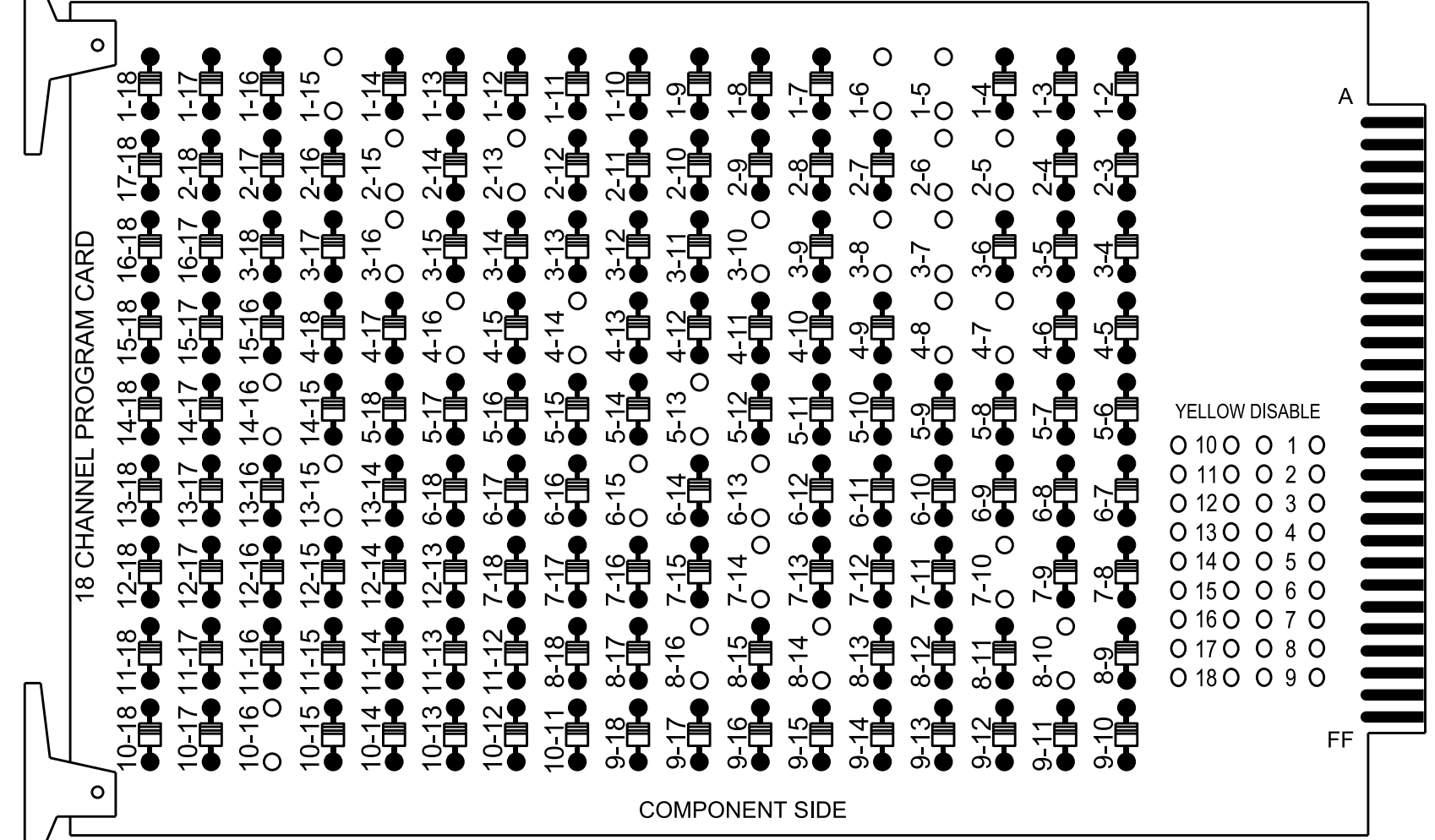


18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

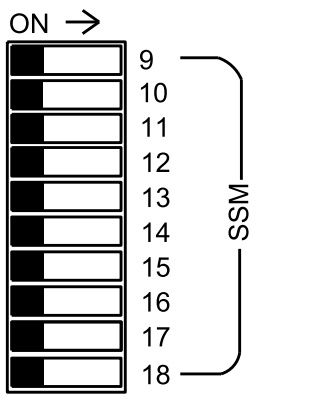
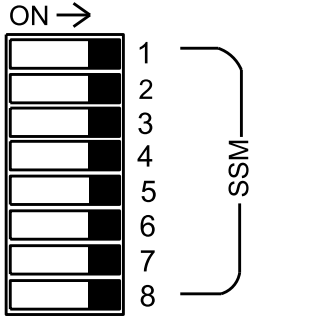
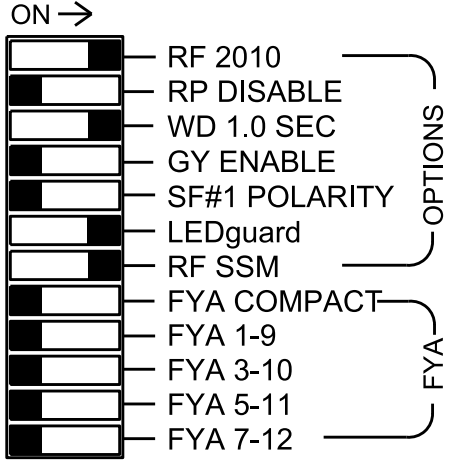
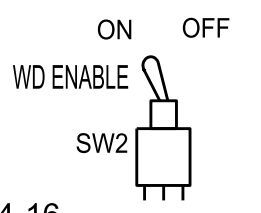
REMOVE DIODE JUMPERS 1-5, 1-6, 1-15, 2-5, 2-6, 2-13, 2-15, 3-7, 3-8, 3-10, 3-16, 4-7, 4-8, 4-14, 4-16, 5-13, 6-13, 6-15, 7-10, 7-14, 8-10, 8-14, 8-16, 10-16, 13-15, and 14-16.



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



■ = 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 Plans.
- Program controller to start up in phases 2 and 6 Green/Don't Walk.
- Enable simultaneous gap-out feature for all phases.
- The cabinet and controller are part of the Raleigh Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070LX
 CABINET.....332 w/ AUX
 SOFTWARE.....SE-PAC
 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 S2
 PHASES USED.....1,2,2 PED,3,3 PED,4,4 PED,5,6,6 PED,7,8,8 PED
 OVERLAPS.....NONE

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	OLA	3 PED	SPARE	OLC	OLD	SPARE					
SIGNAL HEAD NO.	11	21,22	P21, P22	22	31	41,42, 43	P41, P42	43	51	61,62	P61, P62	62	71	81,82	P81, P82	NU	P31, P32	BLANKOUT SIGN	NU	NU	NU	NU	
RED		128				101				134				107									
YELLOW		129				102				135				108									
GREEN		130				103				136				109									
RED ARROW	125				116				131			122											
YELLOW ARROW	126			117	117			132	132			123	123										
GREEN ARROW	127			118	118			133	133			124	124										
PEDESTRIAN				113				104				119				110			A124				
PEDESTRIAN YELLOW																							** A125
																							** A126

