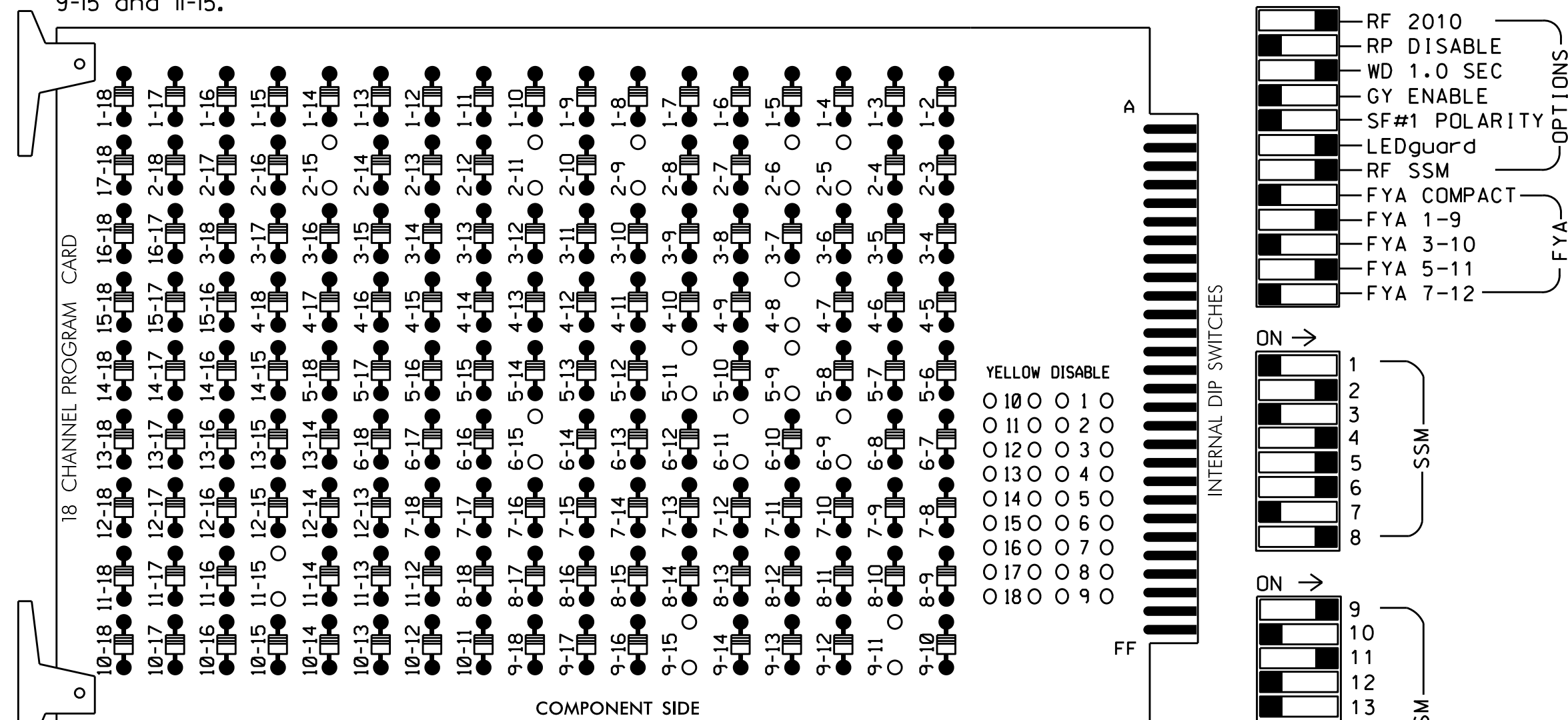


EDI MODEL 2018EClip-NC CONFLICT MONITOR

PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 2-5, 2-6, 2-9, 2-11, 2-15, 4-8, 5-9, 5-11, 6-9, 6-11, 6-15, 9-11, 9-15 and 11-15.



