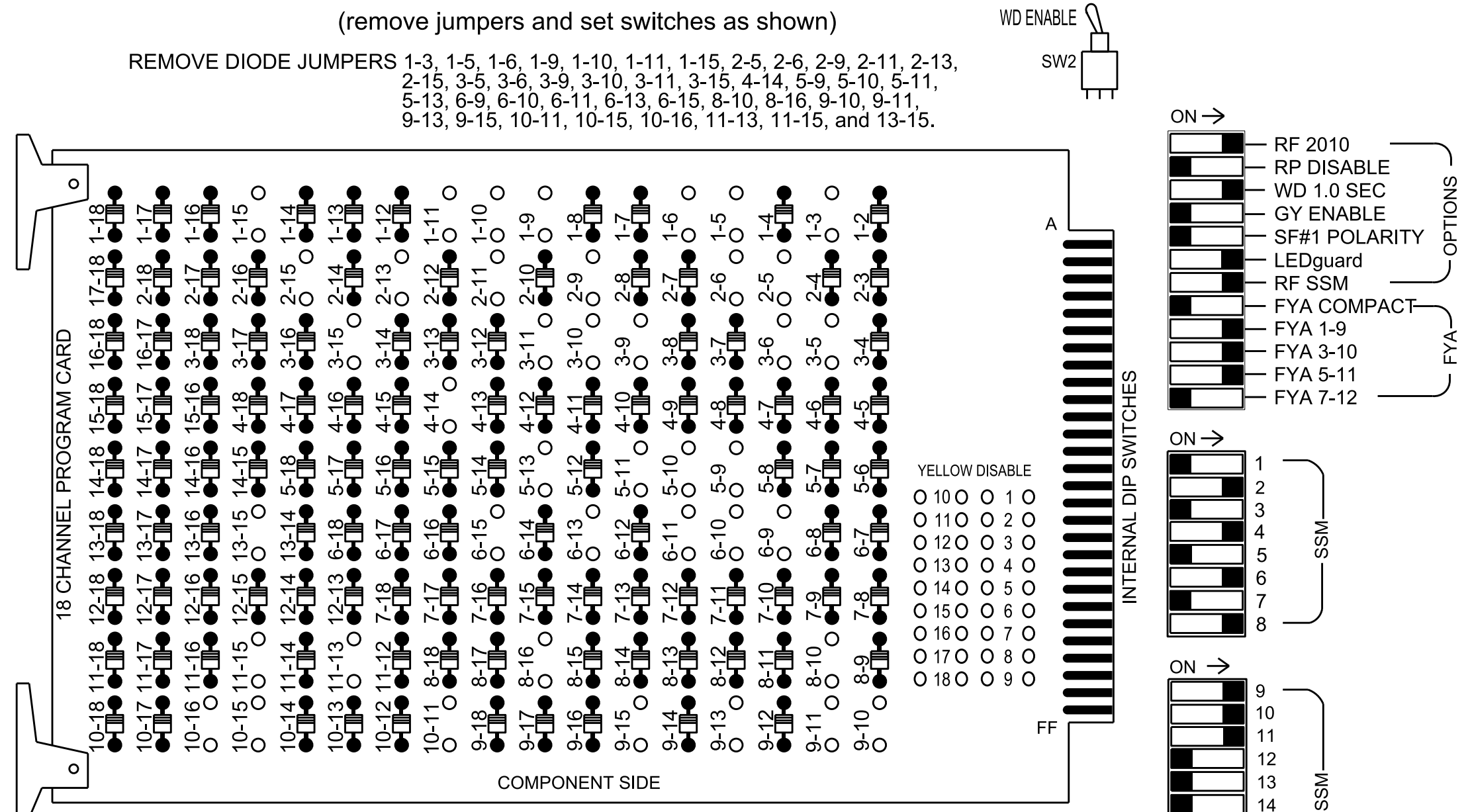


18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL



- 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.
 - Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

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 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.....18 With Aux. Output File
 Load Switches Used.....S1, S2, S3, S4, S5, S6, S7, S8, S9, S11, S12, AUX S1, AUX S2, AUX S4
 Phases Used.....1, 2, 2PED, 3, 3PED, 4, 4PED, 5, 6, 6PED,
 Overlap "1".....*
 Overlap "2".....*
 Overlap "3".....*
 Overlap "4".....NOT USED
 Overlap "7".....*
 *See overlap programming detail on Sheet 2.

