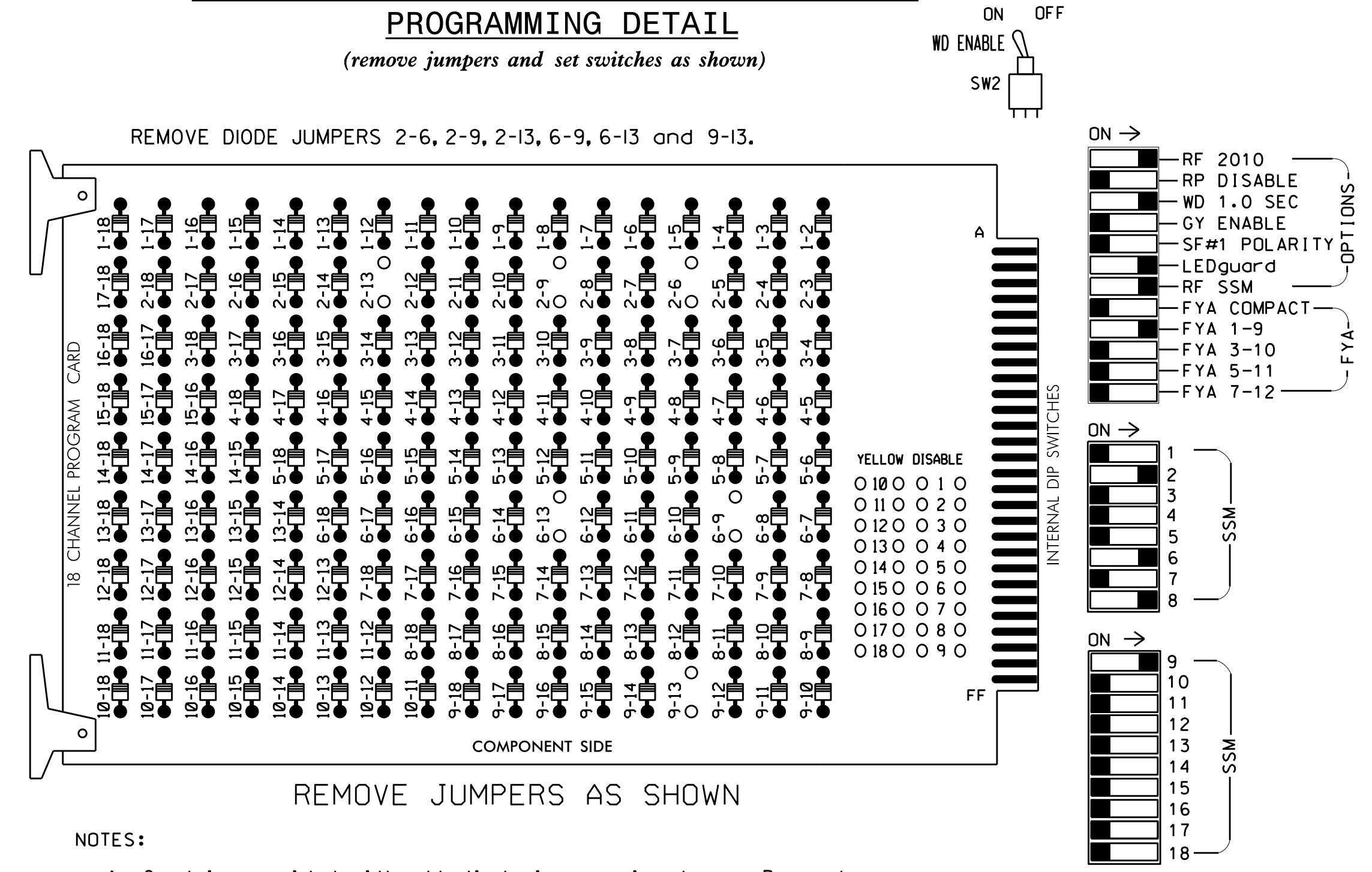


EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL
(remove jumpers and set switches as shown)



