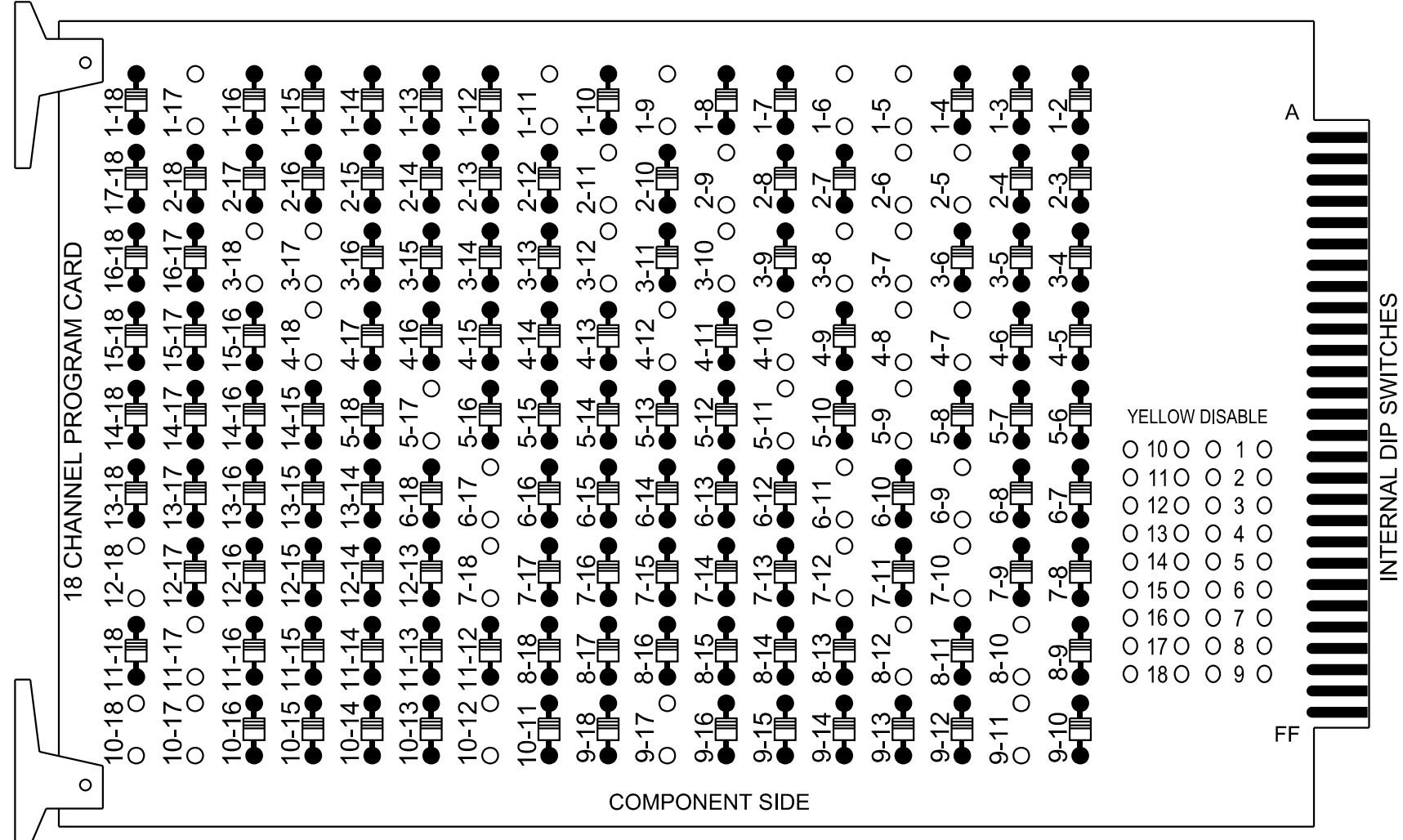


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 1-17, 2-5, 2-6, 2-9, 2-11, 3-7, 3-8, 3-10, 3-12, 3-17, 3-18, 4-7, 4-8, 4-10, 4-12, 4-18, 5-9, 5-11, 5-17, 6-9, 6-11, 6-17, 7-10, 7-12, 7-18, 8-10, 8-12, 9-11, 9-17, 10-12, 10-17, 10-18, 11-17, and 12-18.



