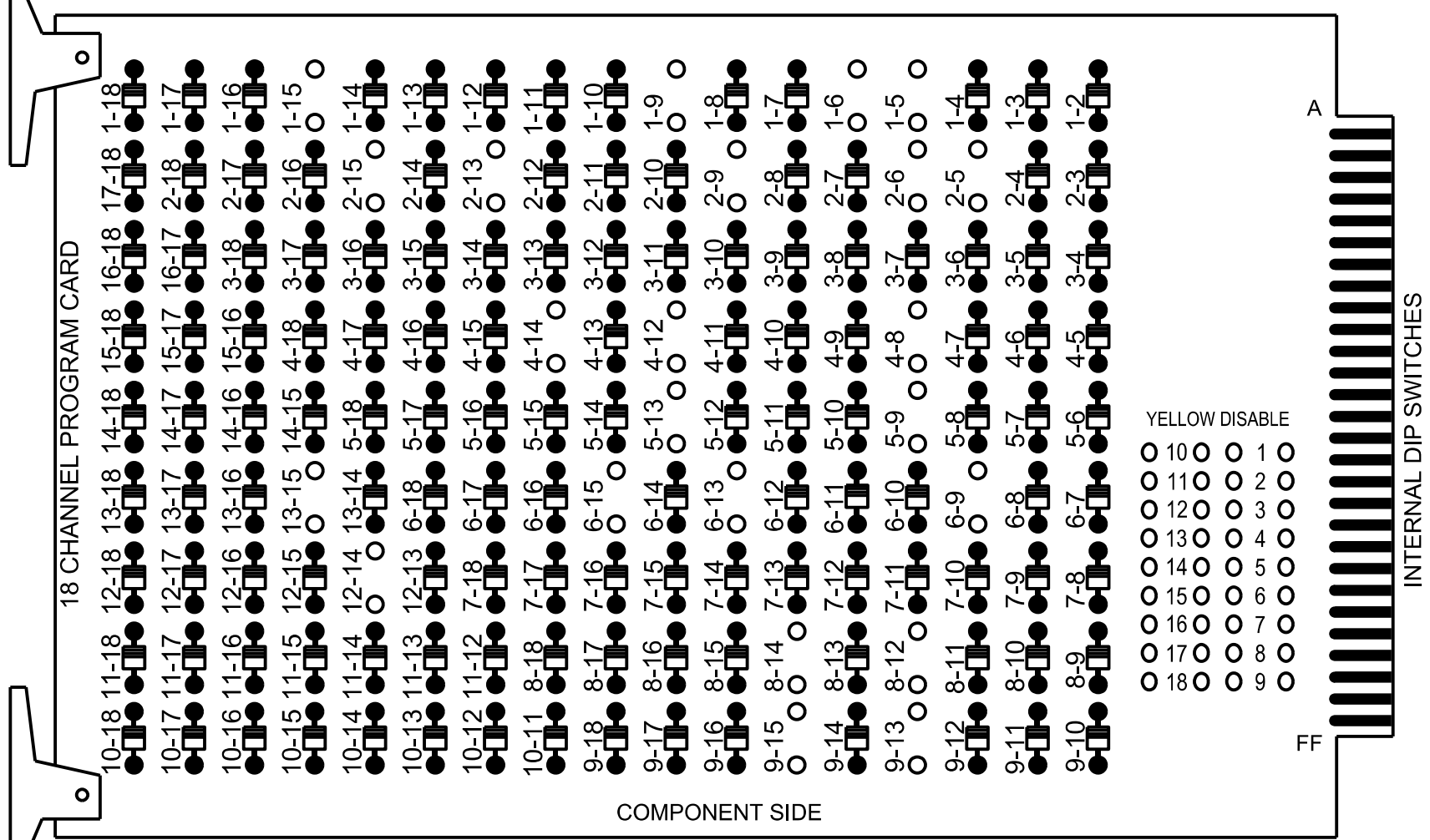


18 CHANNEL IP CONFLICT MONITOR

PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

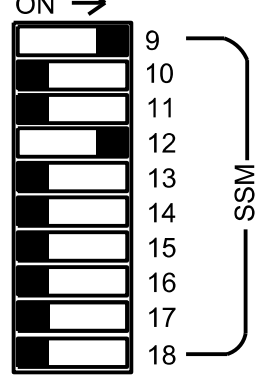
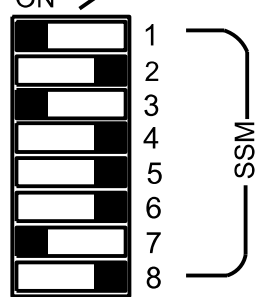
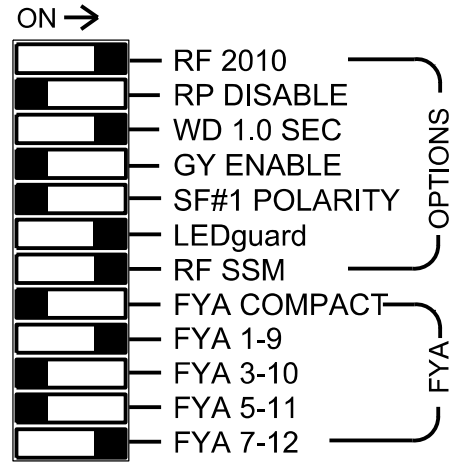
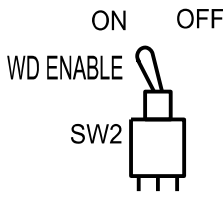
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-15, 2-5, 2-6, 2-9, 2-13, 2-15, 4-8, 4-12, 4-14, 5-9, 5-13, 6-9, 6-13, 6-15, 8-12, 8-14, 9-13, 9-15, 12-14 AND 13-15.



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 the Red Enable is active at all times during normal operation.
- Integrate monitor with Ethernet network in cabinet.



■ = DENOTES POSITION OF SWITCH

NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program phases 4 and 8 for Dual Entry.
- Program phases 4 and 8 for Simultaneous Start.
- Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
- The cabinet and controller are part of the D13-02 Asheville System.

EQUIPMENT INFORMATION

Controller.....2070LX  
Cabinet.....332 w/ Aux  
Software.....Q-Free MAXTIME  
Cabinet Mount.....Base  
Output File Positions.....18 With Aux. Output File  
Load Switches Used.....S1,S2, S3, S5, S6, S7, S8, S9, S11, AUX S1, AUX S5  
Phases Used.....2, 2PED, 4, 4 PED, 5, 6, 6PED, 8  
Overlap "1".....\*  
Overlap "2".....NOT USED  
Overlap "3".....NOT USED  
Overlap "4".....\*

\*See overlap programming detail on sheet 2.

SIGNAL HEAD HOOK-UP CHART

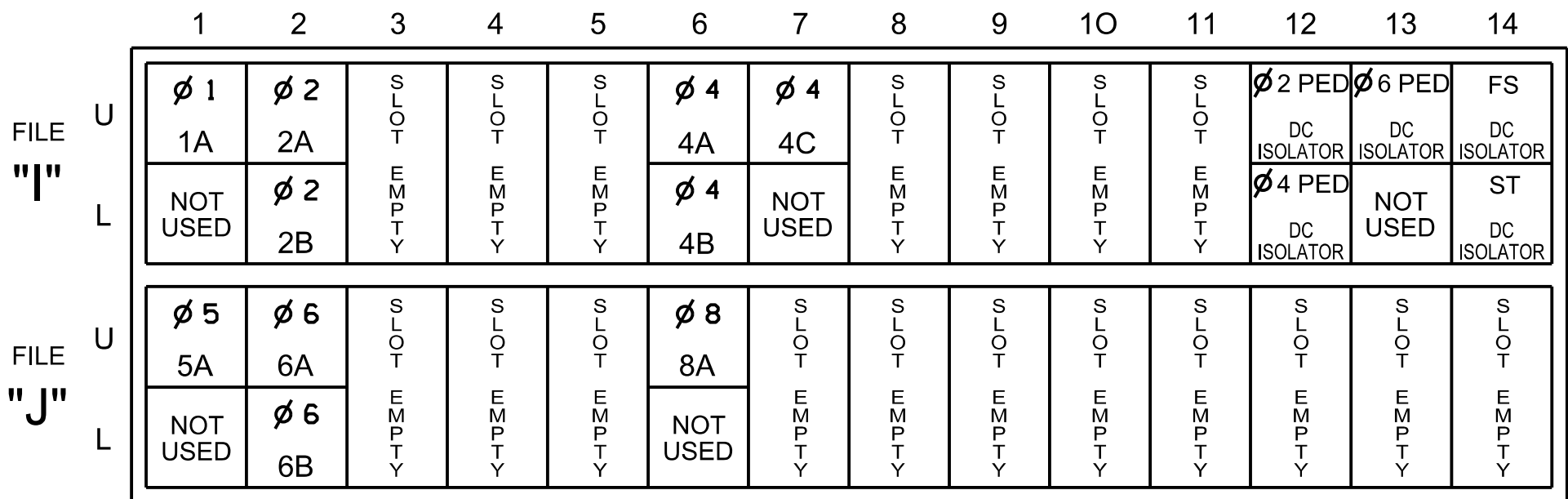
| LOAD SWITCH NO.       | S1  | S2    | S3       | S4 | S5    | S6       | S7  | S8       | S9       | S10 | S11   | S12   | AUX S1 | AUX S2 | AUX S3 | AUX S4 | AUX S5 | AUX S6 |
|-----------------------|-----|-------|----------|----|-------|----------|-----|----------|----------|-----|-------|-------|--------|--------|--------|--------|--------|--------|
