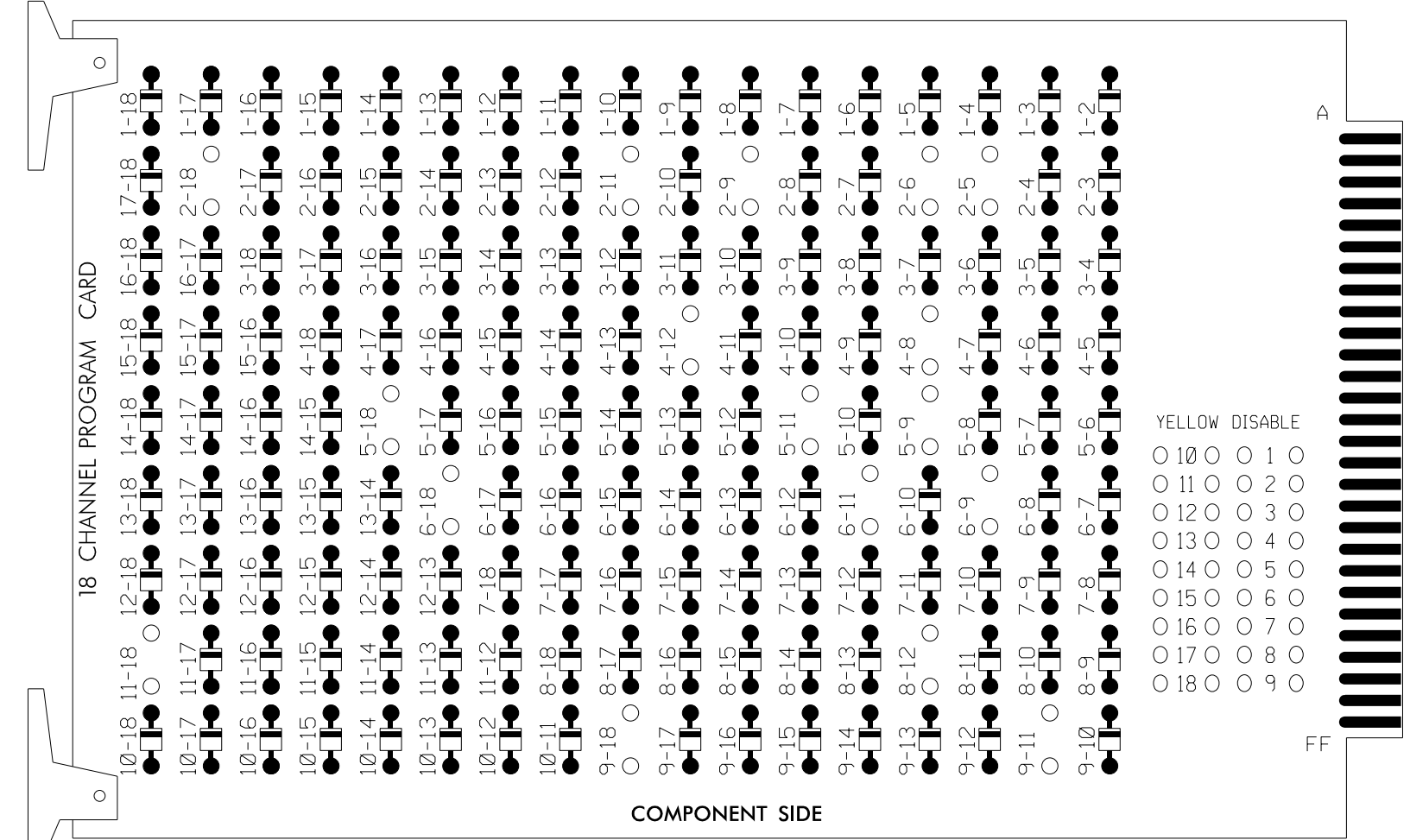


18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

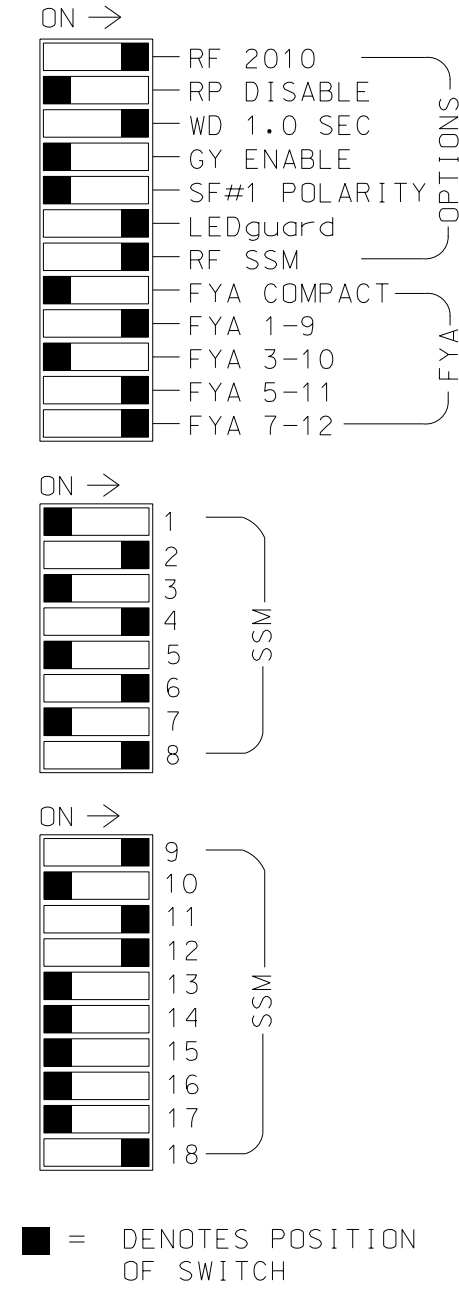
REMOVE DIODE JUMPERS 2-5, 2-6, 2-9, 2-11, 2-18, 4-8, 4-12, 5-9, 5-11, 5-18, 6-9, 6-11, 6-18, 8-12, 9-11, 9-18 and 11-18.



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.
- 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. The installer shall verify that signal heads flash in accordance with the Signal Plans.
- Program phases 4 and 8 for Dual Entry.
- Enable Simultaneous Gap-Out for all Phases.
- Program phases 2 and 6 for Variable Initial and Gap Reduction.
- Program phases 2 and 6 for Startup In Green.
- Program phases 2 and 6 for Yellow Flash, and overlap 1 as Wag Overlap.
- The cabinet and controller are part of the Winston-Salem Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070
 CABINET.....332 W/ AUX
 SOFTWARE.....ECONOLITE OASIS
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
 LOAD SWITCHES USED.....S2,S5,S7,S8,S11,AUX S1,AUX S4,AUX S5,AUX S6
 PHASES USED.....2,4,5,6,8
 OVERLAP "A".....2
 OVERLAP "B".....NOT USED
 OVERLAP "C".....5+6
 OVERLAP "D".....8
 OVERLAP "F".....2