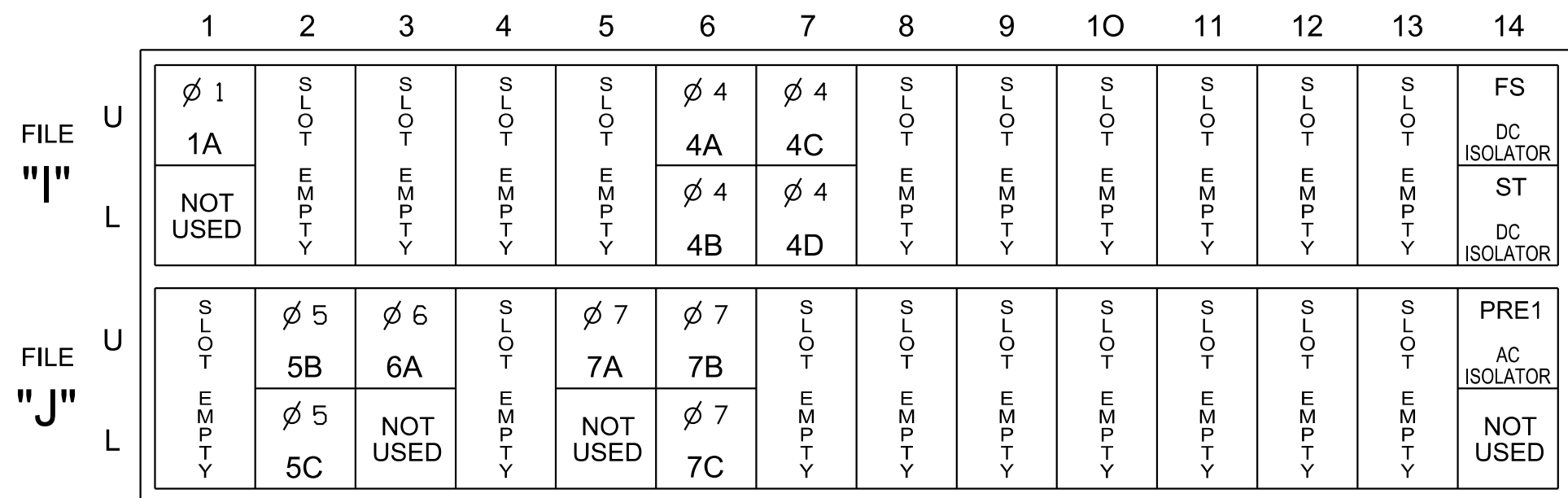
REMOVE JUMPERS AS SHOWN

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 the Red Enable is active at all times during normal operation.
- Integrate monitor with Ethernet network in cabinet.

INPUT FILE POSITION LAYOUT

(front view)