| 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 | 42,43 | P41, P42 | 51  | 61,62,63 | P61, P62 | NU  | 81,82 | NU    | 11     | NU     | NU     | NU     | 41     | NU     |
| RED                   |     | 128   |          |    | 101   |          |     | 134      |          |     | 107   |       |        |        |        |        |        |        |
| YELLOW                | *   | 129   |          |    | 102   |          |     | 135      |          |     | 108   |       |        |        |        |        |        |        |
| GREEN                 |     | 130   |          |    | 103   |          |     | 136      |          |     | 109   |       |        |        |        |        |        |        |
| RED ARROW             |     |       |          |    |       |          | 131 |          |          |     |       |       | A121   |        |        |        | A101   |        |
| YELLOW ARROW          |     |       |          |    |       |          | 132 |          |          |     |       |       | A122   |        |        |        | A102   |        |
| FLASHING YELLOW ARROW |     |       |          |    |       |          |     |          |          |     |       |       | A123   |        |        |        | A103   |        |
| GREEN ARROW           | 127 |       |          |    |       |          | 133 |          |          |     |       |       |        |        |        |        |        |        |
| Hand icon             |     |       | 113      |    |       | 104      |     |          | 119      |     |       |       |        |        |        |        |        |        |
| Walking person icon   |     |       | 115      |    |       | 106      |     |          | 121      |     |       |       |        |        |        |        |        |        |