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 Red Enable is active at all times during normal operation.
- Ensure Conflict Monitor Ethernet port is connected to a Switch port located within the 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 Plans.
- Initialize database in Naztec 2070 local software (Apogee) as FULL-CALTRANS. This initialization should be done prior to programming controller.
- Initialize I/O "C1-C11-ABC IO Mode" to USER (MM 1-8-6). Then set "Init 2A" to MODE 5 (MM 1-8-9-3).
- Program phase 2 for Start Up In Green and phase 6 for Start Up In Walk.
- Program "Start Up Flash" for 0 sec. The conflict monitor will govern start-up flash time.
- Ensure "Local Flash Start" feature is set to "DRK".
- Program controller to provide a 1 second delay on the Flash Sense/Local Flash input. Use the following logic statement to provide this functionality:

```
FROM MAIN MENU->1->8->7 (I/O LOGIC)
Result Src.Fcn  } TimeOp Time
1208 = 01208    } DLY 1
```
- Program phases 4 and 8 for Dual Entry.
- The cabinet and controller are part of the City of Greensboro Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070
 CABINET.....332 W/ AUX
 SOFTWARE.....NAZTEC APOGEE
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 (12-STD, 6-AUX)
 LOAD SWITCHES USED.....S2,S5,S7,S8,S9,S11,AUX S1, AUX S4
 PHASES USED.....2,4,5,6,6 PED,8
 OVERLAP A.....*
 OVERLAP B.....NOT USED
 OVERLAP C.....NOT USED
 OVERLAP D.....NOT USED
 * See Overlap Programming Detail Sheet 2.