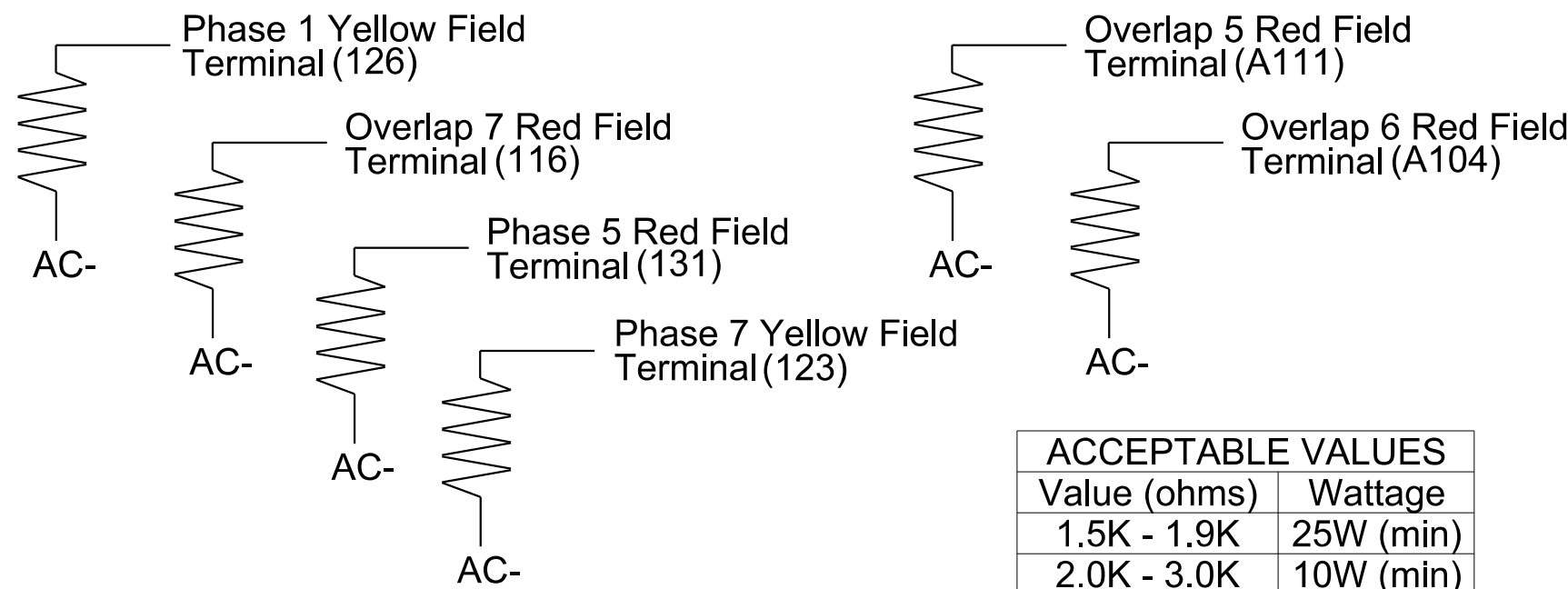


EX : 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME
PRE = PREEMPT

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)



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

NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program phases 2, 6, and 40 for Min Veh Recall.
- Program phases 4 and 8 for Dual Entry.
- Program phases 9 and 39 for No Startup Veh Call.
- Program controller to start up in phase 2 Green No Walk, 6 Green No Walk, 9 Phase Not On, 39 Phase Not On, and 40 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.

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,S4,S5,S7,S8,S10,S11,AUX S1,
AUX S2,AUX S3,AUX S4,AUX S5,AUX S6
Phases Used.....1,2,3,4,5,6,7,8,9**,39**,40**
Overlap "1".....*
Overlap "2".....*
Overlap "3".....*
Overlap "4".....*
Overlap "5".....*
Overlap "6".....*
Overlap "7".....*

*See overlap programming detail on sheet 2.

**Phase used for preemption timing purposes only.

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
1A	TB2-1,2	I1U	56	18 -	1 29	1 6	15.0 3.0		X X		X X	
4A	TB4-9,10	I6U	41	3	8	4			X		X	
4B	TB4-11,12	I6L	45	7	9	4			X		X	
4C	TB6-1,2	I7U	65	31	10	4			X		X	
4D	TB6-3,4	I7L	78	44	11	4	5.0		X		X	
5B	TB3-5,6	J2U	40	2	16	5	15.0		X		X	
5C	TB3-7,8	J2L	44	6	17	5	10.0		X		X	
6A	TB3-9,10	J3U	64	30	18	6			X	X	X	
7A	TB5-5,6	J5U	57	19 -	21 32	7 4	15.0 3.0		X X		X X	
7B	TB5-9,10	J6U	42	4	22	7	3.0		X		X	
7C	TB5-11,12	J6L	46	8	23	7	3.0		X		X	

INPUT FILE POSITION LEGEND: J2L

FILE J
SLOT 2
LOWER

SPECIAL DETECTOR NOTE

For zones 1B, 2A, 3A, 5A, & 8A, install a video 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.

PLANS PREPARED IN THE OFFICE OF:
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Raleigh, NC 27601
(919) 677-2000

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	OL7		4	4 PED	5		6	6 PED	7	8	8 PED	OL1	OL2	OL5	OL3	OL4	OL6
SIGNAL HEAD NO.	11★	21,22	NU	22	31★	41,42	NU	42	51★	61,62	NU	71★	81,82	NU	11★	31★	82	51★	71★	62
RED	-	128	-	★	-	101	-	★	-	134	-	-	107	-	-	-	★	-	-	★
YELLOW	★	129	-	-	-	102	-	-	-	135	-	★	108	-	-	-	-	-	-	-
GREEN	-	130	-	-	-	103	-	-	-	136	-	-	109	-	-	-	-	-	-	-
RED ARROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A121	A124	-	A114	A101	-
YELLOW ARROW	-	-	-	117	-	-	-	132	-	-	-	-	-	-	A122	A125	A112	A115	A102	A105
FLASHING YELLOW ARROW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A123	A126	-	A116	A103	-
GREEN ARROW	127	-	-	118	118	-	-	133	133	-	-	124	-	-	-	-	A113	-	-	A106

