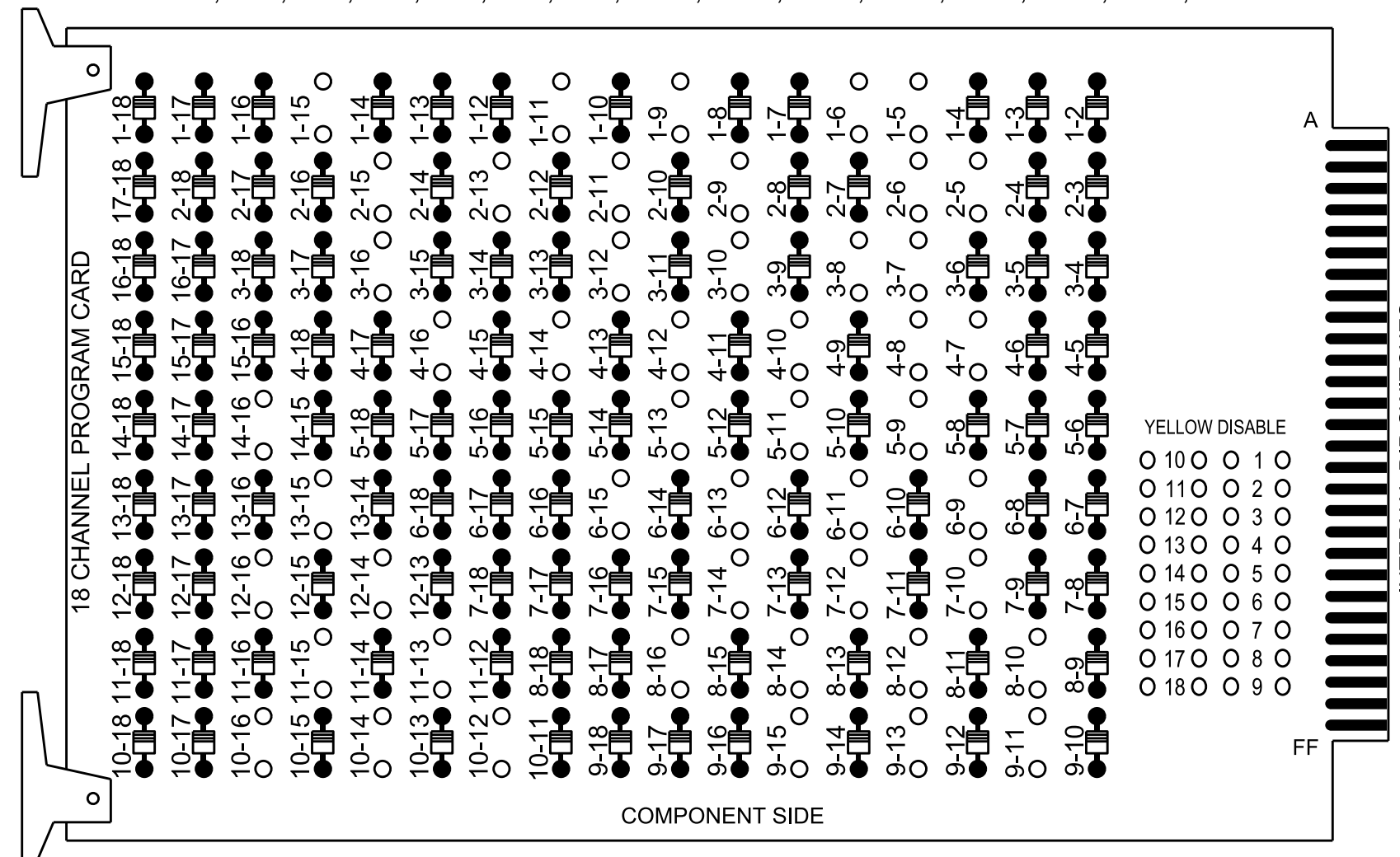


18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

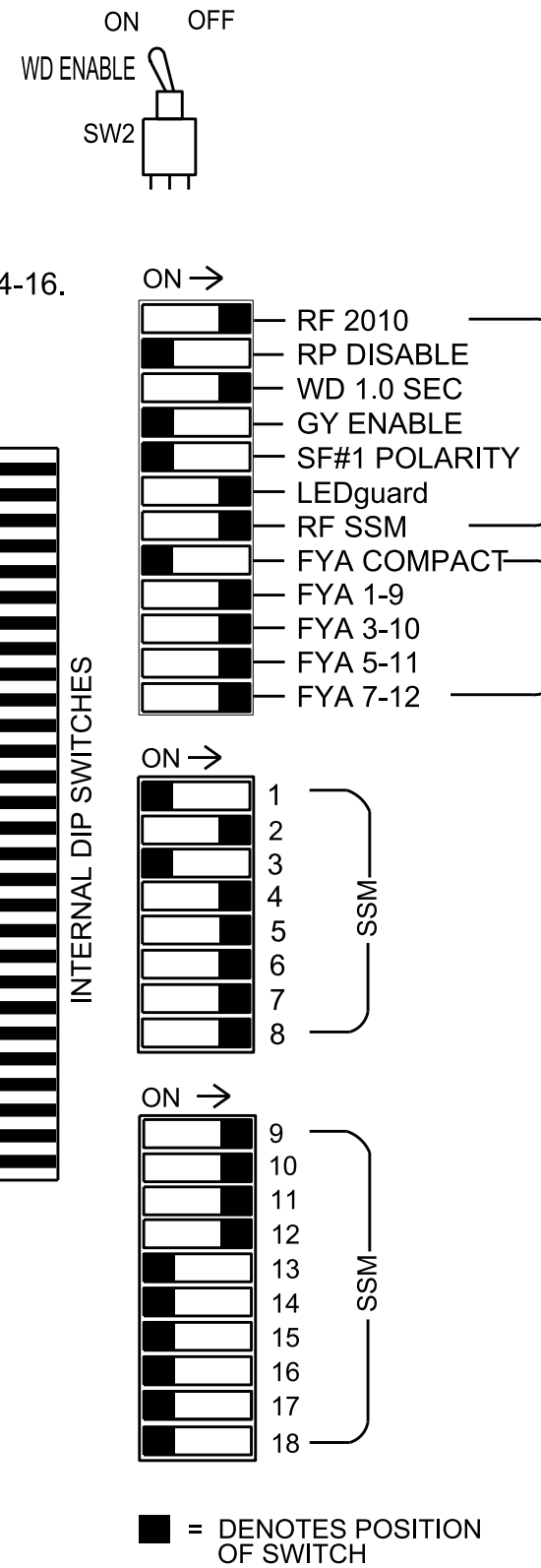
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 1-15, 2-5, 2-6, 2-9, 2-11, 2-13, 2-15, 3-7, 3-8, 3-10, 3-12, 3-16, 4-7, 4-8, 4-10, 4-12, 4-14, 4-16, 5-9, 5-11, 5-13, 6-9, 6-11, 6-13, 6-15, 7-10, 7-12, 7-14, 8-10, 8-12, 8-14, 8-16, 9-11, 9-13, 9-15, 10-12, 10-14, 10-16, 11-13, 11-15, 12-14, 12-16, 13-15 and 14-16.



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.



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 No Walk and 6 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, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, AUX S1, AUX S2, AUX S4, AUX S5
 Phases Used.....1, 2, 2 PED, 3, 4, 4 PED, 5, 6, 6 PED, 7, 8, 8 PED
 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*	21,22	P21, P22	31*	41,42	P41, P42	51*	61,62	P61, P62	71*	81,82	P81, P82	11*	31*	NU	51*	71*	NU
RED		128		101	*		134	*		107								
YELLOW	*	129		102			135			108								
GREEN		130		103			136			109								
RED ARROW													A121	A124		A114	A101	
YELLOW ARROW							132			123			A122	A125		A115	A102	
FLASHING YELLOW ARROW													A123	A126		A116	A103	
GREEN ARROW	127			118			133	133		124	124							
Hand			113			104			119			110						
Walking			115			106			121			112						

