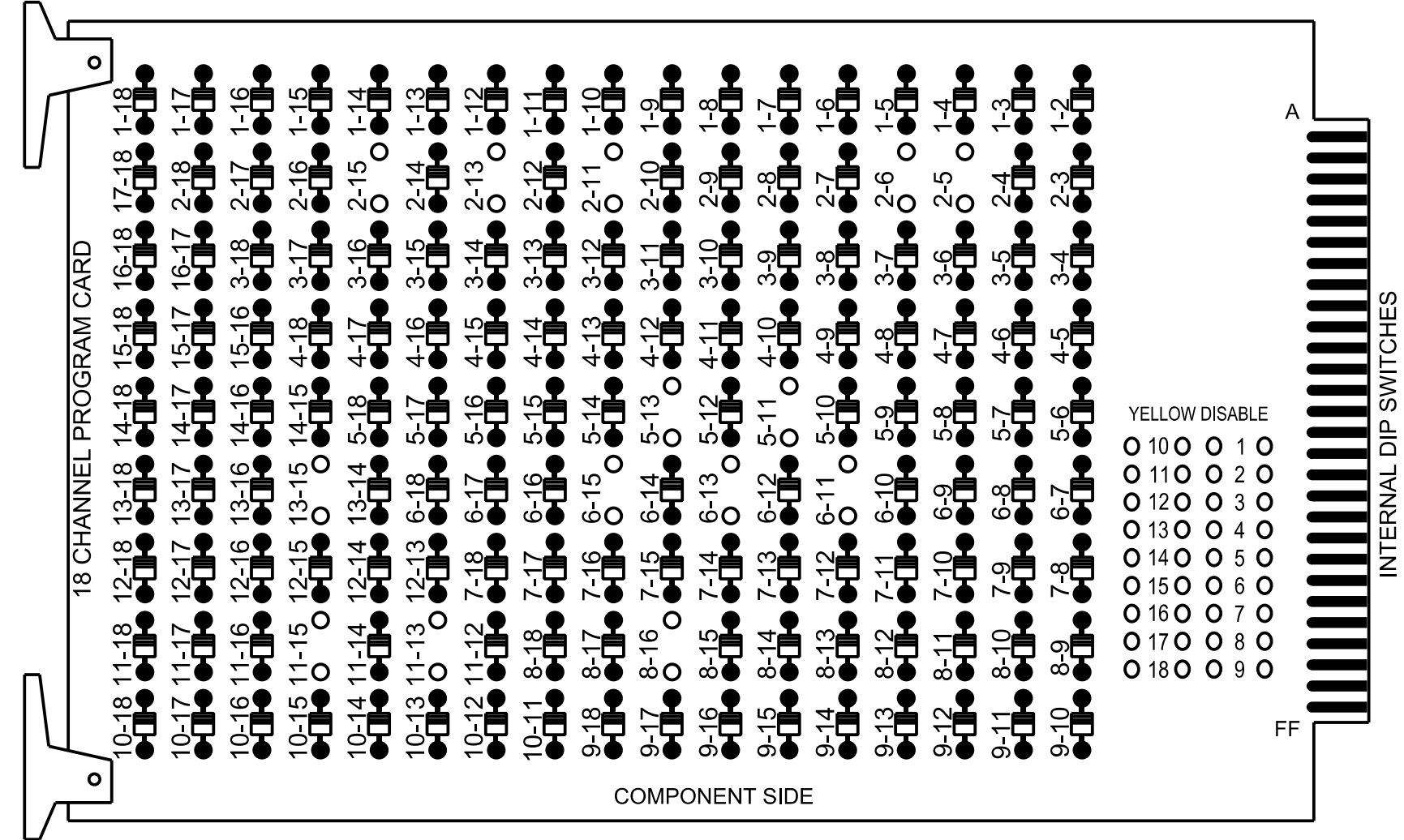


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

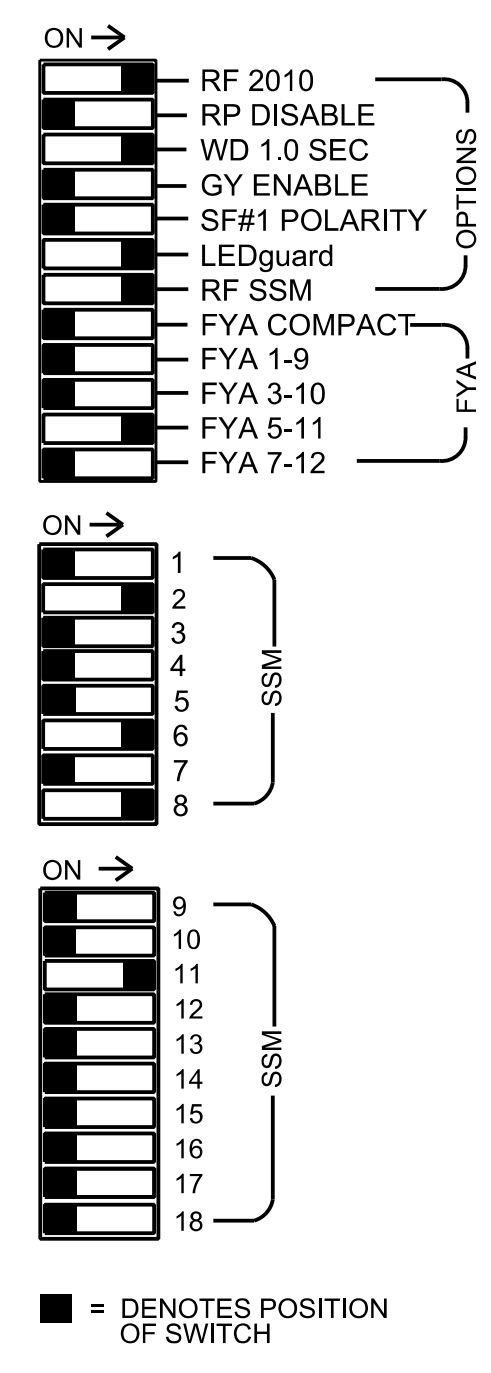
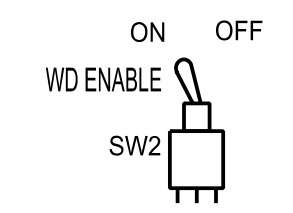
REMOVE DIODE JUMPERS 2-5, 2-6, 2-11, 2-13, 2-15, 5-11, 5-13, 6-11, 6-13, 6-15, 8-16, 11-13, 11-15, and 13-15.



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.



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).

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.....S2,S3,S7,S8,S9,S11,S12,AUX S4
 Phases Used.....2,2 PED,5,6,6 PED,8,8 PED
 Overlap "1".....Not Used
 Overlap "2".....Not Used
 Overlap "3".....*
 Overlap "4".....Not Used

*See overlap programming detail on sheet 2