- 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.
 - Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. 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.
 - Program Startup Ped Calls for phase 2.
 - 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.....S2,S3,S8,S11,AUX S1
 PHASES USED.....2,6,8,2 PED
 OVERLAP 1.....2
 OVERLAP 2.....NOT USED
 OVERLAP 3.....NOT USED
 OVERLAP 4.....NOT USED

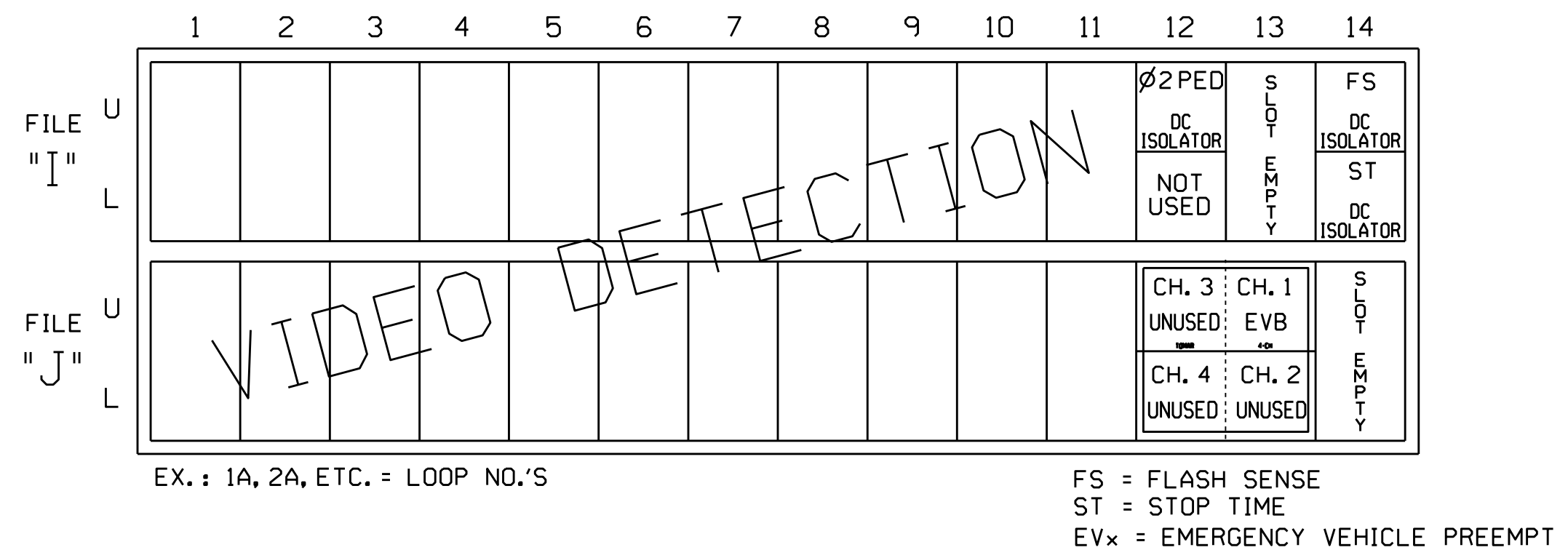
SIGNAL HEAD HOOK-UP CHART

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	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	NU	22,23	P21, P22	NU	NU	NU	NU	62,63	NU	NU	81,82	NU	61*	NU	NU	NU	NU	NU
RED		128						134			107							
YELLOW		129						135			108							
GREEN		130						136			109							
RED ARROW													A121					
YELLOW ARROW													A122					
FLASHING YELLOW ARROW													A123					
GREEN ARROW																		
Hand icon																		
Person icon																		

