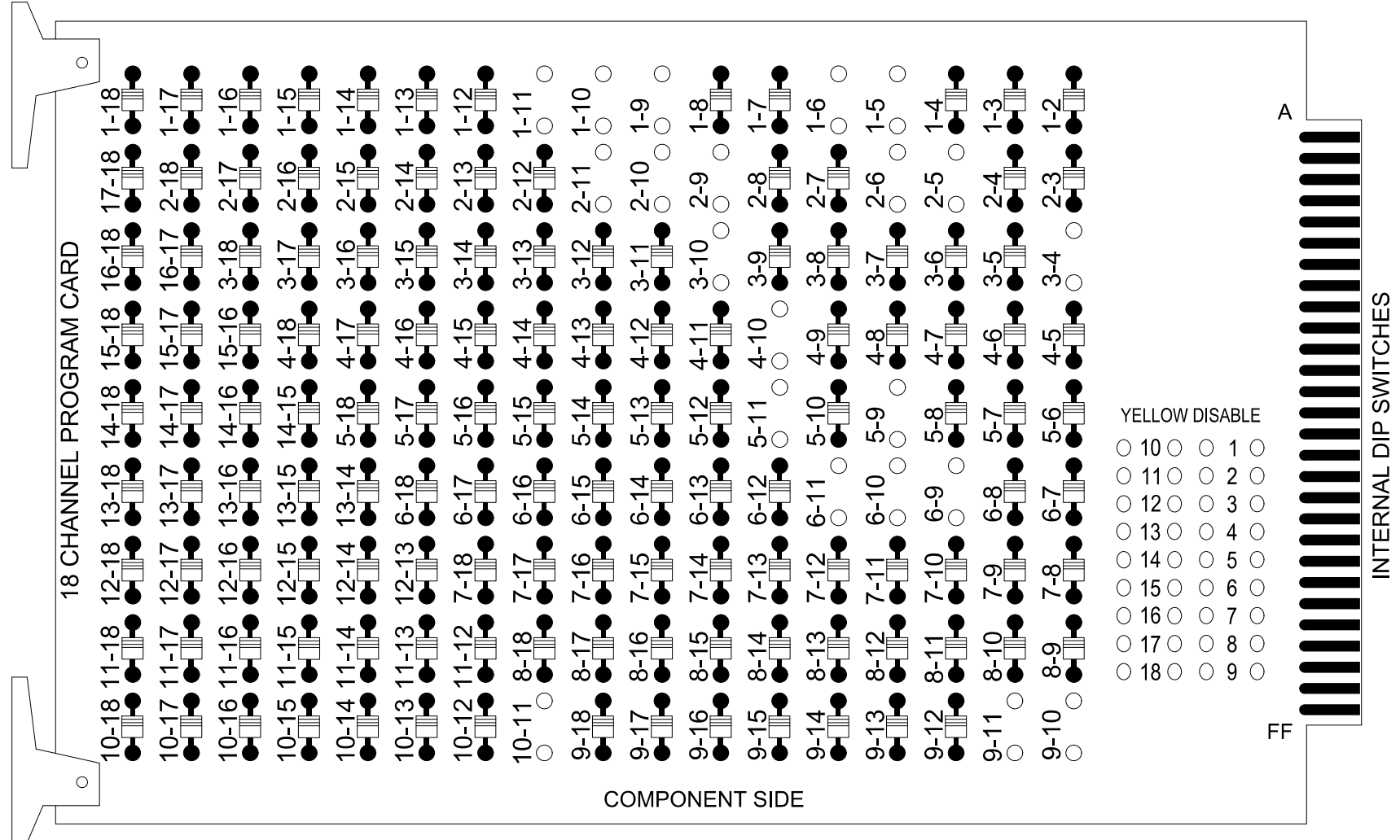


18 CHANNEL IP CONFLICT MONITOR  
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

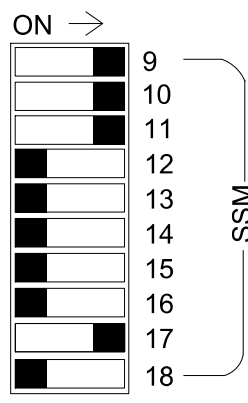
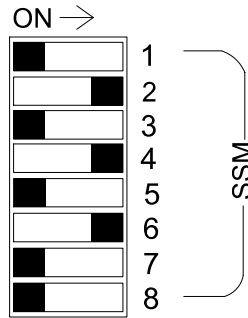
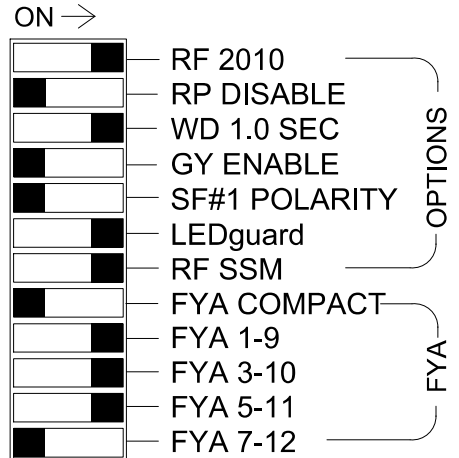
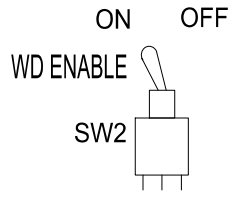
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-10, 1-11, 2-5, 2-6, 2-9, 2-10, 2-11, 3-4, 3-10, 4-10, 5-9, 5-11, 6-9, 6-10, 6-11, 9-10, 9-11, and 10-11.



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 unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program controller to start up in phase 2 Green No Walk, 6 Green No Walk, 39 Phase Not On, and 40 Green No Walk.
- Program Phase 39 for No Startup Veh Call.
- Program phases 2, 6, and 40 for Min Recall.
- 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 #D06-17 Lumberton US 301 and SR 1997 (Fayetteville Road).

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, S4, S5, S7, S8, AUX S1, AUX S2, AUX S3, AUX S4  
Phases Used.....1, 2, 3, 4, 5, 6  
Overlap "1".....\*  
Overlap "2".....\*  
Overlap "3".....\*  
Overlap "4".....NOT USED  
Overlap "5".....\*  
Overlap "7".....\*

\*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 | OL7 | 4   |     |     | 4 PED | 5   | 6     | 6 PED | 7   | 8   | 8 PED | OL1    | OL2    | OL5    | OL3    | OL4    | SPARE  |    |
| SIGNAL HEAD NO.                                                                     | 11★ | 21.22 | NU    | 63  | 41  | 42  | 43  | NU    | 51★ | 61,62 | NU    | NU  | NU  | NU    | 11★    | 63★    | 31     | 32     | 51★    | NU     | NU |
| RED                                                                                 |     | 128   |       |     |     | 101 | 101 |       |     | 134   |       |     |     |       |        | A124   | A111   | A111   |        |        |    |
| YELLOW                                                                              | ★   | 129   |       | ★   |     | 102 | 102 |       | ★   | 135   |       |     |     |       |        |        | A112   | A112   |        |        |    |
| GREEN                                                                               |     | 130   |       |     |     | 103 | 103 |       |     | 136   |       |     |     |       |        |        | A113   | A113   |        |        |    |
| RED ARROW                                                                           |     |       |       |     | 101 |     |     |       |     |       |       |     |     |       | A121   |        |        |        | A114   |        |    |
| YELLOW ARROW                                                                        |     |       |       |     | 102 |     |     |       |     |       |       |     |     |       | A122   | A125   |        |        | A115   |        |    |
| FLASHING YELLOW ARROW                                                               |     |       |       |     |     |     |     |       |     |       |       |     |     |       | A123   | A126   |        |        | A116   |        |    |
| GREEN ARROW                                                                         | 127 |       |       | 118 | 103 | 103 |     |       | 133 |       |       |     |     |       |        |        | A113   |        |        |        |    |
|  |     |       |       |     |     |     |     |       |     |       |       |     |     |       |        |        |        |        |        |        |    |
|  |     |       |       |     |     |     |     |       |     |       |       |     |     |       |        |        |        |        |        |        |    |