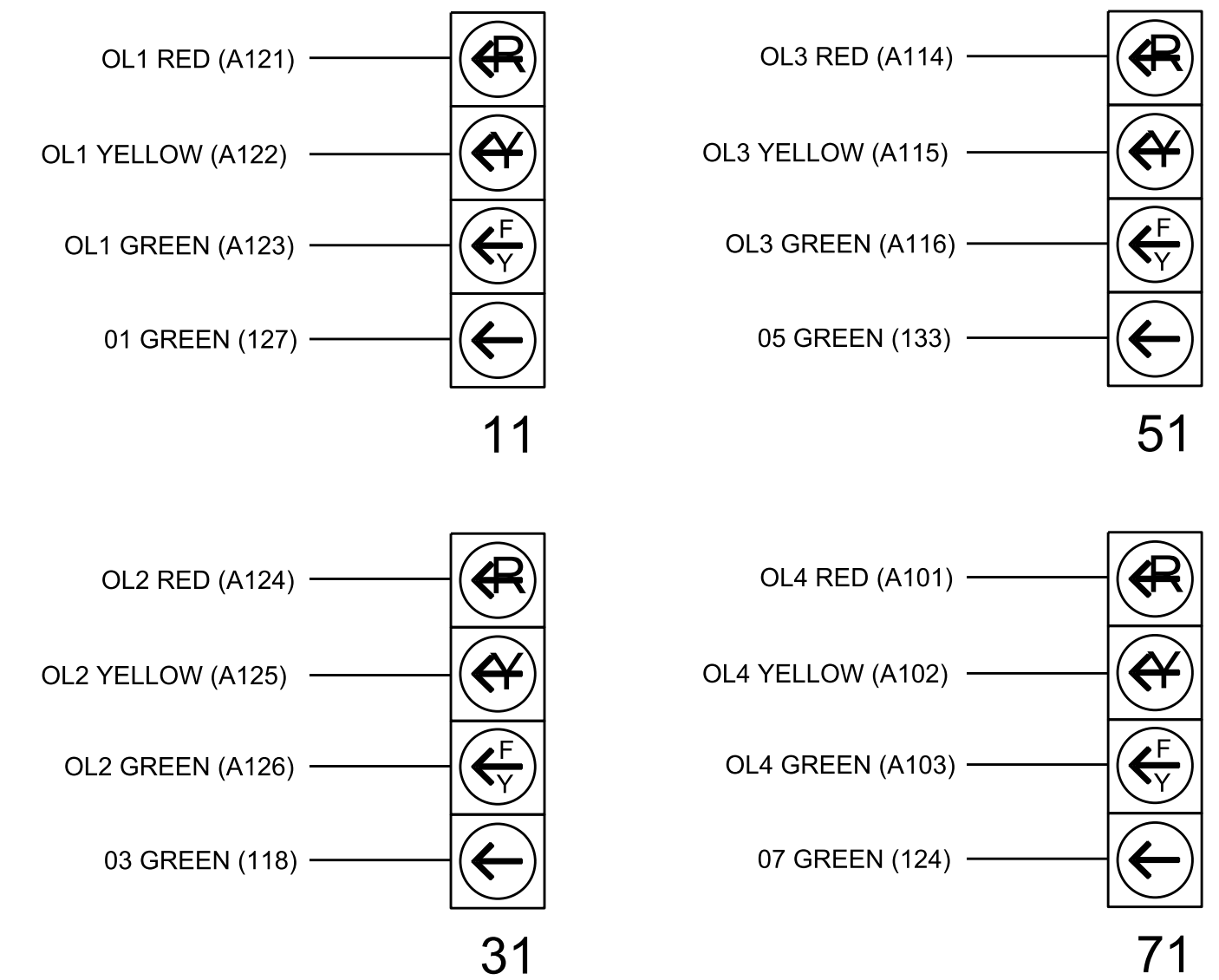
NU = Not Used

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

* See pictorial of head wiring in detail this sheet.