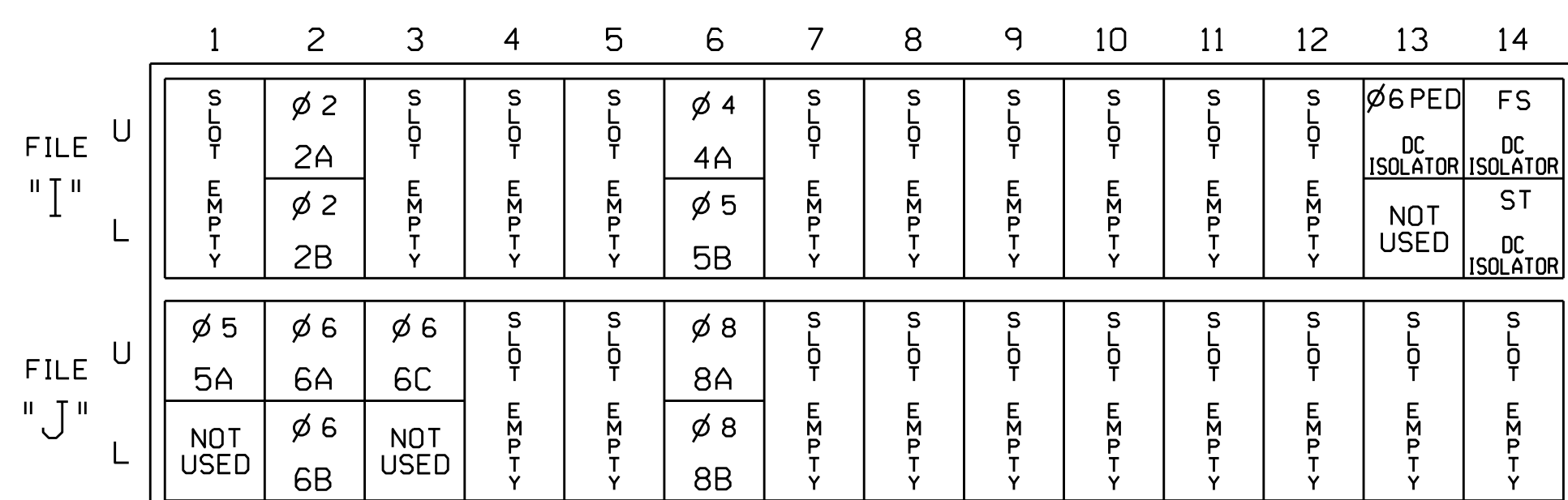
SIGNAL HEAD HOOK-UP CHART

| 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 | OLA | OLB | SPARE | OLC | OLD | SPARE |
| SIGNAL HEAD NO. | NU | 21,22 | NU | NU | 41,42 | NU | 42 | 51 | 62,63 | P61, P62 | NU | 81,82 | NU | 61 | NU | 51 | NU | NU |
| RED | | 128 | | | 101 | | * | | 134 | | | 107 | | | | | | |
| YELLOW | | 129 | | | 102 | | | | 135 | | | 108 | | | | | | |
| GREEN | | 130 | | | 103 | | | | 136 | | | 109 | | | | | | |
| RED ARROW | | | | | | | | | | | | | | | | A121 | | A114 |
| YELLOW ARROW | | | | | | | | | 132 | | | | | | | A122 | | A115 |
| FLASHING YELLOW ARROW | | | | | | | | | | | | | | | | A123 | | A116 |
| GREEN ARROW | | | | | | | | | 133 | 133 | | | | | | | | |
| Hand | | | | | | | | | | | | | 119 | | | | | |
| Person | | | | | | | | | | | | | | | | | | 121 |

NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 ★ See pictorial of head wiring in detail below.

INPUT FILE POSITION LAYOUT

(from view)



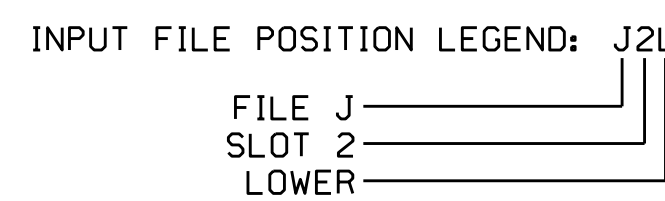
EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
 ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

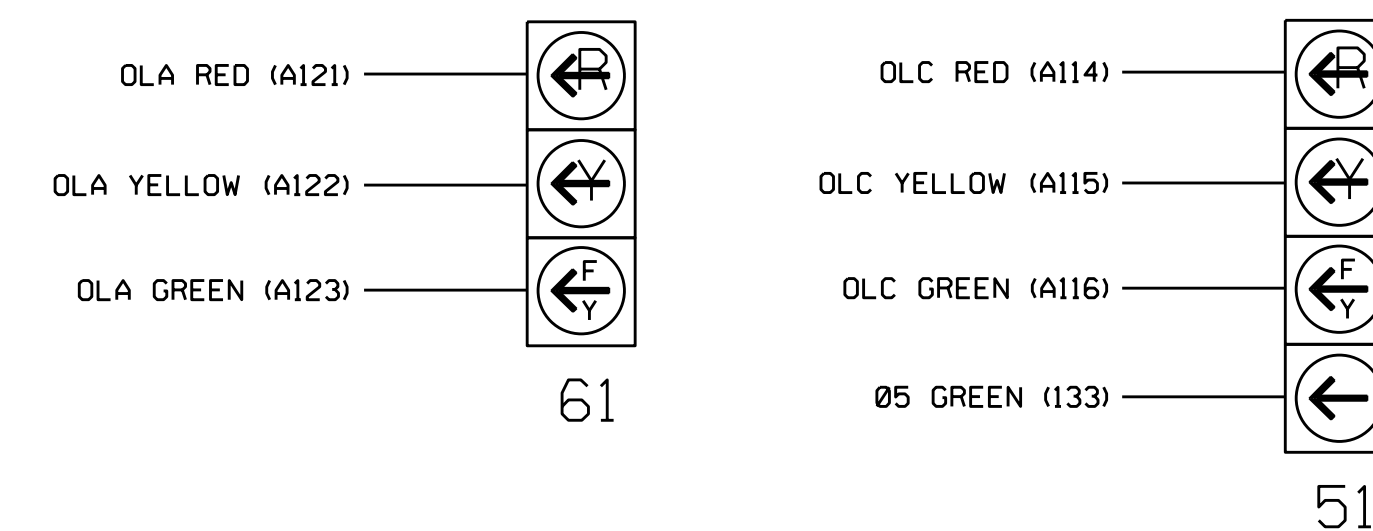
| LOOP NO. | LOOP TERMINAL | INPUT FILE POS. | PIN NO. | DETECTOR NO. | CALL PHASE | SWITCH | DELAY TIME | EXTEND TIME | CALL | EXTEND | ADDED INIT. |
|------------------|---------------|-----------------|---------|--------------|------------|--------|------------|-------------|------|--------|-------------|
| 2A | TB2-5,6 | I2U | 39 | 2 | 2 | | | | X | X | X |
| 2B | TB2-7,8 | I2L | 43 | 3 | 2 | | | | X | X | X |
| 4A | TB4-9,10 | I6U | 41 | 8 | 4 | | | | X | X | |
| 5A | TB3-1,2 | J1U | 55 | 15 | 5 | | 15 | | X | X | |
| 5B | TB4-11,12 | I6L | 45 | 9 | 5 | | 15 | | X | X | |
| 6A | TB3-5,6 | J2U | 40 | 16 | 6 | | | | X | X | X |
| 6B | TB3-7,8 | J2L | 44 | 17 | 6 | | | | X | X | X |
| 6C | TB3-9,10 | J3U | 64 | 18 | 6 | | | | X | X | |
| 8A | TB5-9,10 | J6U | 42 | 22 | 8 | | | | X | X | |
| 8B | TB5-11,12 | J6L | 46 | 23 | 8 | | 10 | | X | X | |
| PED PUSH BUTTONS | | | | | | | | | | | |
| P61,P62 | TB8-7,9 | I13U | 68 | PED 6 | 6 PED | | | | | | |

