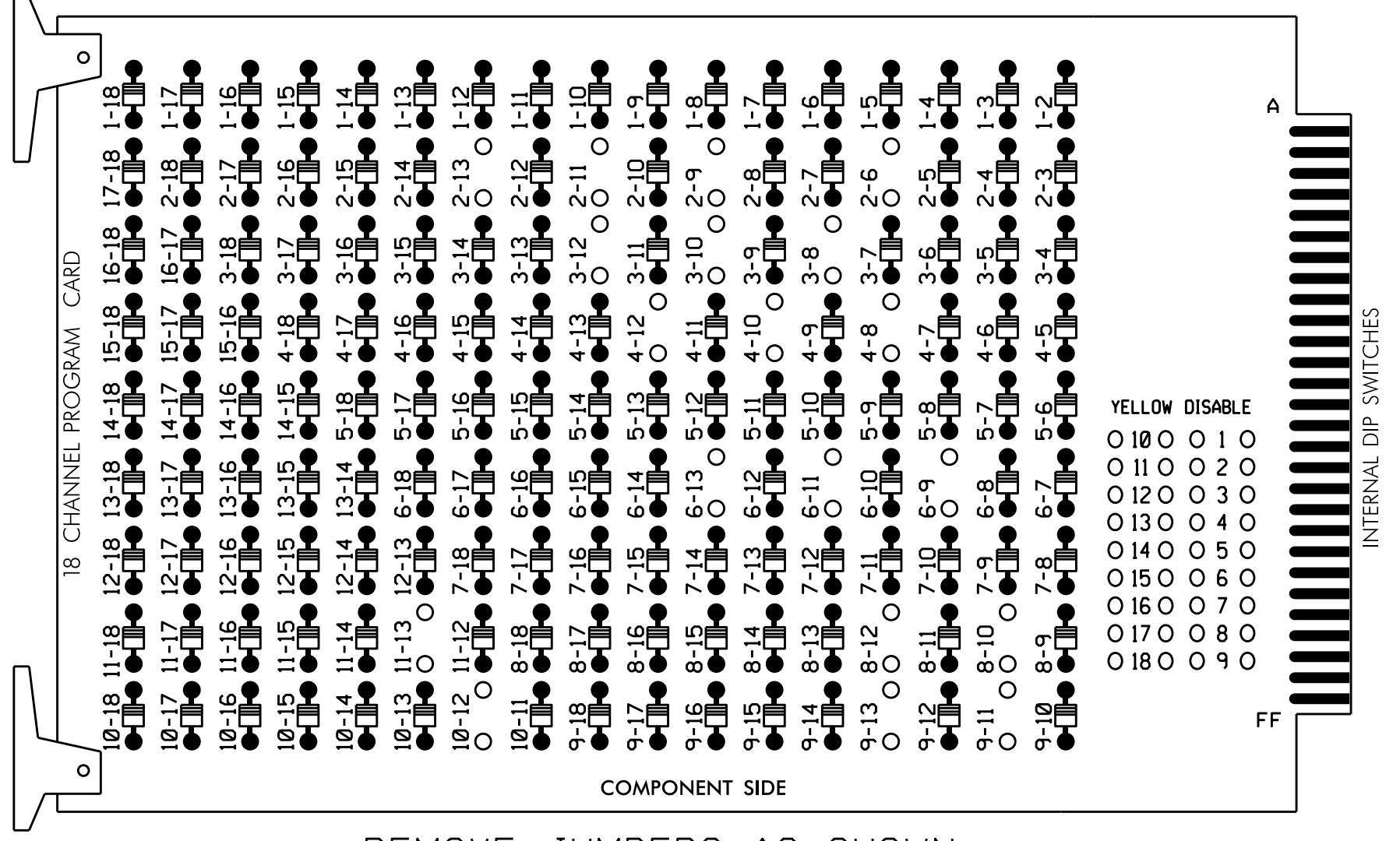


EDI MODEL 2018ECL-NC CONFLICT MONITOR

PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 2-6, 2-9, 2-11, 2-13, 3-8, 3-10, 3-12, 4-8, 4-10, 4-12, 6-9, 6-11, 6-13, 8-10, 8-12, 9-11, 9-13, 10-12 and 11-13.



