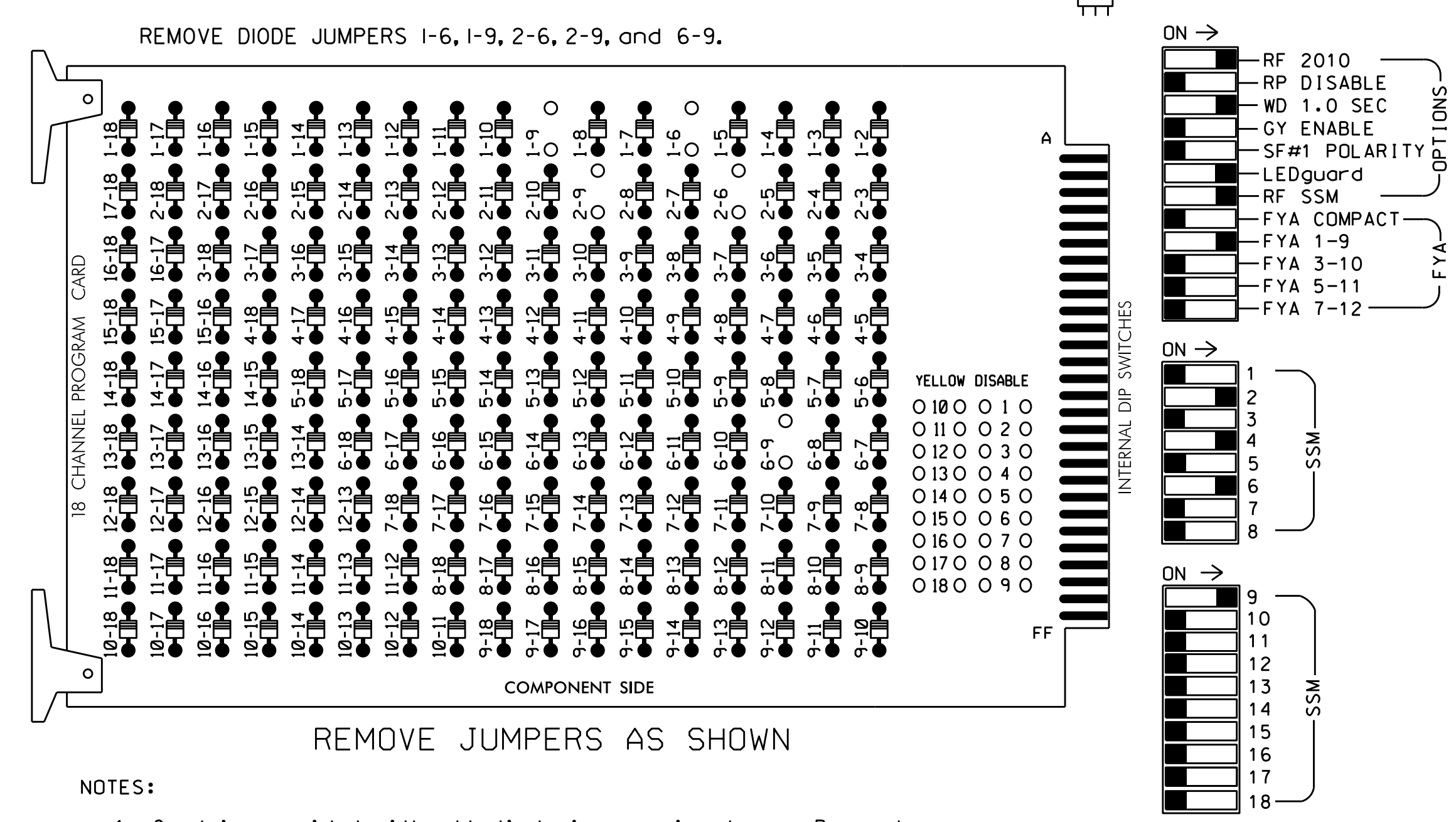


EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(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.
 - 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. 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.
- Set the Red Revert interval on the controller to 1 second.
- This cabinet and controller are part of the Durham 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	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11	21,22	NU	NU	41,42	NU	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																	