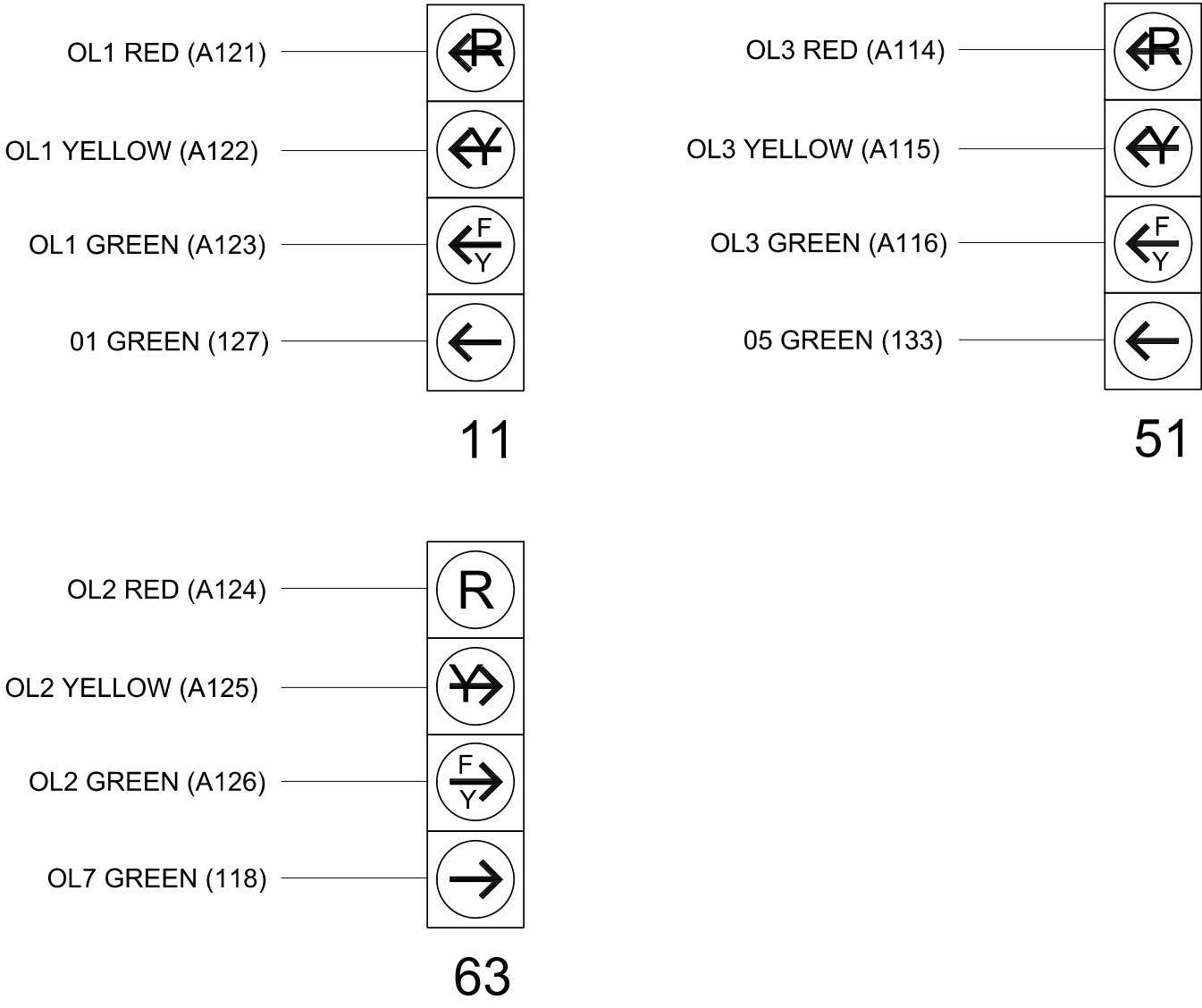
NU = Not Used

\* Denotes install load resistor. See load resistor installation detail this sheet.