SIGNAL HEAD HOOK-UP CHART

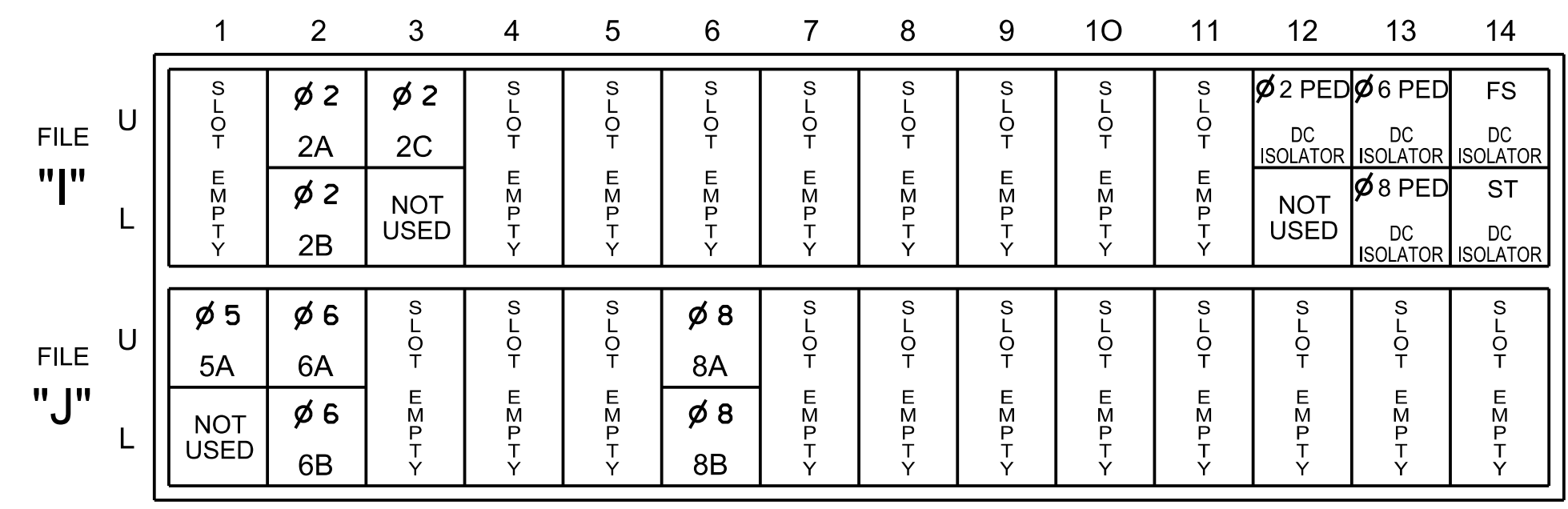
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6			
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18			
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE			
SIGNAL HEAD NO.	NU	21,22	23	P21, P22	NU	NU	NU	51*	61,62	P61, P62	NU	81,82	P81, P82	NU	NU	NU	51*	NU	NU		
RED		128	128																		
YELLOW		129	129					*	135												
GREEN		130																			
RED ARROW																				A114	
YELLOW ARROW																					A115
FLASHING YELLOW ARROW																					A116
GREEN ARROW			130					133	136												
Hand																					
Person																					