NOTE:
 INSTALL DC ISOLATORS IN INPUT FILE SLOT 113.



FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



COUNTDOWN PEDESTRIAN SIGNAL OPERATION

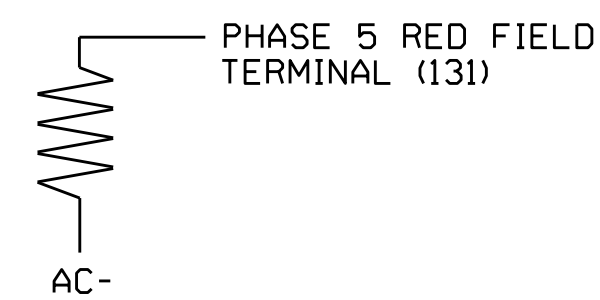
Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: GBO-559T1
 DESIGNED: October 2017
 SEALED: 10/31/2017
 REVISED:

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

| VALUE (ohms) | WATTAGE |
|--------------|-----------|
| 1.5K - 1.9K | 25W (min) |
| 2.0K - 3.0K | 10W (min) |



Electrical Detail - Temp 1 - Sheet 1 of 3

Prepared In the Offices of:
 GULF TRANSPORTATION MOBILITY AND SAFETY DISTRICT
 DIVISION OF TRANSPORTATION AND SIGNAL MANAGEMENT SYSTEMS

750 N. Greenfield Pkwy, Garner, NC 27529

DETAILS FOR: N. Elm Street at United Health Care and Lake Jeanette Office Park

Division 7 Guilford County Greensboro

PLAN DATE: October 2017 REVIEWED BY: T. Joyce

PREPARED BY: C. Strickland REVIEWED BY:

REVISIONS INIT. DATE

DocuSigned by: D. Todd Joyce 11/2/2017

SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIG. INVENTORY NO. GBO-559T1

C:\1400-2017_1450_S:\MITSAS\1450_S:\Signal\work\hgr\output\sig\Map\511\ck\lanc\gbo-559_sml.e_l_xxx.dgn
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