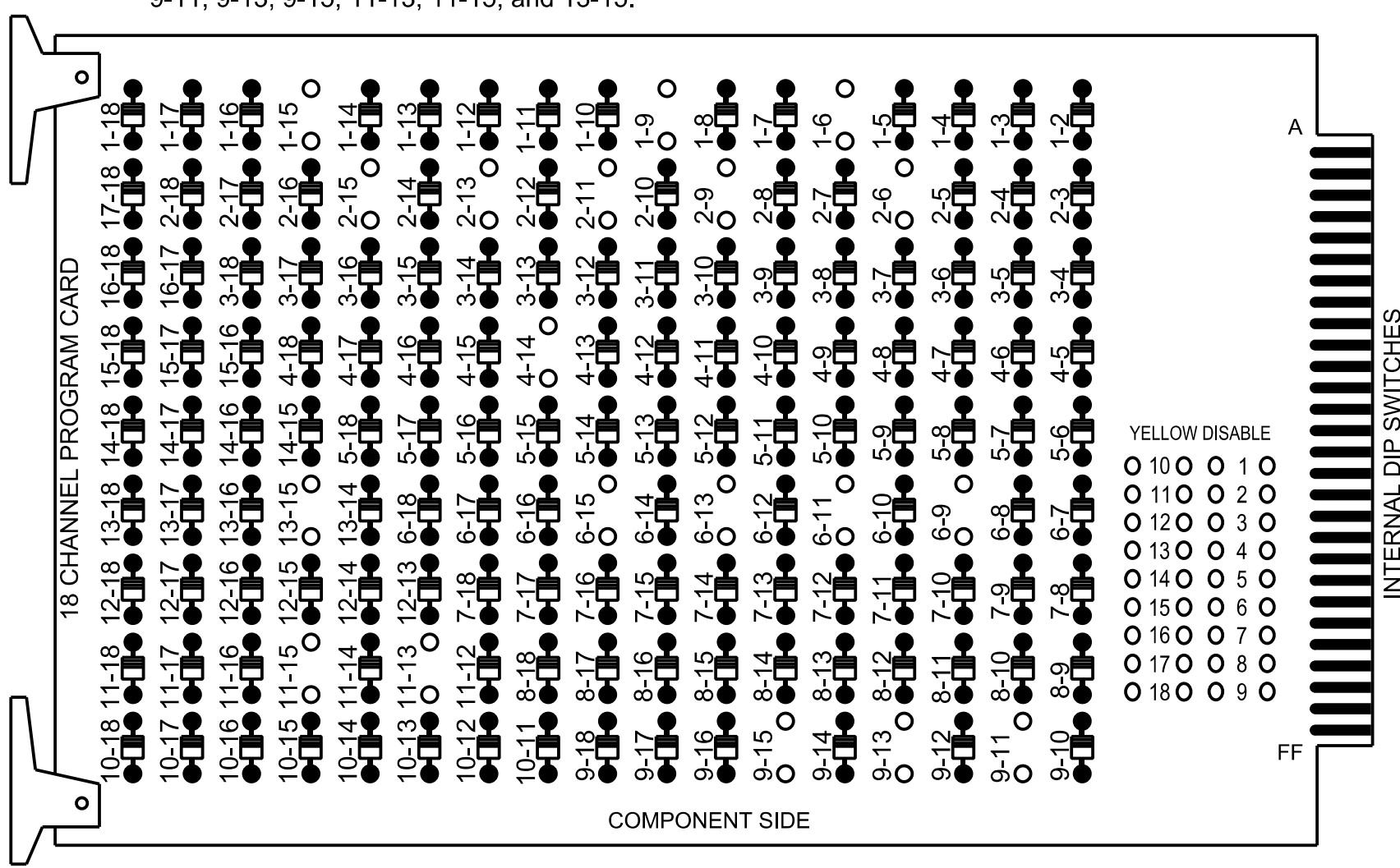


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

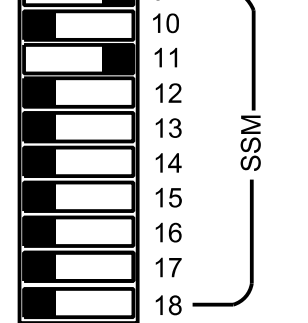
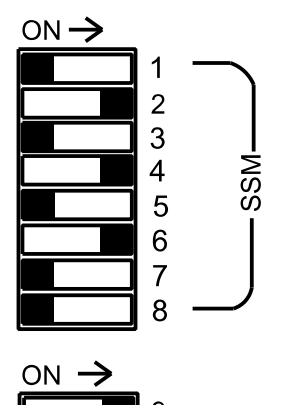
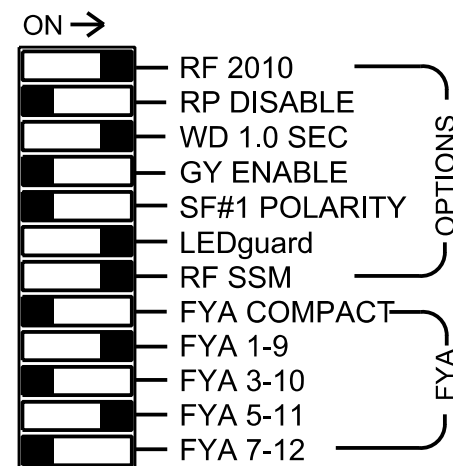
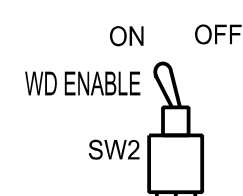
REMOVE DIODE JUMPERS 1-6, 1-9, 1-15, 2-6, 2-9, 2-11, 2-13, 2-15, 4-14, 6-9, 6-11, 6-13, 6-15, 9-11, 9-13, 9-15, 11-13, 11-15, and 13-15.



