S3,S5,S6,S8,AUX S1  
 PHASES USED.....1,2,2PED,4,4PED,6  
 OVERLAP 1.....\*  
 OVERLAP 2.....NOT USED  
 OVERLAP 3.....NOT USED  
 OVERLAP 4.....NOT USED  
 \* See FYA PPLT 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	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11	21,22	P21, P22	NU	41,42	P41, P42	NU	61,62	NU	NU	NU	NU	11	NU	NU	NU	NU	NU
RED		128			101			134										
YELLOW	*	129			102			135										
GREEN		130			103			136										
RED ARROW													A121					
YELLOW ARROW													A122					
FLASHING YELLOW ARROW													A123					
GREEN ARROW	127																	
Hand			113			104												
Person			115			106												

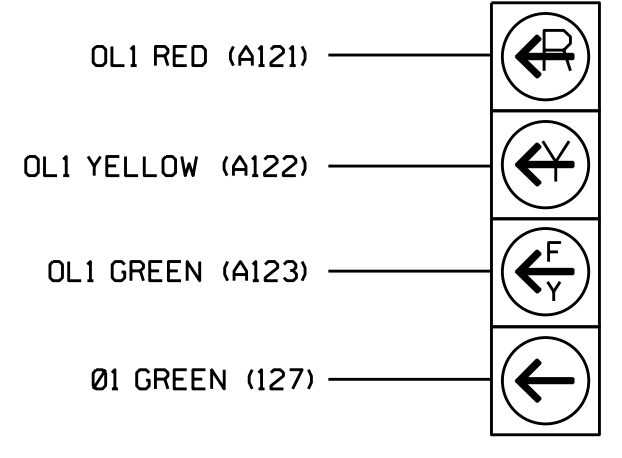
NU = Not Used

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

\* See pictorial of head wiring in detail below.

### FYA SIGNAL WIRING DETAIL

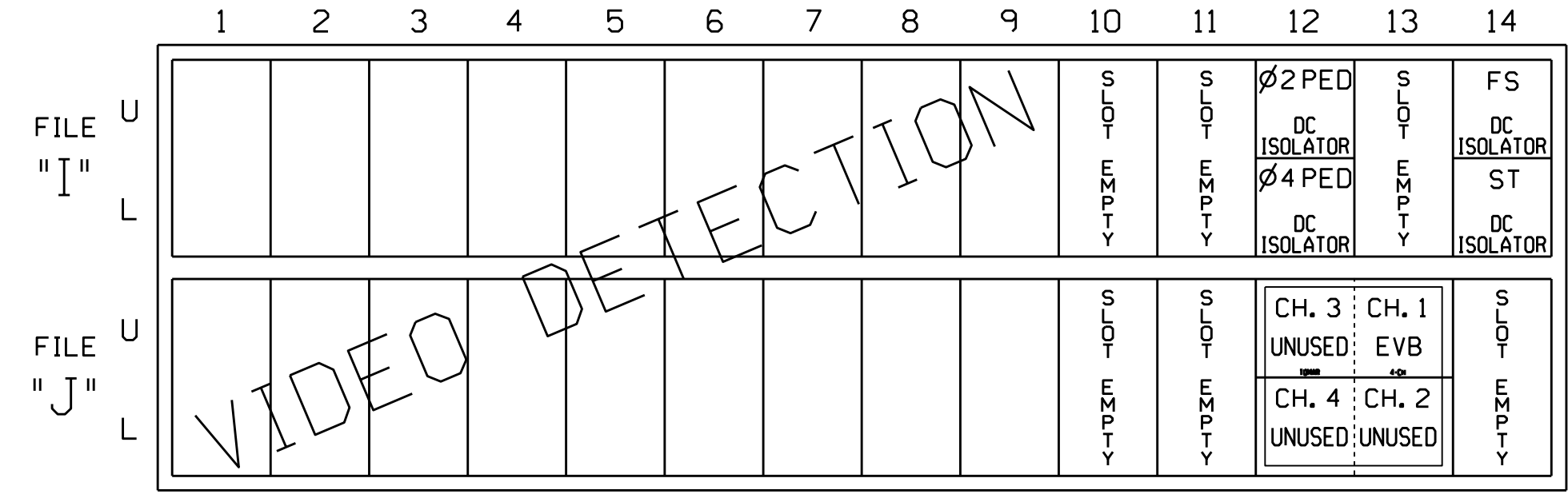
(wire signal head as shown)



11

### INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE  
 ST = STOP TIME  
 EVB = EMERGENCY VEHICLE PREEMPT

### INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
PED PUSH BUTTONS						
P21,P22	T88-4,6	I12U	25	67	2	2 PED
P41,P42	T88-5,6	I12L	27	69	2	4 PED

NOTE: INSTALL DC ISOLATOR IN INPUT FILE SLOT 112.