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.
- Program phases 4 and 8 for Double Entry.
- Ensure start up flash phases are coordinated with flash program block assignments.
- Program Startup Ped Call for phase 2.
- Set the Red Revert interval on the controller to 1 second.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
 CABINET.....332 W/ AUX
 SOFTWARE.....McCAIN 2033
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 WITH AUX FILE
 LOAD SWITCHES USED.....S2,S3,S4,S5,S8,S11
 AUX S1,AUX S2,AUX S4,AUX S5
 PHASES USED.....2,2 PED,3*,4,6,8
 OVERLAP 1.....2+6
 OVERLAP 2.....**
 OVERLAP 3.....2+6
 OVERLAP 4.....4+8
 * Phase used only during Preempt.
 ** See FYA PPLT Programming - Sheet 2.

SIGNAL HEAD HOOK-UP CHART

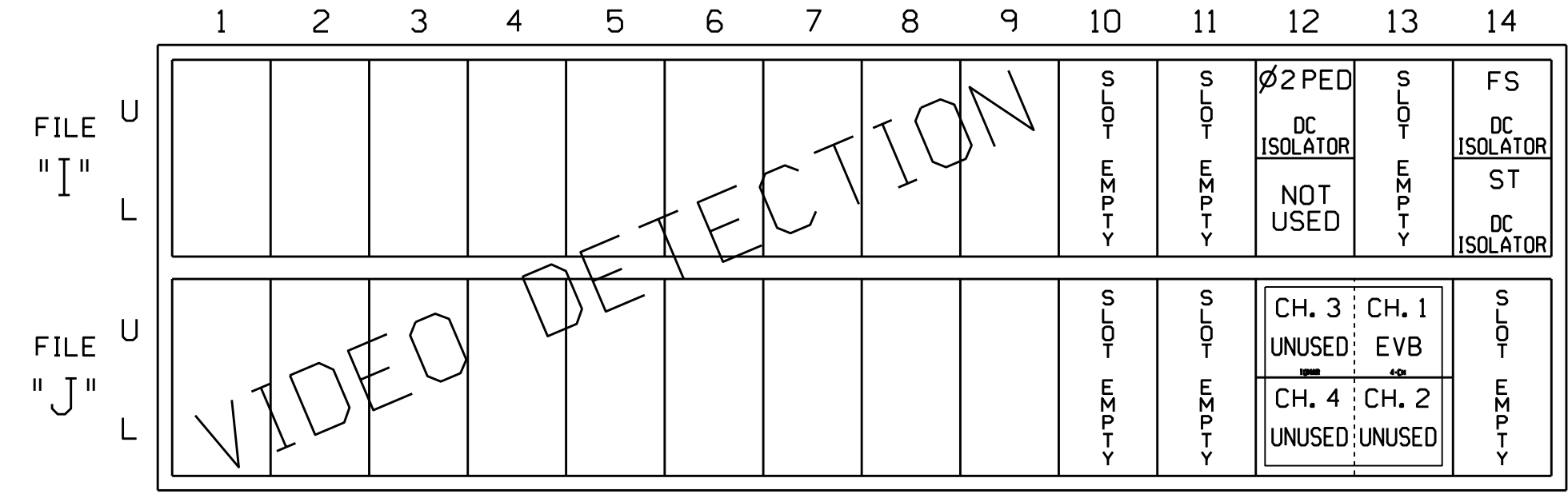
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6	
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18	
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE	
SIGNAL HEAD NO.	NU	22,23	P21, P22	31	42,43	NU	NU	62,63	NU	NU	81,82	NU	61	31	NU	21	41	NU	
RED		128			101			134					107						
YELLOW		129		*	102			135					108						
GREEN		130			103			136					109						
RED ARROW																A121	A124	A114	A101
YELLOW ARROW																A122	A125	A115	A102
FLASHING YELLOW ARROW																A123	A126	A116	A103
GREEN ARROW																			
Hand																			
Person																			

NU = Not Used

* Denotes install load resistor. See load resistor installation detail this sheet.
 * See pictorial of head wiring in detail below.