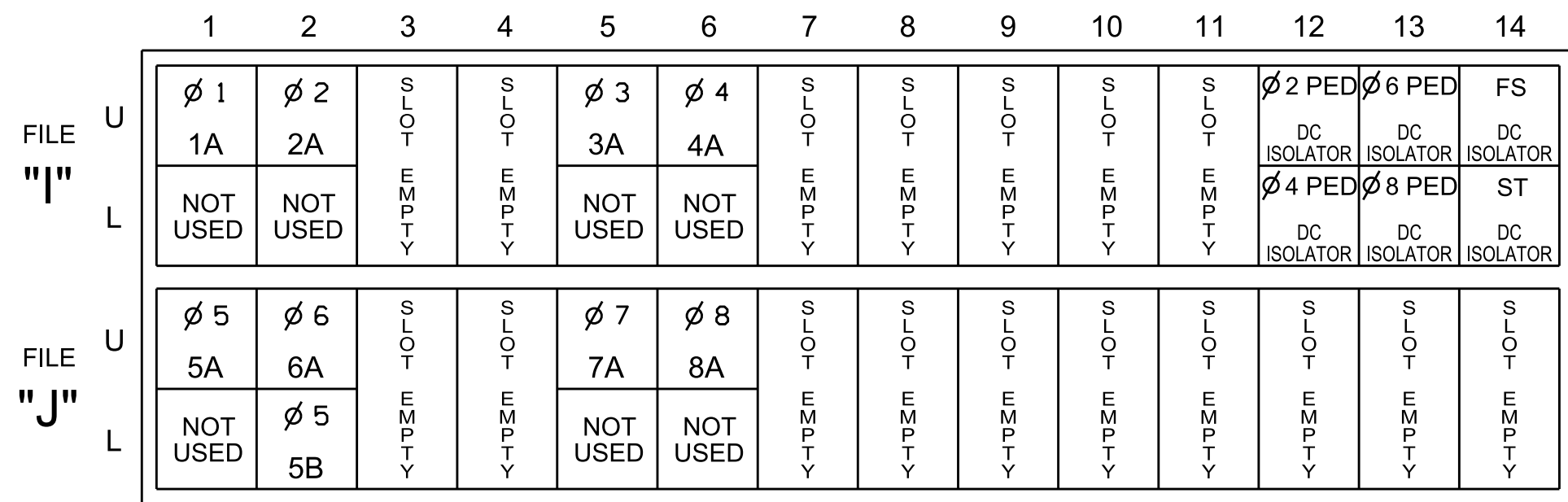
FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT

(front view)



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

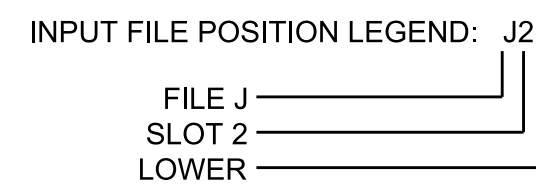
FS = FLASH SENSE
ST = STOP TIME

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
1A	TB2-1,2	I1U	56	18	1 *	1	15.0		X		X	
2A	TB2-5,6	I2U	39	1	29 *	6			X		X	
3A	TB4-5,6	I5U	58	20	7 *	3	15.0		X		X	
4A	TB4-9,10	I6U	41	3	30 *	8	3.0		X		X	
5A	TB3-1,2	J1U	55	17	15 *	5	15.0		X		X	
5B	TB3-7,8	J2L	44	5	17	5	15.0		X		X	
6A	TB3-5,6	J2U	40	2	16	6			X		X	
7A	TB5-5,6	J5U	57	19	21 *	7	15.0		X		X	
8A	TB5-9,10	J6U	42	4	32 *	4	3.0		X		X	
PED PUSH BUTTONS												
P21,P22	TB8-4,6	I12U	67	33	2	PED 2						
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						
P61,P62	TB8-7,9	I13U	68	34	6	PED 6						
P81,P82	TB8-8,9	I13L	70	36	8	PED 8						