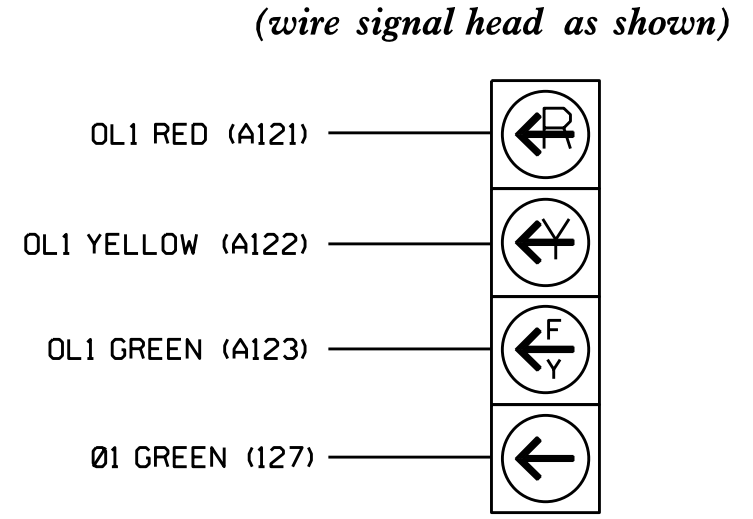
NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 ★ See pictorial of head wiring in detail below.

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,S5,S8,AUX S1
 PHASES USED.....1,2,4,6
 OVERLAP 1.....*
 OVERLAP 2.....NOT USED
 OVERLAP 3.....NOT USED
 OVERLAP 4.....NOT USED

* See FYA PPLT Programming detail this sheet.

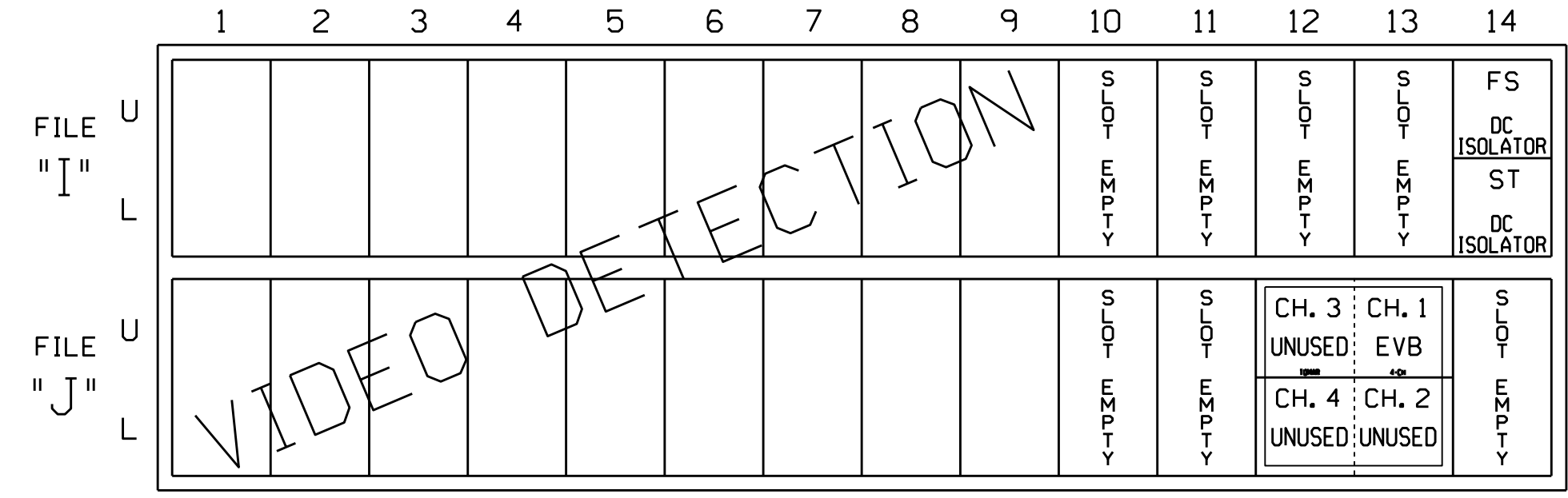
FYA SIGNAL WIRING DETAIL



11

INPUT FILE POSITION LAYOUT

(front view)



