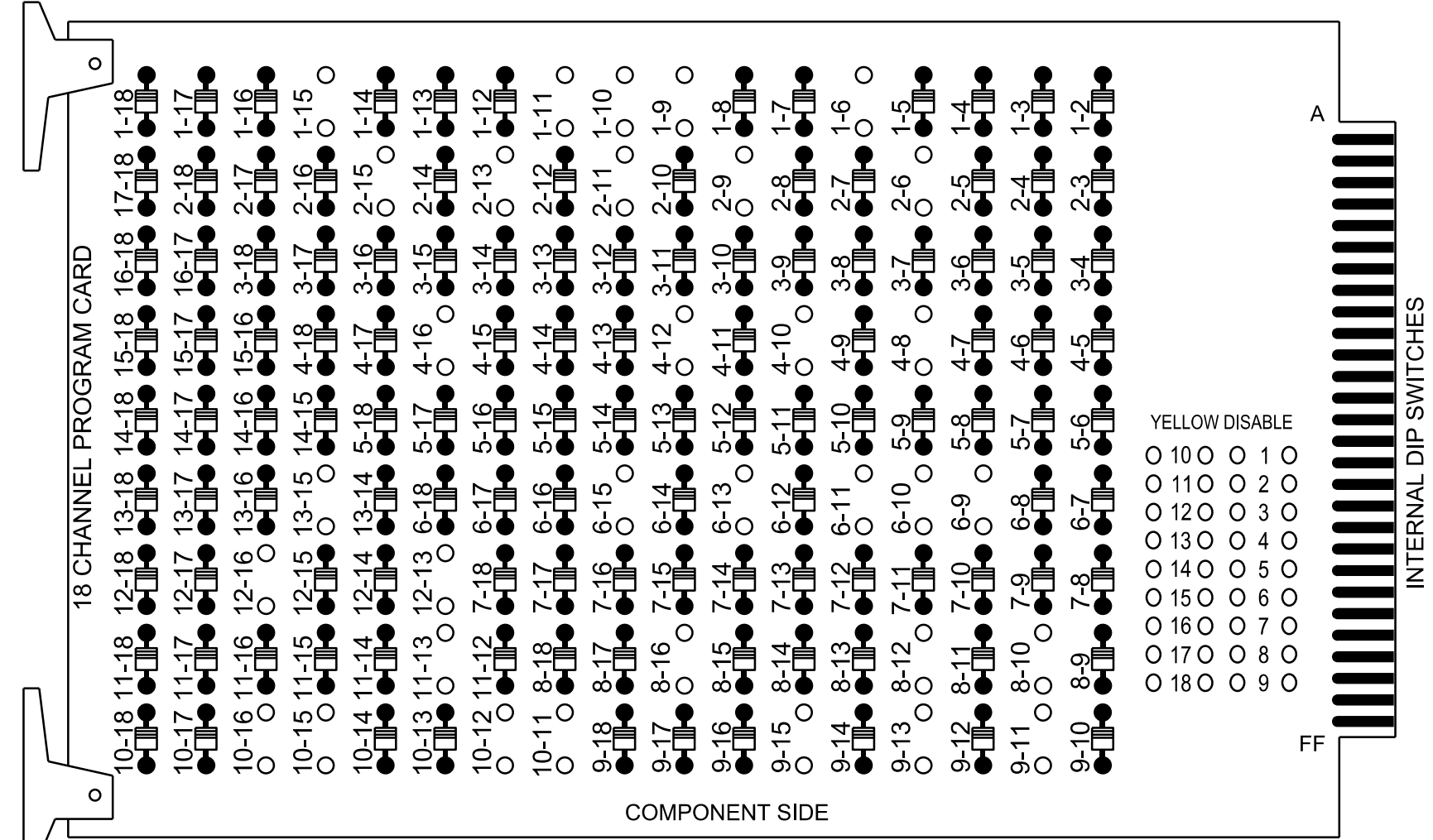


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

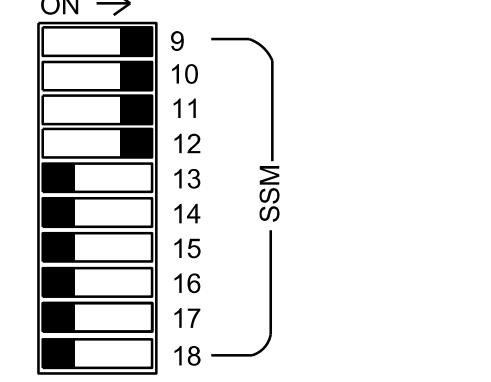
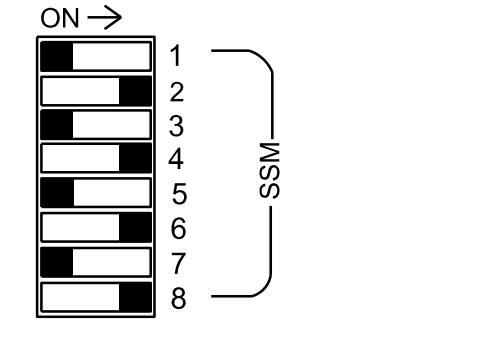
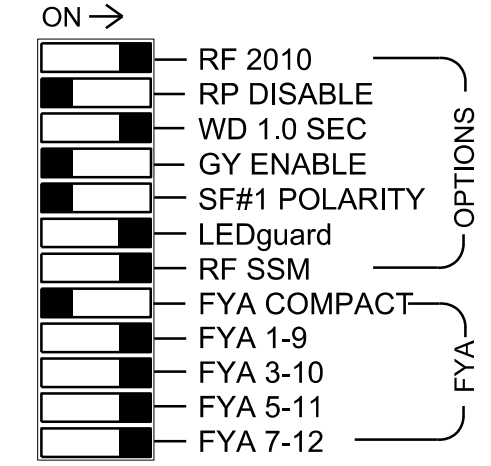
REMOVE DIODE JUMPERS 1-6, 1-9, 1-10, 1-11, 1-15, 2-6, 2-9, 2-11, 2-13, 2-15, 4-8, 4-10, 4-12, 4-16, 6-9, 6-10, 6-11, 6-13, 6-15, 8-10, 8-12, 8-16, 9-11, 9-13, 9-15, 10-11, 10-12, 10-15, 10-16, 11-13, 12-13, 12-16 AND 13-15.



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 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 phases 4 and 8 for Dual Entry.
- Program controller to start up in phase 2 Green Walk and 6 Green Walk.
- 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 D14-12 Waynesville Signal System.

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, S3, S5, S8, S9, S11, S12, AUX S1, AUX S2, AUX S4, AUX S5
 Phases Used.....1, 2, 2PED, 4, 6, 6PED, 8, 8PED
 Overlap "1".....*
 Overlap "2".....*
 Overlap "3".....*
 Overlap "4".....*