INPUT FILE POSITION LAYOUT

(front view)



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

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

4 CHANNEL TOMAR OSP CARD
 INSERT CARD INTO SLOT J13

INPUT FILE CONNECTION & PROGRAMMING CHART

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

NOTE:
 INSTALL DC ISOLATOR IN INPUT FILE SLOT I12

DETECTOR ATTRIBUTES LEGEND:

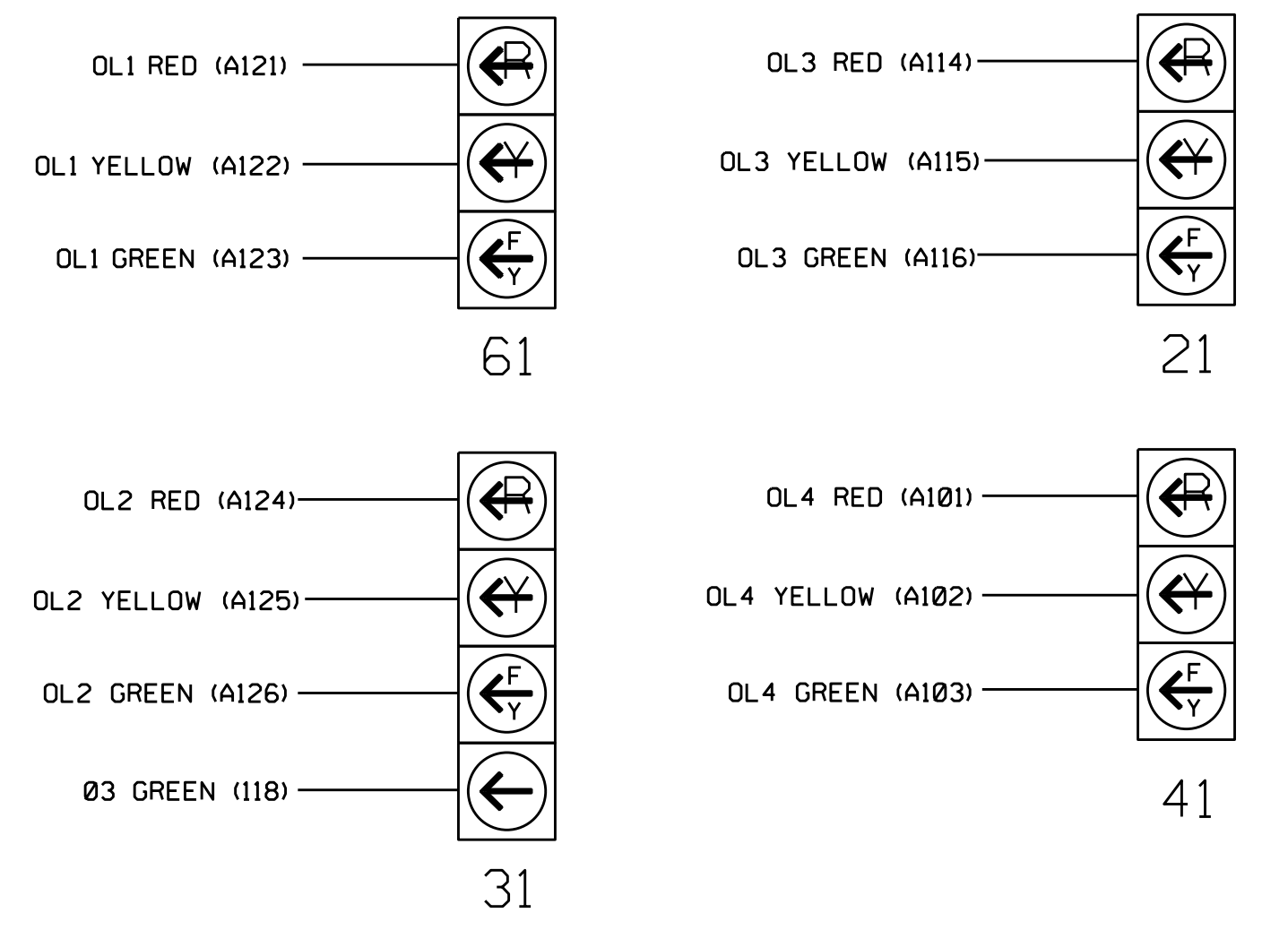
- FULL TIME DELAY
- PED CALL
- RESERVED
- COUNTING
- EXTENSION
- TYPE 3
- CALLING
- ALTERNATE