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

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

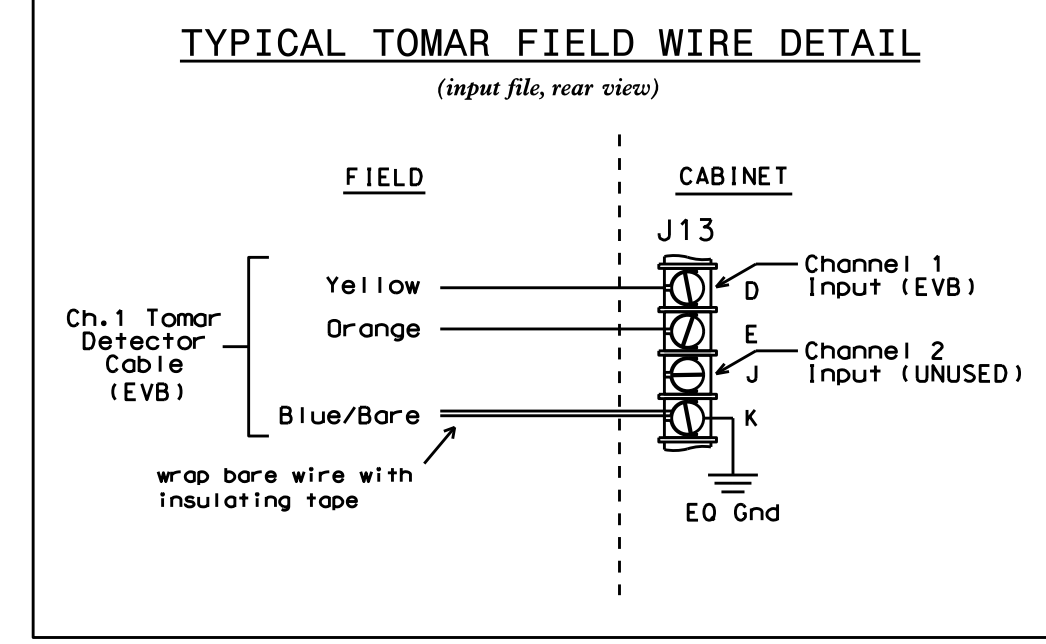
EMERGENCY VEHICLE PREEMPTION PROGRAMMING

- Program EVB preempt as follows:
 Main Menu - 2) PREEMPT - 4) EMERGENCY VEHICLE
 EVB Clear = 2
 EVB Clearance Phases = 1,6
 - Program general preemption parameters as follows:
 Main Menu - 2) PREEMPT - 6) MISC PREEMPTION PARAMETERS
 Min Time Before PE ForceOff = 1
- Program extend time on optical detector unit for 2.0 sec for EVB.

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.

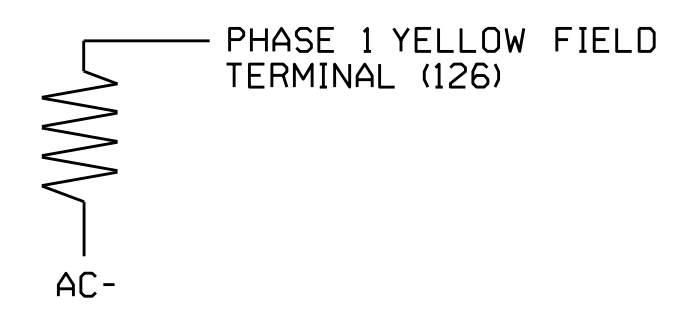
4 CHANNEL TOMAR OSP CARD
 INSERT CARD INTO SLOT J13



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: 05-1028T1/T3
 DESIGNED: September 2014
 SEALED: 4/2/15
 REVISED: N/A

Electrical Detail - Temporary Design 1 (TMP Phase 1, Steps 1-10)
 Electrical Detail - Temporary Design 3 (TMP Phase 1, Steps 11-21)

Electrical and Programming Details for: **NC 55 (South Alston Avenue) at NC 147 SB Ramps**

Prepared in the Offices of: **Transportation Mobility and Safety Solutions**

Division 5 Durham County
 PLAN DATE: November 2014 REVIEWED BY: *JTR*
 PREPARED BY: S. Armstrong REVIEWED BY: *JTR*

750 N. Greenfield Pkwy, Garner, NC 27529

SEAL: JOHN T. ROWE, JR. ENGINEER SEAL 008453

DocuSigned by: **John T. Rowe, Jr.** 4/2/2015

27-1028-2014-08-27
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 sarmstrong