*See overlap programming detail on sheet 2

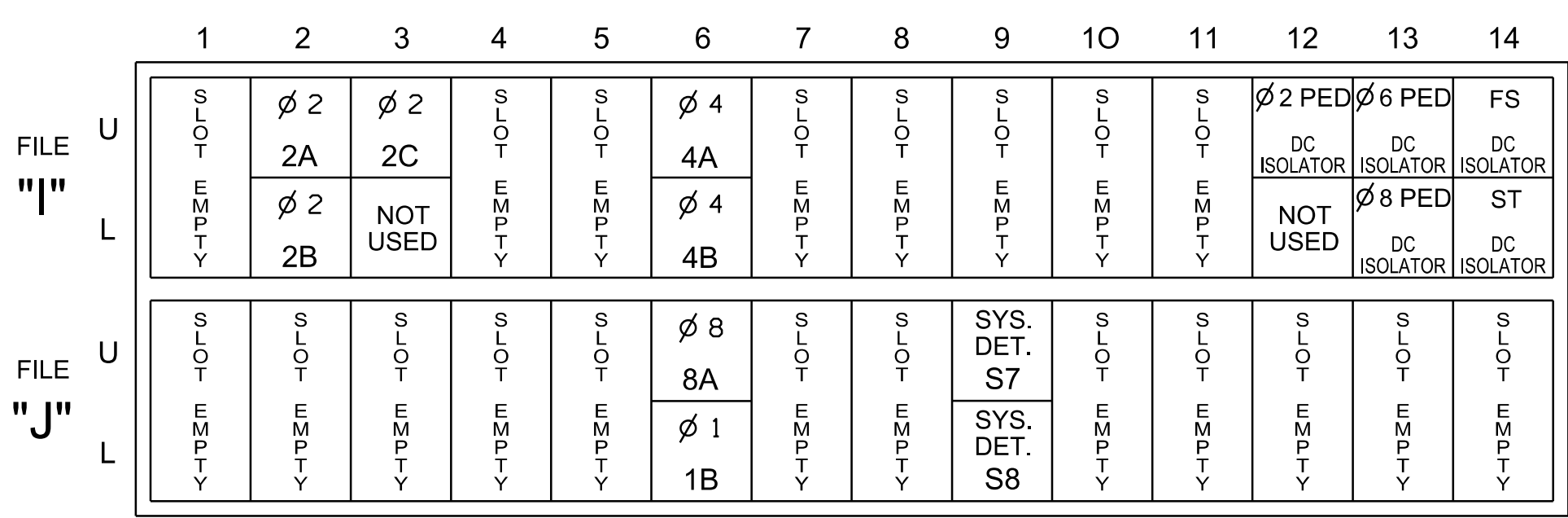
SIGNAL HEAD HOOK-UP CHART

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.	11*	22,23	P21, P22	NU	41,42	NU	NU	61,62	P61, P62	NU	81,82	P81, P82	11*	83*	NU	21*	43*	NU
RED		128			101				134			107			A124			A101
YELLOW	*	129			102				135			108						
GREEN		130			103				136			109						
RED ARROW															A121		A114	
YELLOW ARROW															A122	A125	A115	A102
FLASHING YELLOW ARROW															A123	A126	A116	A103
GREEN ARROW	127																	
Hand																		
Walking																		

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

SPECIAL DETECTOR NOTE

For detection zones 1A, 6A, 6B, S5, S6, 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.

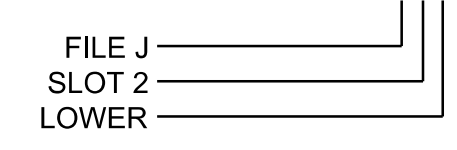
INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	QUEUE	CALL	DELAY DURING GREEN
1B	TB5-11,12	J6L	46	8	23	1	10		X			X	
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	
4A	TB4-9,10	I6U	41	3	8	4	3		X			X	
4B	TB4-11,12	I6L	45	7	9	4	10		X			X	
8A	TB5-9,10	J6U	42	4	22	8	3		X			X	
*S7	TB7-9,10	J9U	59	21	27								
*S8	TB7-11,12	J9L	61	23	28								
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							

*System detector only. Remove any assigned vehicle phase.