** See Blankout sign wiring detail on Sheet 2.

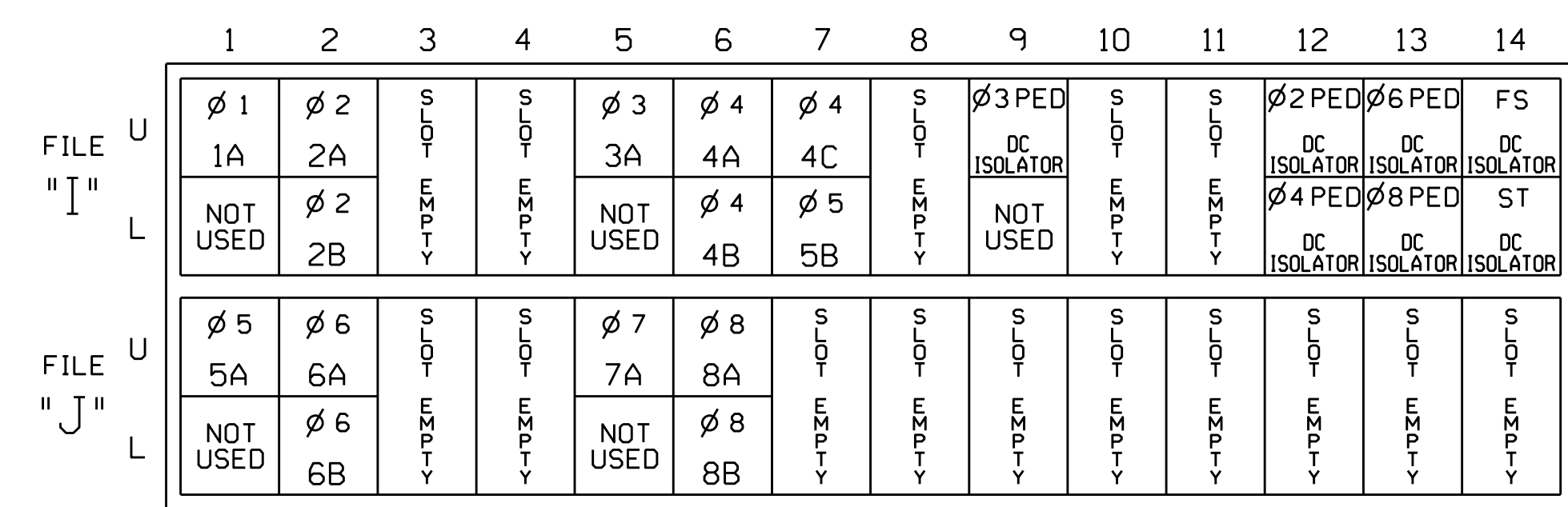
NU = Not Used

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

(front view)



EX.: 1A, 2A, ETC. = LOOP NO.'S FS = FLASH SENSE ST = STOP TIME

NOTE: The input function for slot 19 (Detector 17) has been remapped. See Sheet 2 for details.

IMPORTANT: Remove surge protection from TB6-9, TB6-10, TB6-11, and TB6-12.

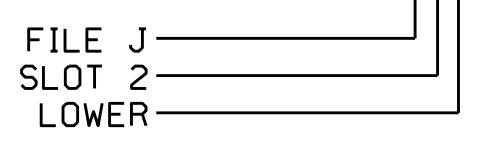
INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	DETECTOR NO.	NEMA PHASE	DELAY TIME	EXTEND (STRETCH) TIME
1A	TB2-1,2	I1U	56	1	1	3	
2A	TB2-5,6	I2U	39	3	2		
2B	TB2-7,8	I2L	43	4	2		
3A	TB4-5,6	I5U	58	9	3	3	
4A	TB4-9,10	I6U	41	11	4		
4B	TB4-11,12	I6L	45	12	4		
4C	TB6-1,2	I7U	65	13	4		
5A	TB3-1,2	J1U	55	19	5	3	
5B	TB6-3,4	I7L	78	14	5	15	
6A	TB3-5,6	J2U	40	21	6		
6B	TB3-7,8	J2L	44	22	6		
7A	TB5-5,6	J5U	57	29	7	3	
8A	TB5-9,10	J6U	42	31	8		
8B	TB5-11,12	J6L	46	32	8	10	
DC ISOLATORS							
P21,P22	TB8-4,6	I12U	67	PED 2	2 PED		
P31,P32	TB6-9,10	I9U	60	17	3 PED		
P41,P42	TB8-5,6	I12L	69	PED 4	4 PED		
P61,P62	TB8-7,9	I13U	68	PED 6	6 PED		
P81,P82	TB8-8,9	I13L	70	PED 8	8 PED		

NOTICE PHASE
 NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS 19, 112, AND 113.

NOTE: See Sheet 2 for 3 Ped detector assignment.

INPUT FILE POSITION LEGEND: J2L



ACCESSIBLE PEDESTRIAN SIGNAL (APS) INSTALLATION NOTES

- Install push buttons and APS equipment per manufacturer's instructions.
- Provide a dedicated cable to each push button per manufacturer's instructions.
- If APS equipment is mounted in cabinet, use filtered power (i.e., Controller Receptacle) to power APS equipment. Do not use Equipment Receptacle, which is a GFCI outlet.
- Never attempt to operate a standard contact closure push button with the APS system unless cabinet is re-wired for standard button operation or unless explicitly allowed by the manufacturer.
- Place manufacturer's instructions in cabinet with cabinet prints, signal plans, and electrical details.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: R-0434
 DESIGNED: February 2023
 SEALED: 8/30/2023
 REVISED: N/A

31-AUG-2023 08:53 S:\IT\565\15 Signal\Projects From Signal Design\Act1\ve Projects\CR\odock\2_Pending\0434_46927_1_1\04034_sm.ele_20230303.dwg dj-craddock

Electrical Design - Final Design - Sheet 1 of 2

Atlantic Avenue at New Hope Church Road

Division 5 Wake County Raleigh

PLAN DATE: May 2023 REVIEWED BY: DTJ

PREPARED BY: D.J. Craddock REVIEWED BY:

REVISIONS: INIT. DATE

750 N. Greenfield Pkwy, Corner, NC 27529

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031001 TODD JOYCE

DocSigned by: D. Todd Joyce 08/31/2023

SIG. INVENTORY NO. R-0434