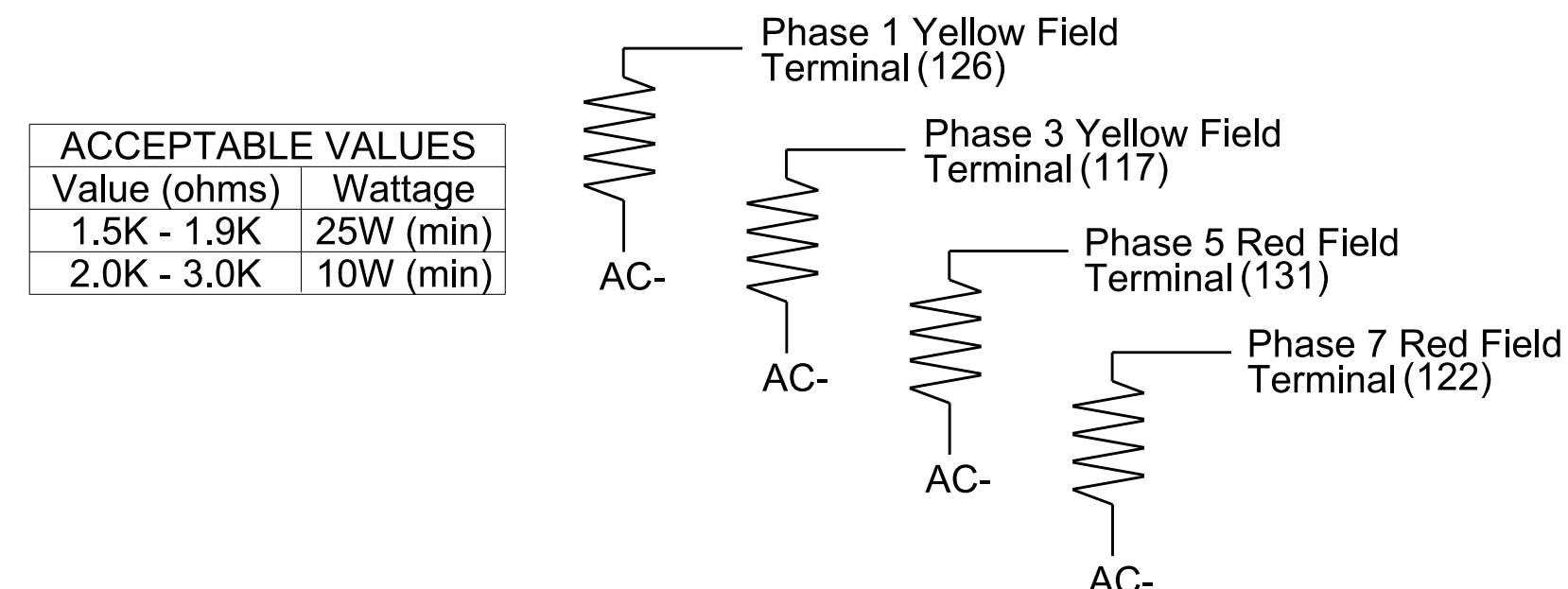
NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

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



LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)



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.

This plan supersedes the plan signed and sealed on 8/11/2023.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 10-0696
 DESIGNED: December 2023
 SEALED: 12/05/2023
 REVISED: N/A

Electrical Detail - Sheet 1 of 2

Electrical and Programming Details For: SR 1357 (Potter Road) at SR 1364 (Pleasant Plains Road)

Prepared in the Offices of: [Logo]

Division 10 Union County Stallings

PLAN DATE: December 2023 REVIEWED BY:

PREPARED BY: Sarah Kirkpatrick REVIEWED BY:

REVISIONS: INIT. DATE

750 N. Greenfield Pkwy, Garner, NC 27529

Seal: RYAN W. HOUGH, ENGINEER, SEAL 036833

Designed by: Ryan W. Hough 12/06/2023

SIG. INVENTORY NO. 10-0696