NU = Not Used

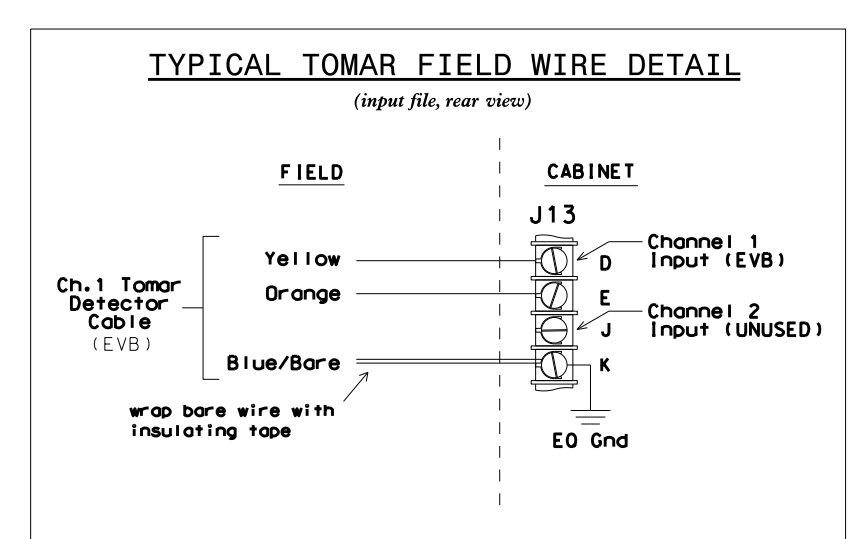
* See pictorial of head wiring in detail below.

INPUT FILE POSITION LAYOUT (front view)



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

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

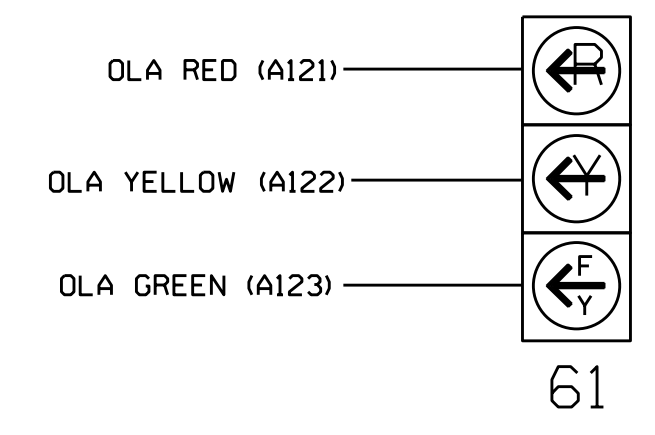


INPUT FILE CONNECTION & PROGRAMMING CHART

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

- INPUT FILE POSITION LEGEND: J2L
- FILE J
 - SLOT 2
 - LOWER
- DETECTOR ATTRIBUTES LEGEND:
- 1-FULL TIME DELAY
 - 2-PED CALL
 - 3-RESERVED
 - 4-COUNTING
 - 5-EXTENSION
 - 6-TYPE 3
 - 7-CALLING
 - 8-ALTERNATE

3 SECTION FYA WIRING DETAIL (wire signal heads as shown)



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.

Electrical Detail - Sheet 1 of 2

Electrical and Programming Details For: **NC 55 (South/North Alston Avenue) at E. Main St.**

Prepared In the Offices of: **Transporatio Mobility and Safety Solutions**

PLAN DATE: November 2014
 PREPARED BY: James Peterson

REVIEWED BY: [Signature]
 REVIEWED BY: [Signature]

Division 5 Durham County
 SEAL: JOHN T. ROWE, JR. PROFESSIONAL ENGINEER

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

SIG. INVENTORY NO. 05-1030T2

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 S:\IT\SS\115\Sig\18\18.1\EDI Model 2018ECL-NC Conflict Monitor\jpeterson\20141230.dgn
 J. Peterson