SIGNAL HEAD HOOK-UP CHART

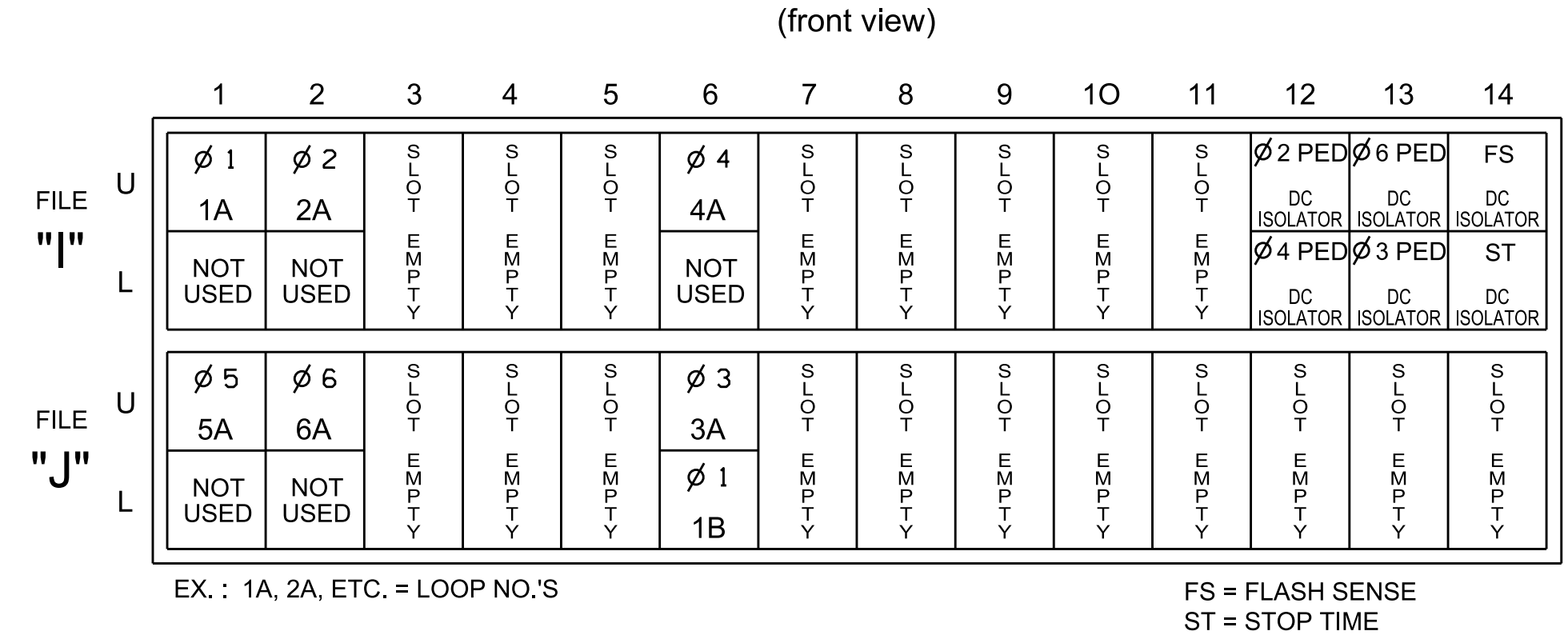
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6	
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18	
PHASE	1	2	2 PED	OL7	4	4 PED	5	6	6 PED	7	3	3 PED	OL1	OL2	SPARE	OL3	OL4	SPARE	
SIGNAL HEAD NO.	11	21,22	P21, P22	33	41	42	P41, P42	51	61,62	P61, P62	NU	31	32	P31, P32	11	33	NU	51	NU
RED		128			101	101			134		107	107			A124				
YELLOW	*	129		*	102	102		*	135		108	108							
GREEN		130			103	103			136		109	109							
RED ARROW															A121			A114	
YELLOW ARROW															A122	A125		A115	
FLASHING YELLOW ARROW															A123	A126		A116	
GREEN ARROW	127			118	103			133			109								
Hand				113				104			119								
Walking				115				106			121								

* Denotes install load resistor. See load resistor installation detail this sheet.
 * See pictorial of head wiring in detail this sheet.
 NOTE: Loadswitches S4, S11, and S12 have been reassigned. See Sheet 2 for programming details.

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.

