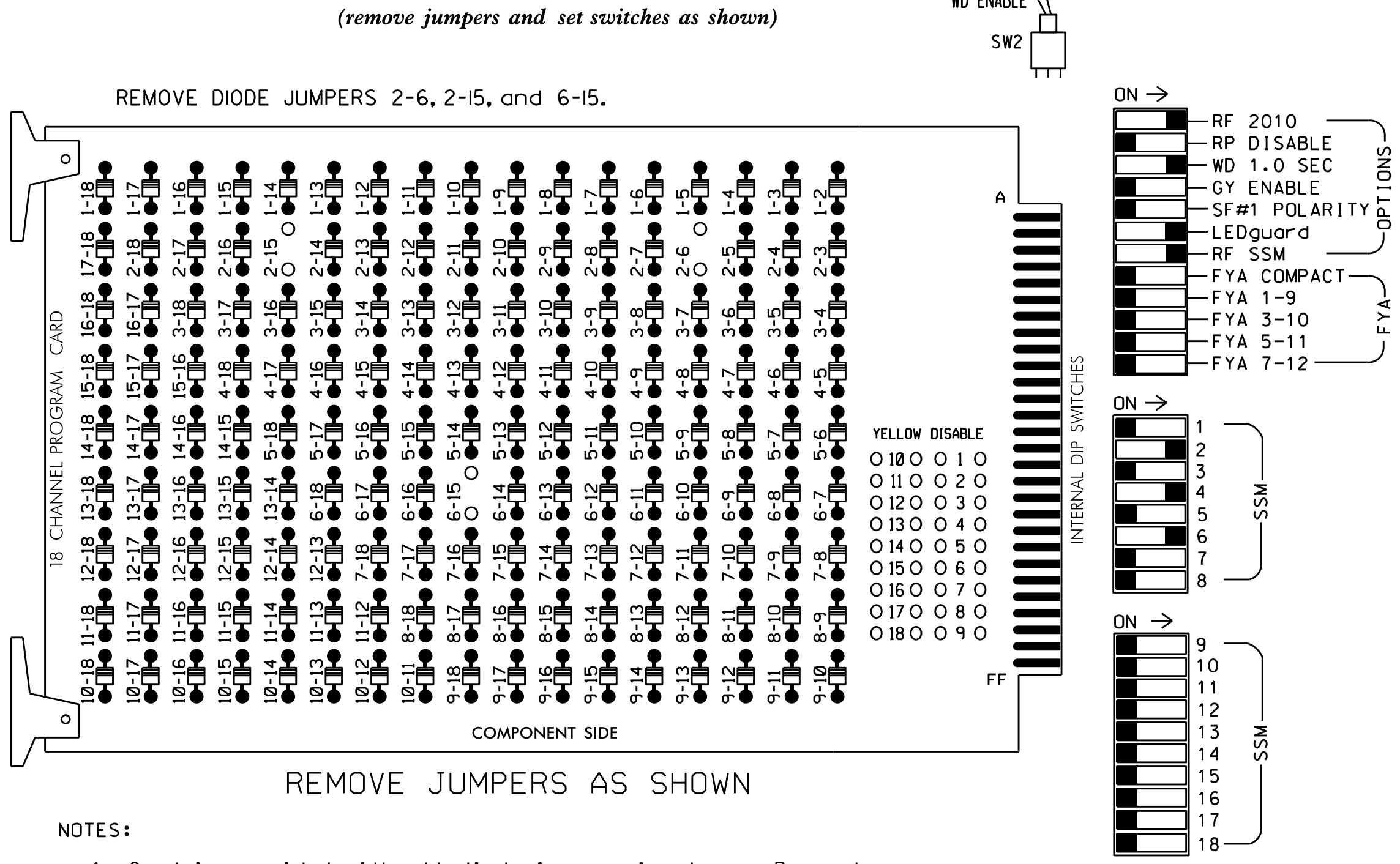


**EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL**  
(remove jumpers and set switches as shown)



- 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.
  - Program Startup Ped Call for phase 6.
  - 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**