INPUT FILE POSITION LEGEND:

- FILE J
- SLOT 2
- LOWER

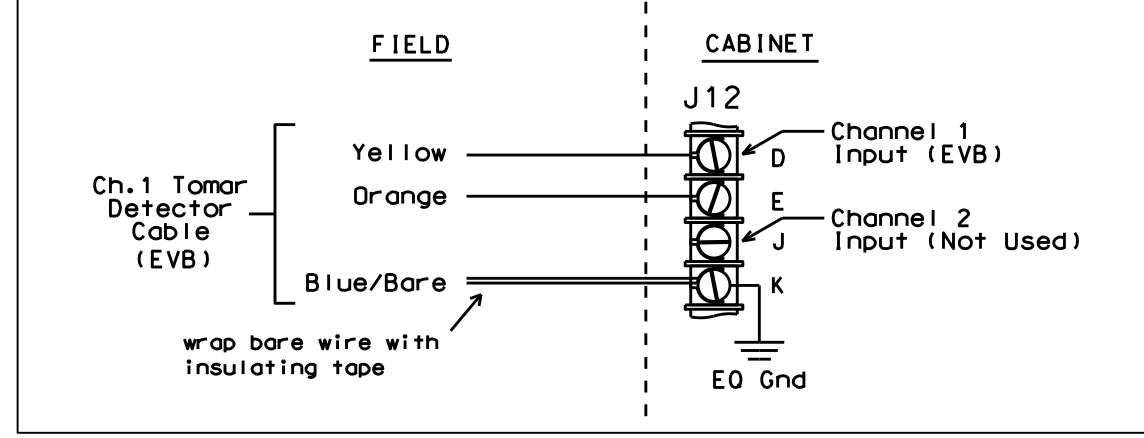
FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



TYPICAL TOMAR FIELD WIRE DETAIL

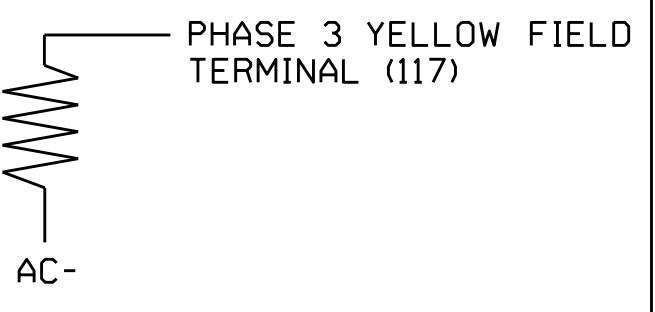
(input file, rear view)



LOAD RESISTOR INSTALLATION DETAIL

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: 05-1029T2
 DESIGNED: September 2014
 SEALED: 4/2/15
 REVISED: N/A

Electrical Detail - Sheet 1 of 2 (Temporary Design 2)

Electrical and Programming Details for: **NC 55 (North Alston Avenue) at Liberty St**

Prepared in the Offices of: **TRANSPO-MOBILITY AND SAFETY SOLUTIONS**

750 N. Greenfield Pkwy, Garner, NC 27529

Division 5 Durham County Durham

PLAN DATE: November 2014 REVIEWED BY: T. Joyce

PREPARED BY: B. SIMMONS REVIEWED BY:

REVISIONS INIT. DATE

DocuSigned by: **George C. Brown** 4/7/2015

SEAL: PROFESSIONAL ENGINEER GEORGE C. BROWN

SIG. INVENTORY NO. 05-1029T2

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 B.S. Simmons