REMOVE JUMPERS AS SHOWN

NOTES:

- 1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that the Red Enable is active at all times during normal operation.
4. Integrate monitor with Ethernet network in cabinet.



■ = DENOTES POSITION OF SWITCH

NOTES

- 1. 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.
2. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all enabled detectors used at this location.
4. The cabinet and controller are part of Signal System #D08-29_Asheboro, US 64 Bus-NC 49 (Asheboro).

SIGNAL HEAD HOOK-UP CHART

Table with columns for LOAD SWITCH NO., S1-S12, AUX S1-S6, PHASE, SIGNAL HEAD NO., and signal colors (RED, YELLOW, GREEN, RED ARROW, YELLOW ARROW, FLASHING YELLOW ARROW, GREEN ARROW). Includes pedestrian and hand icons.

NU = Not Used

★ Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail this sheet.

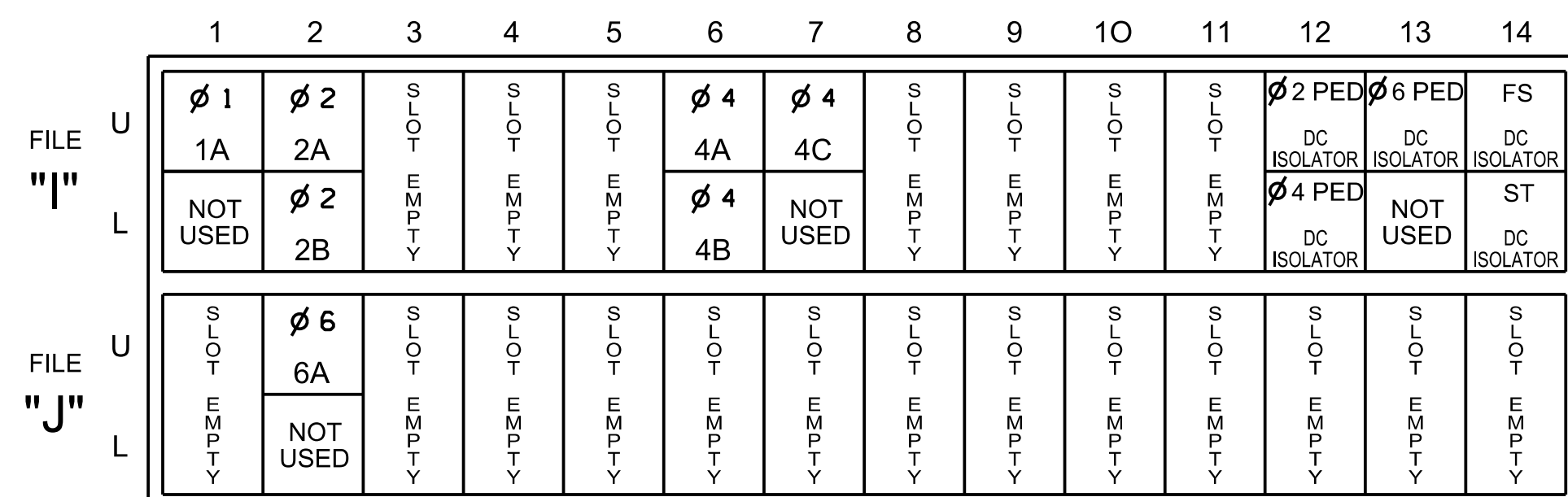
EQUIPMENT INFORMATION

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,S5,S6,S8,S9
AUX S1, AUX S4
Phases Used.....1,2,2 PED,4,4 PED,6,6 PED
Overlap "1".....*
Overlap "2".....Not Used
Overlap "3".....*
Overlap "4".....Not Used

*See overlap programming detail on sheet 2

INPUT FILE POSITION LAYOUT

(front view)



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

FS = FLASH SENSE
ST = STOP TIME

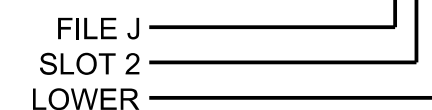
INPUT FILE CONNECTION & PROGRAMMING CHART

Table with columns for LOOP NO., LOOP TERMINAL, INPUT FILE POS., PIN NO., INPUT POINT, DETECTOR NO., CALL PHASE, DELAY TIME, EXTEND TIME, EXTEND, ADDED INITIAL, CALL, and DELAY DURING GREEN.

NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.

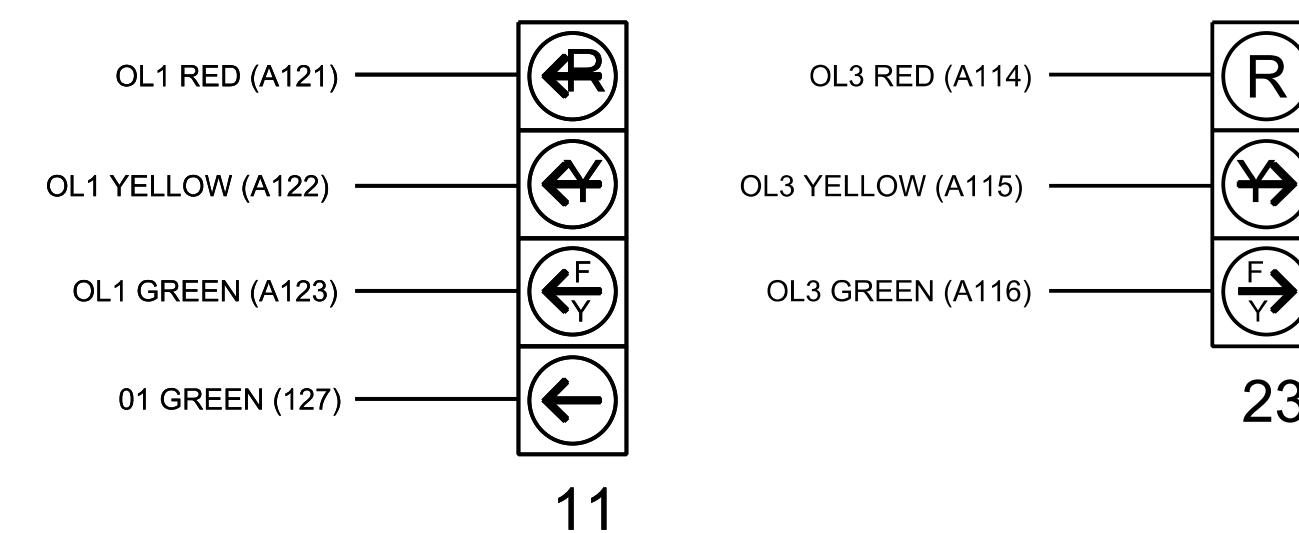
★ For the detectors to work as shown on the signal design plan, see the Detector Programming Detail for Alternate Phasing on Sheet 2.

INPUT FILE POSITION LEGEND: J2L



FYA SIGNAL WIRING DETAIL

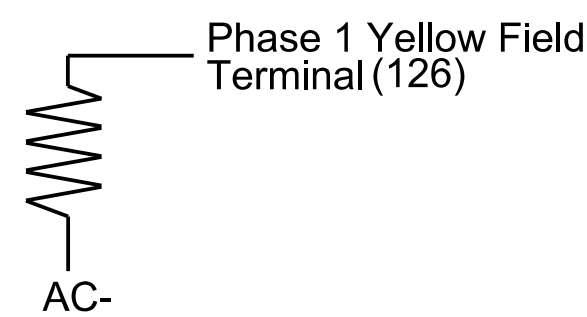
(wire signal heads as shown)



LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown)

Table with columns for ACCEPTABLE VALUES, Value (ohms), and Wattage. Values: 1.5K - 1.9K, 25W (min); 2.0K - 3.0K, 10W (min).



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.

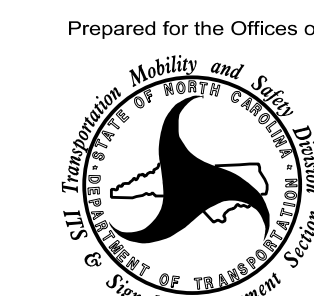


HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

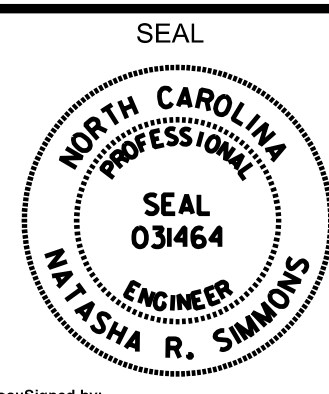
Signal Upgrade - Final Design
Electrical Detail - Sheet 1 of 3

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:



NC 49 (Albemarle Rd) at I-73-US 220 SB Ramps/ I-74 EB Ramps
Randolph County
Division 8



Prepared by: N.K. Vianich, August 2021
Reviewed by: A.D. Klinksiek, August 2021

Table with columns for REVISIONS, INIT., and DATE.

DocuSigned by:
Melissa R. Simmons
5/21/2024
SIG. INVENTORY NO. 08-0502