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

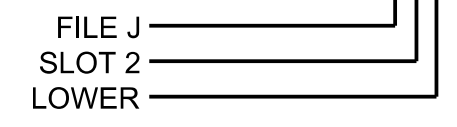
INPUT FILE CONNECTION & PROGRAMMING CHART

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
2A	TB2-5,6	I2U	39	1	2	2				X	X	
2B	TB2-7,8	I2L	43	5	3	2				X	X	
2C	TB2-9,10	I3U	63	29	4	2				X	X	
5A	TB3-1,2	J1U	55	17	15*	5	15			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				X	X	
8B	TB5-11,12	J6L	46	8	23	8				X	X	
PED PUSH BUTTONS												
P21,P22	TB8-4,6	I12U	67	33	2	PED 2						
P61,P62	TB8-7,9	I13U	68	34	6	PED 6						
P81,P82	TB8-8,9	I13L	70	36	8	PED 8						

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

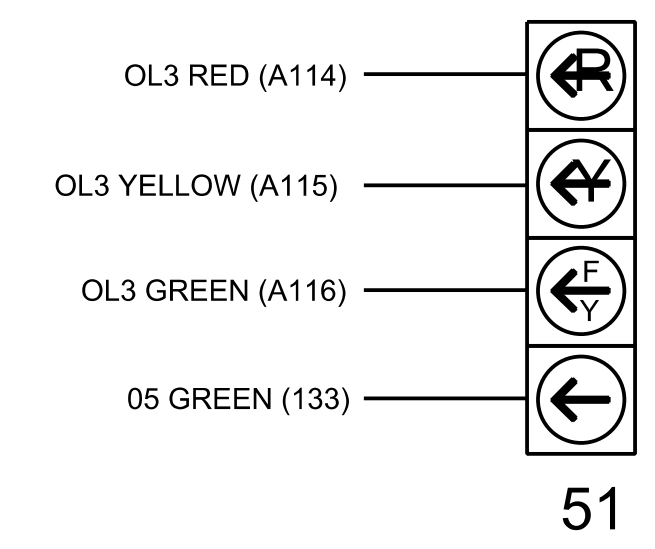
* For the detectors to work as shown on the signal design plan, see the Detector Programming Detail for Alternate Phasing on Sheet 2.

INPUT FILE POSITION LEGEND: J2L



FYA SIGNAL WIRING DETAIL

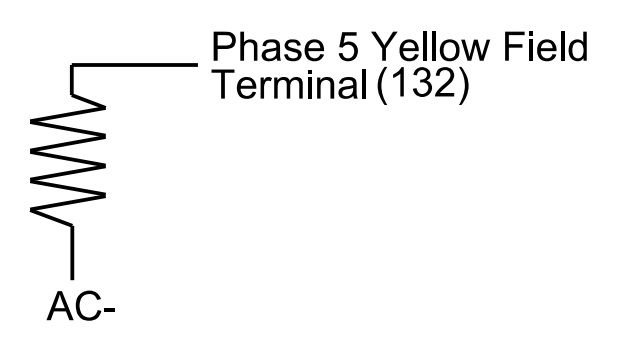
(wire signal heads as shown)



LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
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: US 64 Bus./NC 49 (Dixie Drive) at I-73-US 220 NB/I-74 WB/ NC 49 SB Ramps

Division 8 Randolph County Asheboro

Plan Date: August 2021 Reviewed By: A.D. Klinksiek
 Prepared By: N.K. Vianich Reviewed By: N.R. Simmons

750 N. Greenfield Pkwy, Garner, NC 27529

DocuSigned by: *Natasha R. Simmons* 5/21/2024

SIG. INVENTORY NO. 08-0501