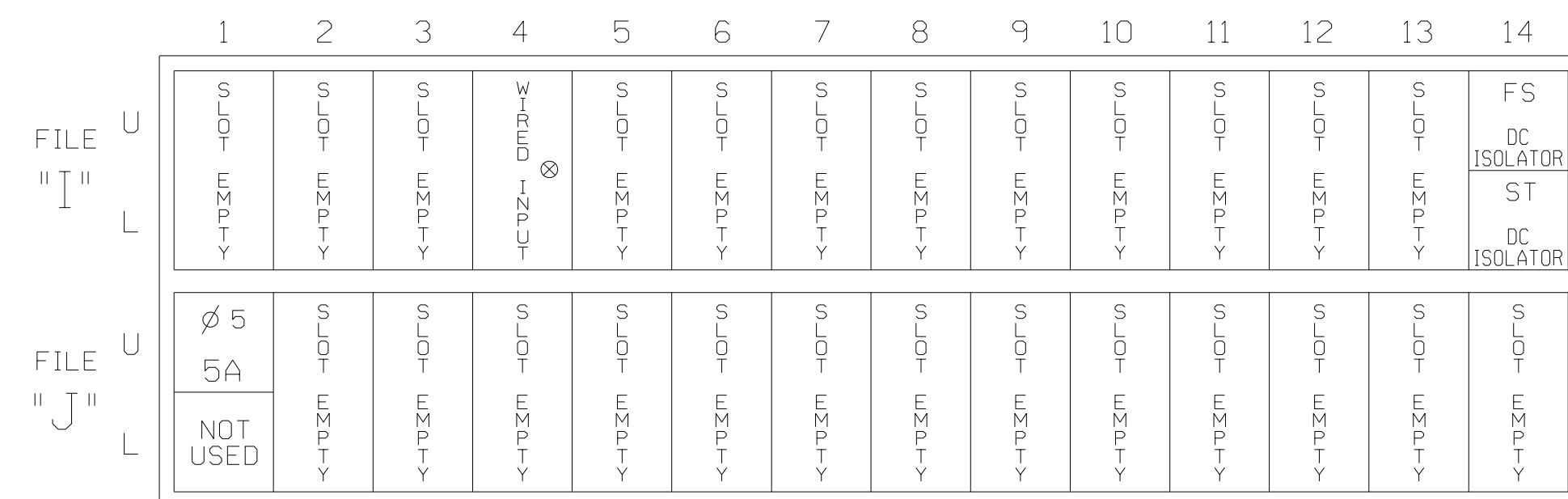
SIGNAL HEAD HOOK-UP CHART

| 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 | OLA | OLB | SPARE | OLC | OLD | OLF |
| SIGNAL HEAD NO. | NU | 21,22 | NU | NU | 42,43 | NU | 51 | 62,63 | NU | NU | 81,82 | NU | 61 | NU | NU | 51 | 41 | 23 |
| RED | | 128 | | | 101 | | | 134 | | | 107 | | | | | | | A104 |
| YELLOW | | 129 | | | 102 | | * | 135 | | | 108 | | | | | | | |
| GREEN | | 130 | | | 103 | | | 136 | | | 109 | | | | | | | |
| RED ARROW | | | | | | | | | | | | | A121 | | | A114 | A101 | |
| YELLOW ARROW | | | | | | | | | | | | | | A122 | | A115 | A102 | A105 |
| FLASHING YELLOW ARROW | | | | | | | | | | | | | | A123 | | A116 | A103 | A106 |
| GREEN ARROW | | | | | | | | 133 | | | | | | | | | | |
| Hand icon | | | | | | | | | | | | | | | | | | |
| Person icon | | | | | | | | | | | | | | | | | | |

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

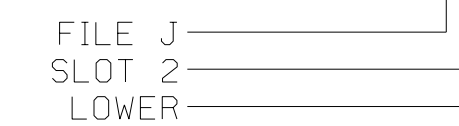
⊗ Wired Input - Do not populate slot with detector card

INPUT FILE CONNECTION & PROGRAMMING CHART

| LOOP NO. | LOOP TERMINAL | INPUT FILE POS. | PIN NO. | INPUT ASSIGNMENT NO. | DETECTOR NO. | NEMA PHASE | CALL | EXTEND | FULL TIME DELAY | STRETCH TIME | DELAY TIME |
|-----------------|---------------|-----------------|---------|----------------------|--------------|------------|------|--------|-----------------|--------------|------------|
| 5A ¹ | TB3-1,2 | J1U | 55 | 17 | 5 | 5 | Y | Y | | | 15 |
| | - | 14U | 47 | 9 ★ | 22 | 2 | Y | Y | Y | | 3 |
| | - | J1U | 55 | 17 ★ | 55 | 5 | Y | Y | | | 3 |

¹Add jumper from J1-W to 14-W, on rear of input file.
 ★ See Input Page Assignment programming details on sheet 4.