NOTE: PROGRAM DETECTOR DELAY AND CARRYOVER TIMES AS SPECIFIED ON SIGNAL DESIGN PLANS.

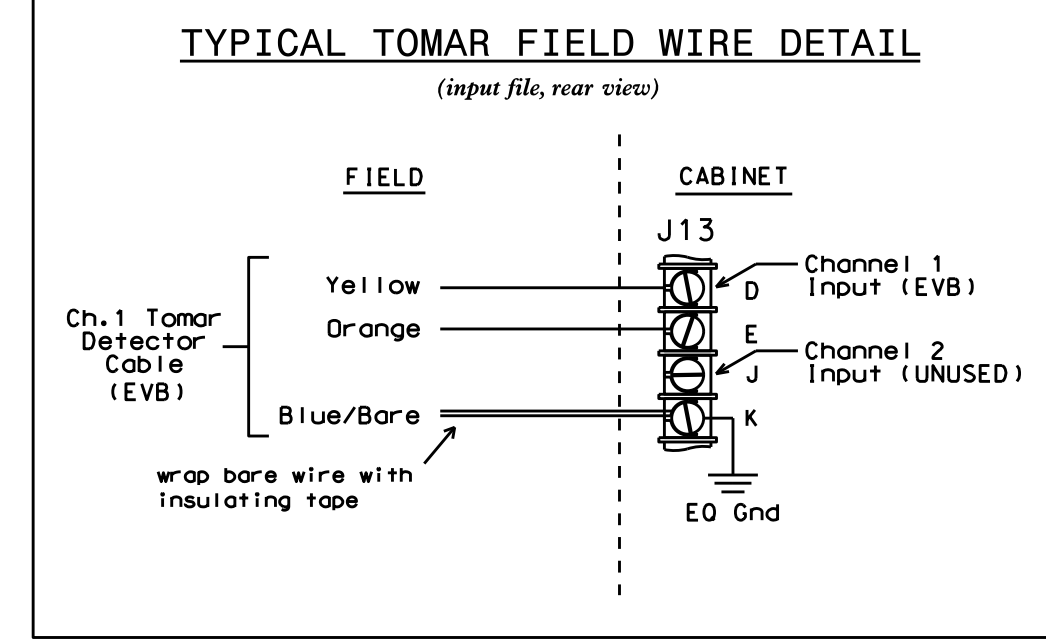
DETECTOR ATTRIBUTES LEGEND: INPUT FILE POSITION LEGEND: J2L

- 1-FULL TIME DELAY  
 2-PED CALL  
 3-RESERVED  
 4-COUNTING  
 5-EXTENSION  
 6-TYPE 3  
 7-CALLING  
 8-ALTERNATE
- FILE J  
 SLOT 2  
 LOWER

### SPECIAL DETECTOR NOTE

Install a video detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

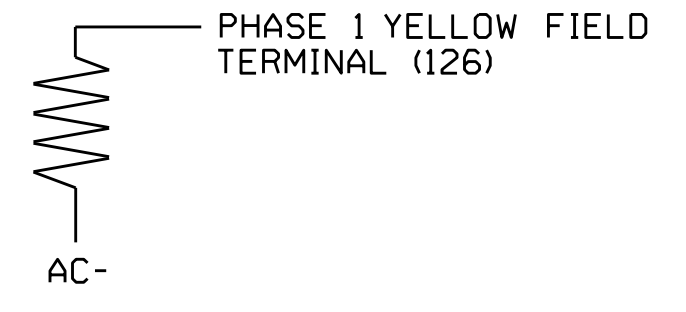
4 CHANNEL TOMAR OSP CARD  
 INSERT CARD INTO SLOT J13



### LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

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



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1028T5  
 DESIGNED: September 2014  
 SEALED: 4/2/15  
 REVISED: N/A

Electrical Detail - Temporary Design 5 (TMP Phase 3) - Sheet 1 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR: Prepared In the Offices of:  750 N. Greenfield Pkwy, Garner, NC 27529	NC 55 (South Alston Avenue) at NC 147 SB Ramps		SEAL  SEAL 008453 JOHN T. ROWE, JR. ENGINEER
	Division 5 PLAN DATE: November 2014 PREPARED BY: S. Armstrong	Durham County REVIEWED BY: JTR REVIEWED BY:	
REVISIONS			INIT. DATE
DocuSigned by: John T. Rowe, Jr. 4/2/2015			DATE:
SIG. INVENTORY NO. 05-1028T5			DATE:

27-MAR-2015 08:59  
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 S:\MTS\SIG\15\Sig\ed\work\hgr\ed\sig\Map\Mstr\trng051028\_Sm.ele.xxx.dgn