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

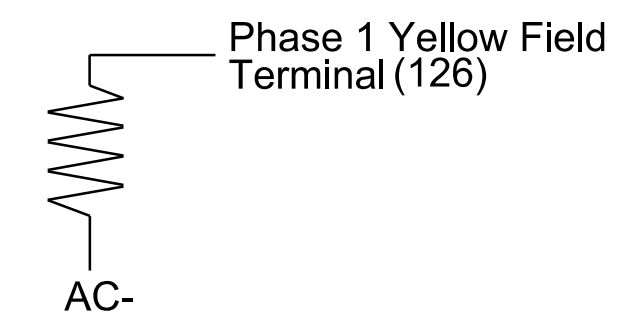
INPUT FILE POSITION LEGEND: J2L



LOAD RESISTOR INSTALLATION DETAIL

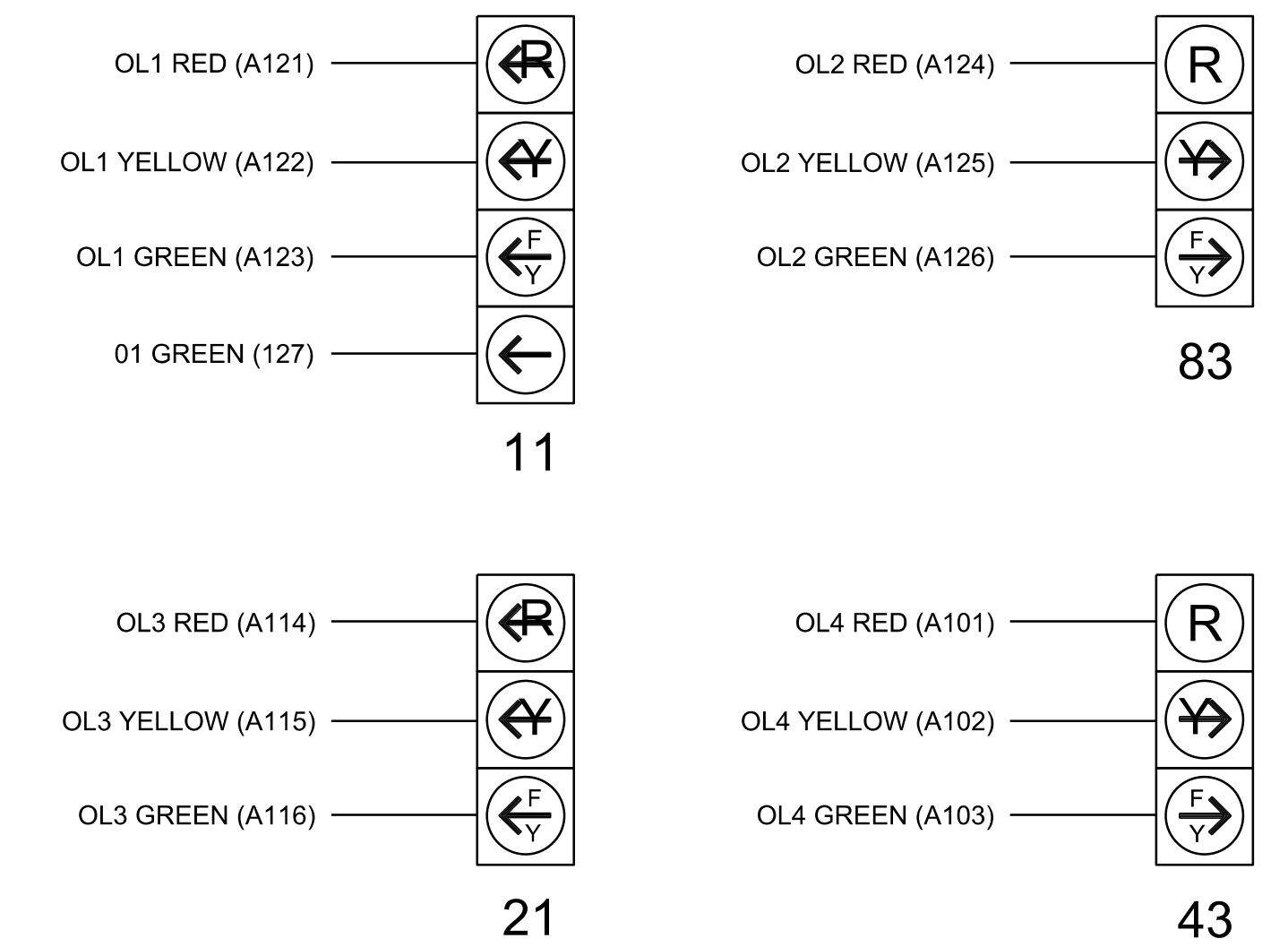
(install resistor as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 14-0685
 DESIGNED: Apr 2023
 SEALED: 04/11/2023
 REVISED: N/A

Electrical Detail - Sheet 1 of 2
 Final Design



Prepared For:

750 N. Greenfield Pkwy, Garner, NC 27529

US 276 (Russ Avenue) at West Marshall Street / Bank Drive
 Division 14 Haywood County Waynesville

PLAN DATE: April 2023 REVIEWED BY: WJ Hamilton
 PREPARED BY: TS Popelka RKA PROJ. NO: 16085 (040)

REVISIONS	INIT.	DATE

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 32396
 WILLIAM J. HAMILTON
 04/11/2023
 DATE
 SIGNATURE
 SIG. INVENTORY NO. 14-0685