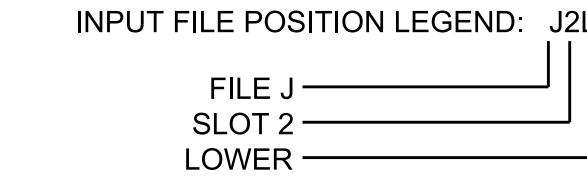
INPUT FILE POSITION LAYOUT



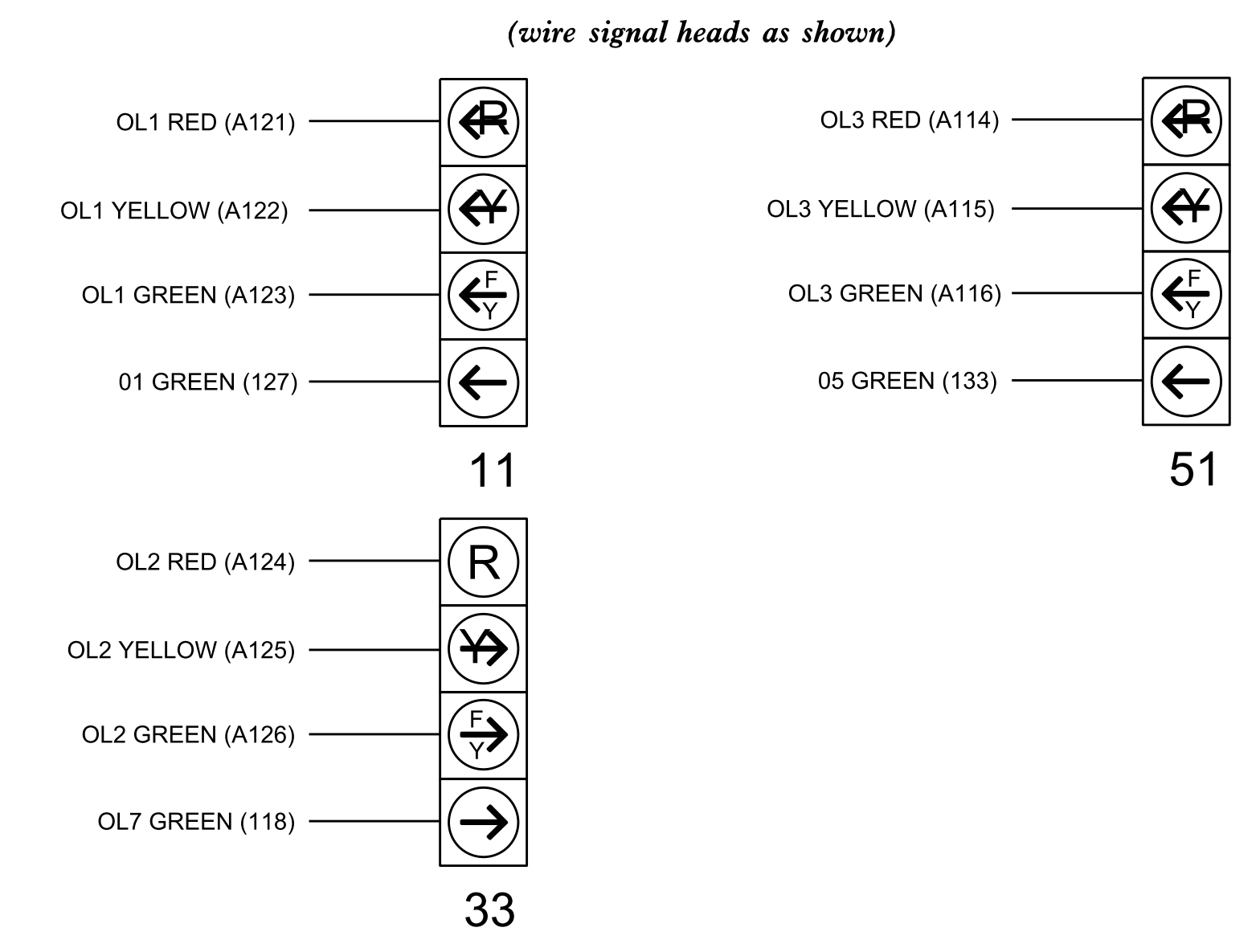
INPUT FILE CONNECTION & PROGRAMMING CHART

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		X		X	
2A	TB2-5,6	I2U	39	8	23	1	15		X		X	
3A	TB5-9,10	J6U	42	1	2	2			X		X	
4A	TB4-9,10	I6U	41	3	8	4	5		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	
PED PUSH BUTTONS												
P21,P22	TB8-4,6	I12U	67	33	2	PED 2						
P31,P32	TB8-8,9	I13L	70	36	8	PED 3						
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						
P61,P62	TB8-7,9	I13U	68	34	6	PED 6						

* 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.