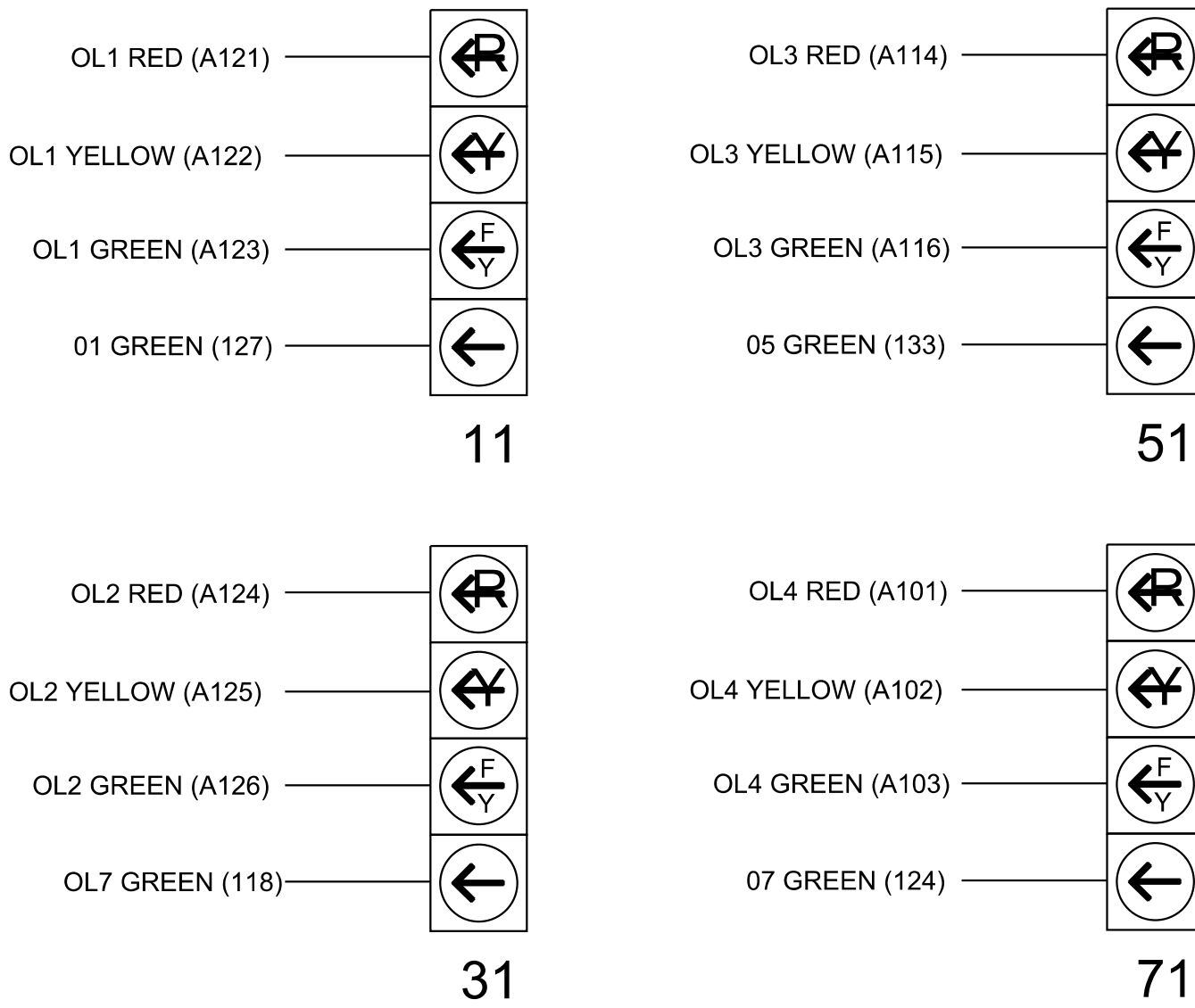
NU = Not Used

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

* See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



Electrical Detail - Temporary Design 2
Sheet 1 of 3

ELECTRICAL AND PROGRAMMING DETAILS FOR:	NC 66/SR 2377 (W. Mountain St.)	
	at NC 66 (Old Hollow Road) and SR 2649 (Hopkins Road)	
Division 9	Forsyth County	Kernersville
PLAN DATE: August 2024	REVIEWED BY: KP Baumann	
PREPARED BY: CF Davis	REVIEWED BY:	
REVISIONS	INIT.	DATE
750 N.Greenfield Pkwy, Garner, NC 27529		
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 044434 KELVIN P. BAUMANN 7/14/2025 SIGNATURE DATE S16. INVENTORY NO. 09-056712		