NU = Not Used

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

INPUT FILE POSITION LAYOUT

(front view)



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

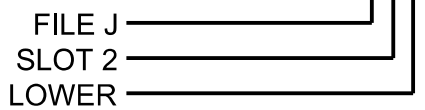
FS = FLASH SENSE  
ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

| LOOP NO.         | LOOP TERMINAL | INPUT FILE POS. | PIN NO. | INPUT POINT | DETECTOR NO. | CALL PHASE | DELAY TIME | EXTEND TIME | EXTEND | ADDED INITIAL | CALL | DELAY DURING GREEN |
|------------------|---------------|-----------------|---------|-------------|--------------|------------|------------|-------------|--------|---------------|------|--------------------|
| 1A               | TB2-1,2       | I1U             | 56      | 18          | 1            | 1          | 15.0       |             | X      |               | X    |                    |
| 2A               | TB2-5,6       | I2U             | 39      | -           | 29           | 6          |            |             | X      |               | X    |                    |
| 2B               | TB2-7,8       | I2L             | 43      | 5           | 3            | 2          |            |             | X      |               | X    |                    |
| 4A               | TB4-9,10      | I6U             | 41      | 3           | 8            | 4          | 3.0        |             | X      |               | X    |                    |
| 4B               | TB4-11,12     | I6L             | 45      | 7           | 9            | 4          | 10.0       |             | X      |               | X    |                    |
| 4C               | TB6-1,2       | I7U             | 65      | 31          | 10           | 4          | 15.0       |             | X      |               | X    |                    |
| 5A               | TB3-1,2       | J1U             | 55      | 17          | 15           | 5          |            |             | X      |               | X    |                    |
| 6A               | TB3-5,6       | J2U             | 40      | 2           | 16           | 6          |            |             | X      |               | X    |                    |
| 6B               | TB3-7,8       | J2L             | 44      | 6           | 17           | 6          |            |             | X      |               | X    |                    |
| 8A               | TB5-9,10      | J6U             | 42      | 4           | 22           | 8          | 10.0       |             | X      |               | X    |                    |
| PED PUSH BUTTONS |               |                 |         |             |              |            |            |             |        |               |      |                    |
| P21,P22          | TB8-4,6       | I12U            | 67      | 33          | 2            | PED 2      |            |             |        |               |      |                    |
| P41,P42          | TB8-5,6       | I12L            | 69      | 35          | 4            | PED 4      |            |             |        |               |      |                    |
| P61,P62          | TB8-7,9       | I13U            | 68      | 34          | 6            | PED 6      |            |             |        |               |      |                    |