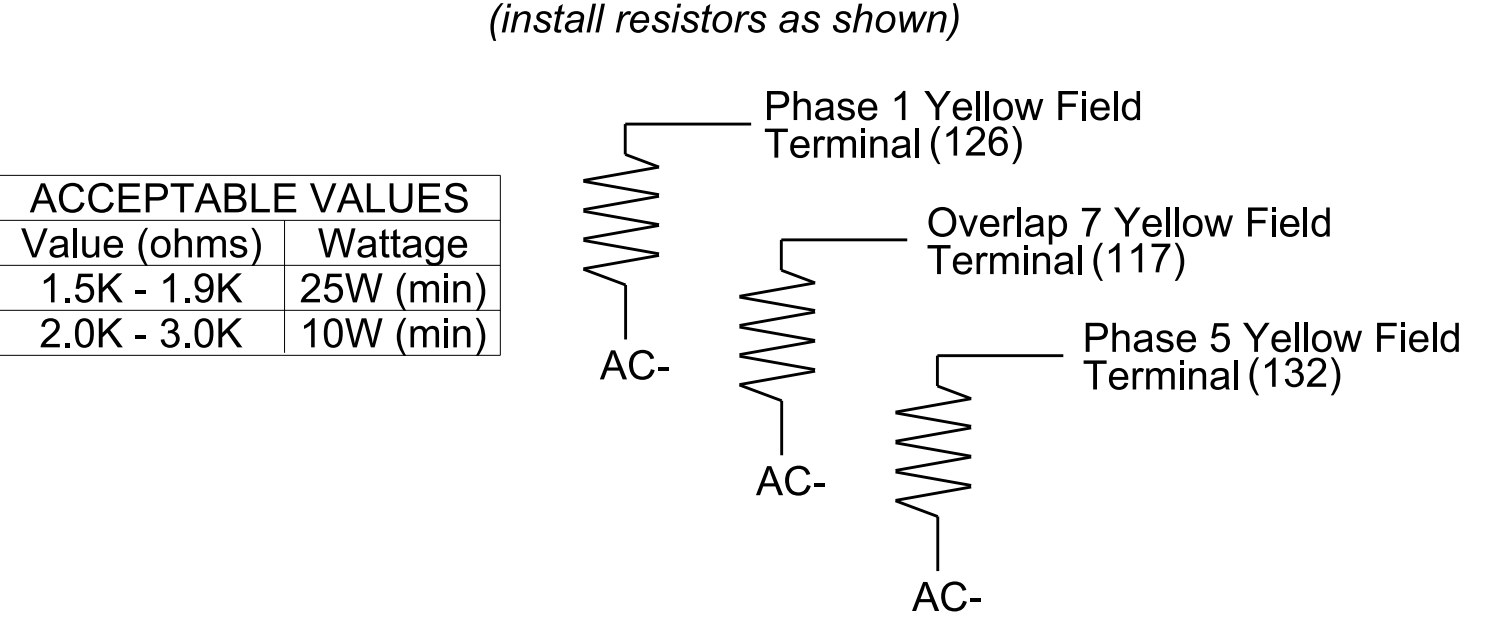
FYA SIGNAL WIRING DETAIL



THIS PLAN SUPERSEDES THE PLAN SIGNED AND SEALED ON 9/22/2021

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 11-0208
 DESIGNED: August 2023
 SEALED: 12/4/2023
 REVISED:

LOAD RESISTOR INSTALLATION DETAIL



FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
- REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

Electrical Detail - Final Design - Sheet 1 of 2

Prepared in the Offices of:

 750 N. Greenfield Pkwy, Garner, NC 27529

SR 1109 (Pinewood Road)
 at
 SR 1108 (N. Highlands Avenue)

Division 11 Caldwell County Granite Falls

PLAN DATE: November 2023 REVIEWED BY: D.T.J.

PREPARED BY: D.J. Craddock REVIEWED BY:

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

 SEAL 031001
 ENGINEER
 TODD JOYCE

DocuSigned by:
 D. Todd Joyce 12/05/2023
 290CADEF08241D
 DATE

SIG. INVENTORY NO. 11-0208

04-DEC-2023 12:42 S:\ITS\GIS\ITS_Signal\Projects\Mon#Projects\From Signal Design\Mch1\ve Projects\Crdock\2_Pending#11-0208_A_0082_46971_L_#110208_sm.ele.202311.dwg dj/craddock