\* See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT  
(front view)

| FILE | U | 1        | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14          |
|------|---|----------|---|---|---|---|---|---|---|---|----|----|----|----|-------------|
| "I"  |   | 1A*      |   |   |   |   |   |   |   |   |    |    |    |    | FS          |
|      |   | NOT USED |   |   |   |   |   |   |   |   |    |    |    |    | DC ISOLATOR |
| "J"  |   | 5A*      |   |   |   |   |   |   |   |   |    |    |    |    | PRE1        |
|      |   | NOT USED |   |   |   |   |   |   |   |   |    |    |    |    | AC ISOLATOR |

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

FS = FLASH SENSE  
ST = STOP TIME  
PRE = PREEMPT

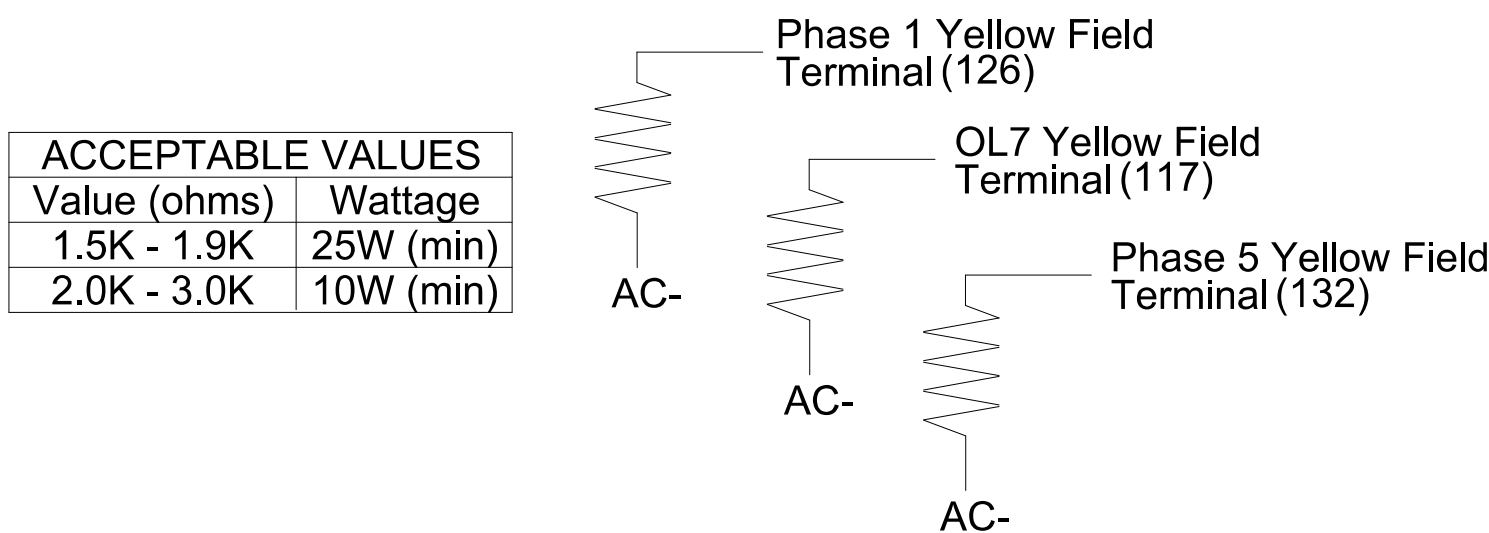
\* Reflects the detector utilized in the "MAXTIME DETECTOR PROGRAMMING DETAIL FOR ALTERNATE PHASING LOOPS 1A & 5A" on Sheet 2.

SPECIAL DETECTOR NOTE

Install a multizone microwave 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.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)



FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO ENSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
- REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 06-1387T3  
DESIGNED: Jan 2026  
SEALED: 1/27/2026  
REVISED:

Temporary Design 3 - TMP Phase VI, Step 4  
Electrical Detail - Sheet 1 of 4

**stv**  
STV Engineers, Inc.  
2151 Hawkins St, Suite 1400  
Charlotte, NC 28203  
(704) 372-1885  
NC License Number F-0991

Electrical and Programming Details For:  
Prepared for the Offices of:  
Seal of the State of North Carolina  
Department of Transportation  
Signal Management Section  
750 N. Greenfield Pkwy, Garner, NC 27529

NC 211 (N. Roberts Avenue)  
at  
Boomerang Drive / Restaurant Driveway  
Division 6 Robeson County Lumberton  
PLAN DATE: Jan 2026 REVIEWED BY: B.J. Roth-Roffy  
PREPARED BY: J.C. Grimm REVIEWED BY: T.M. Moody  
REVISIONS  
INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED  
SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
SEAL 040329  
Trent Moody  
1/27/2026  
DATE  
SIG. INVENTORY NO. 06-1387T3