INPUT FILE POSITION LEGEND: J2L

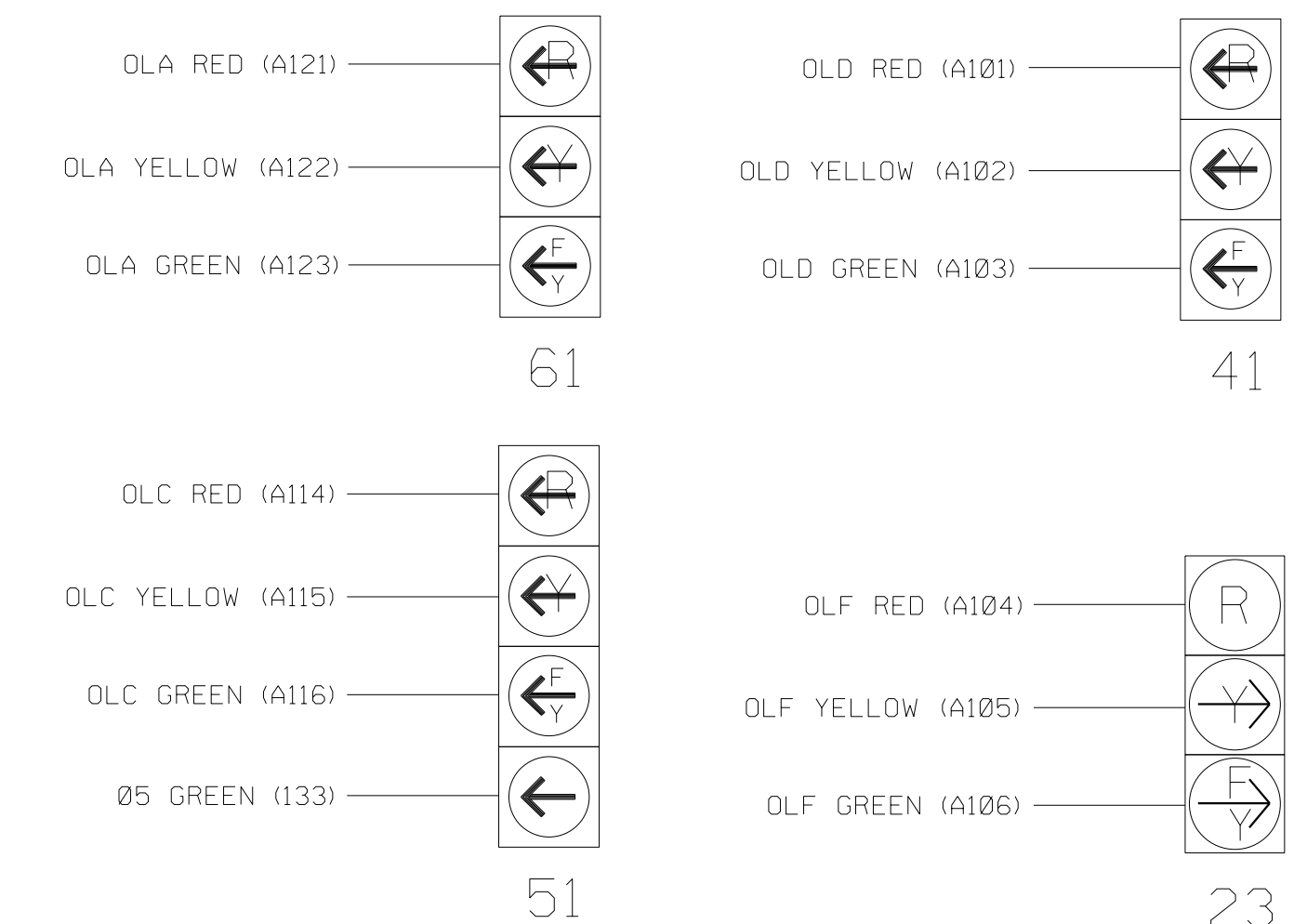


SPECIAL DETECTOR NOTES

- Install a video detection system 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.
- For detection zone 5A detector card placement and slots reserved for wired inputs are typical for a NCDOT installation. Inputs associated with these slots are compatible with time of day instructions located on sheet 4 of this electrical detail.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



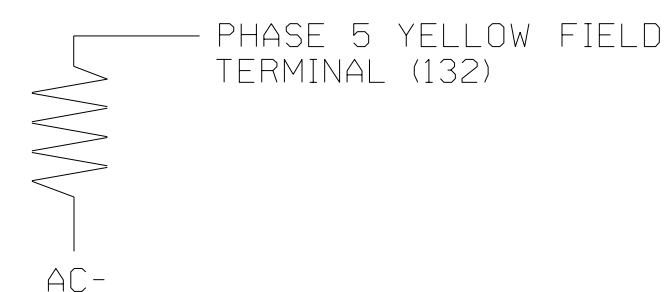
NOTE

The sequence display for signal head 51 requires special logic programming. See sheet 2 for programming instructions.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown below)

| 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: 09-11051
 DESIGNED: March 2023
 SEALED: April 25, 2023
 REVISED:

M M
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 Fuquay-Varina, NC 27526
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ELECTRICAL AND PROGRAMMING DETAILS FOR:

 750 N. Greenfield Pkwy, Garner, NC 27529

SR 1672 (Hanes Mill Rd) at US 52 NB Ramps
 Division 9 Forsyth County Winston-Salem
 PLAN DATE: March 2023 REVIEWED BY: RW Thompson
 PREPARED BY: LD Stouchko REVIEWED BY:
 REVISIONS: INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 032711
 RUSSELL W. THOMPSON
 Russell W. Thompson
 198803988404
 DATE
 SIG. INVENTORY NO. 09-110511

4/25/2023 6:30:35.0.DOC: 1246C_U-2729*Truff.cad: signal09-1105*260_160_0911105-20230425e1-11.dgn User: STDB627