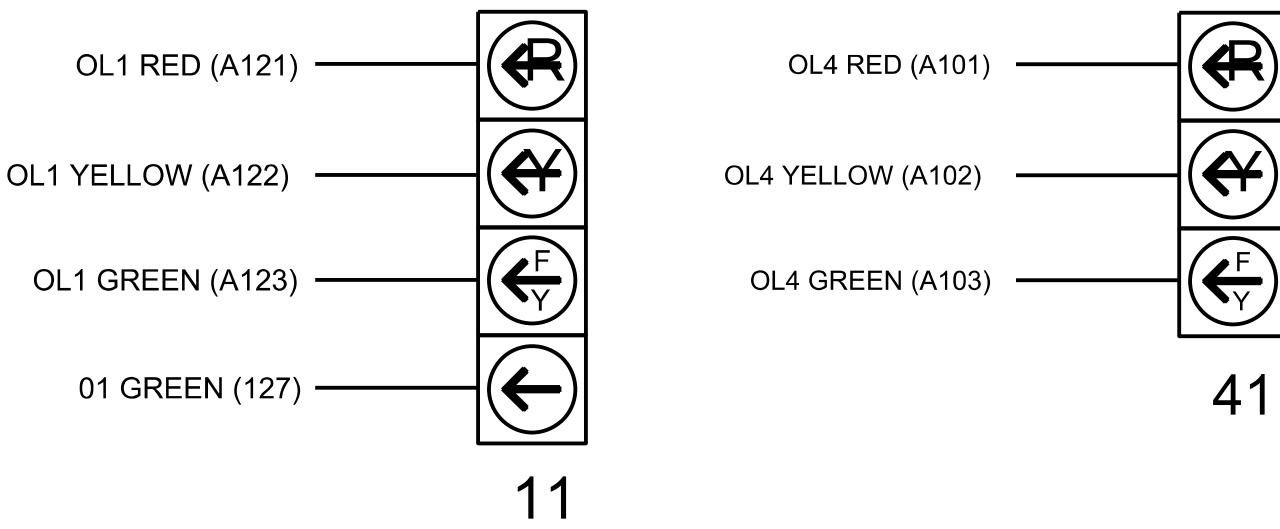
NOTE:  
INSTALL DC ISOLATORS  
IN INPUT FILE SLOTS  
I12 AND I13.

INPUT FILE POSITION LEGEND: J2L



FYA SIGNAL WIRING DETAIL

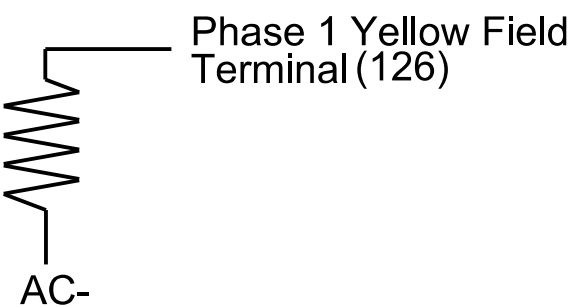
(wire signal heads as shown)



LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown)

| ACCEPTABLE VALUES |           |
|-------------------|-----------|
| Value (ohms)      | Wattage   |
| 1.5K - 1.9K       | 25W (min) |
| 2.0K - 3.0K       | 10W (min) |



Final (TMP Phase IV Step 4)  
Electrical Detail - Sheet 1 of 2

|                                          |                                                                |                                                                              |
|------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------|
| Electrical and Programming Details For:  | NC 191 (Brevard Road)<br>at<br>Fairfax Avenue / Shelburne Road | Division 13<br>Buncombe County<br>Asheville                                  |
| Prepared for the Offices of:             | PLAN DATE: May 2026<br>REVIEWED BY: J O Deaton                 | SEAL<br>NORTH CAROLINA PROFESSIONAL ENGINEER<br>JAMES O. DEATON<br>8/10/2026 |
| 750 N. Greenfield Pkwy, Garner, NC 27529 | PREPARED BY: M W Yalch<br>REVIEWED BY:                         | SIG. INVENTORY NO. 13-1337                                                   |

**AECOM**  
NC Firm License No.: F-0342  
5438 Wade Park Boulevard  
Suite 200, Raleigh, NC 27607  
Phone: 919-461-1100