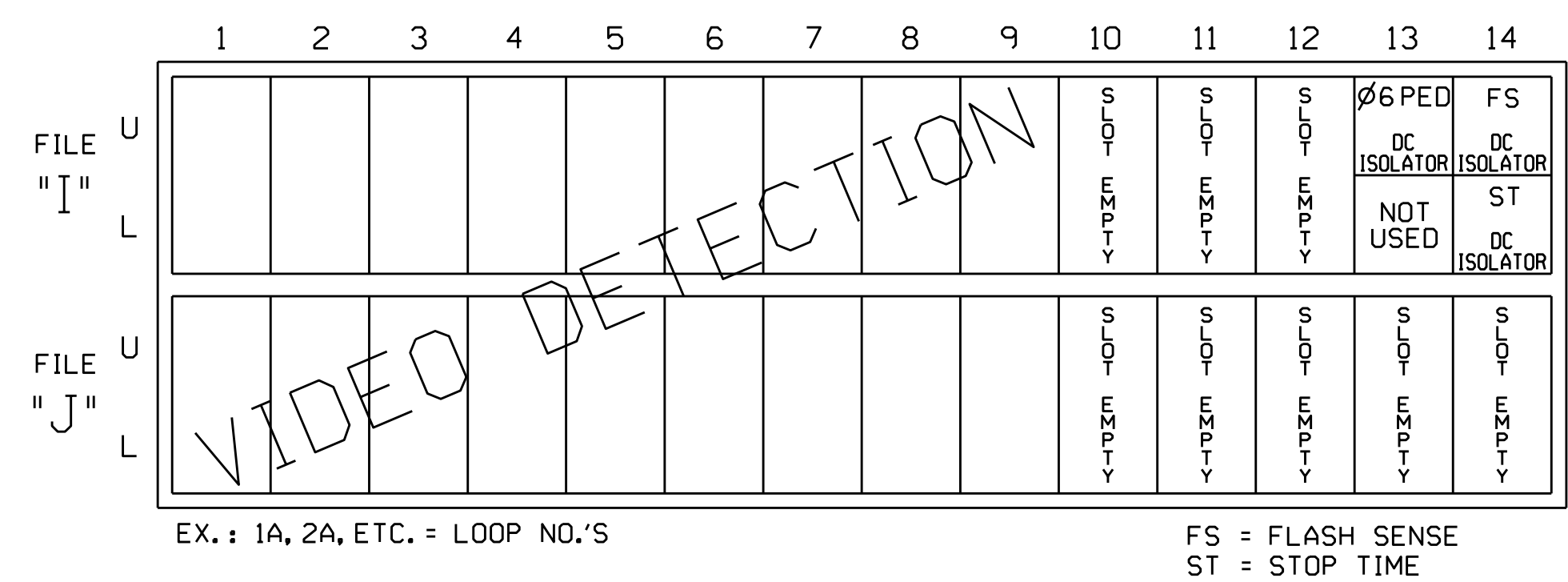
| LOAD SWITCH NO.       | S1 | S2    | S3    | S4 | S5    | S6    | S7 | S8    | S9       | S10 | S11 | S12   | AUX S1 | AUX S2 | AUX S3 | AUX S4 | AUX S5 | AUX S6 |
|-----------------------|----|-------|-------|----|-------|-------|----|-------|----------|-----|-----|-------|--------|--------|--------|--------|--------|--------|
| 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.       | NU | 22,23 | NU    | NU | 42,43 | NU    | NU | 62,63 | P61, P62 | NU  | NU  | NU    | NU     | NU     | NU     | NU     | NU     | NU     |
| RED                   |    | 128   |       |    | 101   |       |    | 134   |          |     |     |       |        |        |        |        |        |        |
| YELLOW                |    | 129   |       |    | 102   |       |    | 135   |          |     |     |       |        |        |        |        |        |        |
| GREEN                 |    | 130   |       |    | 103   |       |    | 136   |          |     |     |       |        |        |        |        |        |        |
| RED ARROW             |    |       |       |    |       |       |    |       |          |     |     |       |        |        |        |        |        |        |
| YELLOW ARROW          |    |       |       |    |       |       |    |       |          |     |     |       |        |        |        |        |        |        |
| FLASHING YELLOW ARROW |    |       |       |    |       |       |    |       |          |     |     |       |        |        |        |        |        |        |
| GREEN ARROW           |    |       |       |    |       |       |    |       |          |     |     |       |        |        |        |        |        |        |
| Hand icon             |    |       |       |    |       |       |    |       |          |     |     |       | 119    |        |        |        |        |        |
| Walking person icon   |    |       |       |    |       |       |    |       |          |     |     |       |        |        |        |        |        | 121    |

NU = Not Used  
★ 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.....S2,S5,S8,S9  
PHASES USED.....2,4,6,6 PED  
OVERLAP 1.....NOT USED  
OVERLAP 2.....NOT USED  
OVERLAP 3.....NOT USED  
OVERLAP 4.....NOT USED

**INPUT FILE POSITION LAYOUT**  
(front view)



**INPUT FILE CONNECTION & PROGRAMMING CHART**

| PED PUSH BUTTONS | LOOP TERMINAL | INPUT FILE POS. | DETECTOR NO. | PIN NO. | ATTRIBUTES | NEMA PHASE |
|------------------|---------------|-----------------|--------------|---------|------------|------------|
| P61,P62          | TB8-7,9       | I13U            | 26           | 68      | 2          | 6 PED      |

NOTE: INSTALL DC ISOLATOR IN INPUT FILE SLOT I13

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

**COUNTDOWN PEDESTRIAN SIGNAL OPERATION**

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1029T4  
DESIGNED: September 2014  
SEALED: 4/2/15  
REVISED: N/A

Electrical Detail - Temporary Design 4

ELECTRICAL AND PROGRAMMING DETAILS FOR: NC 55 (North Alston Avenue) at Liberty St

Prepared In the Offices of: **Transporatio 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  
F12061ED08E8434 DATE: \_\_\_\_\_

SIG. INVENTORY NO. 05-1029T4

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