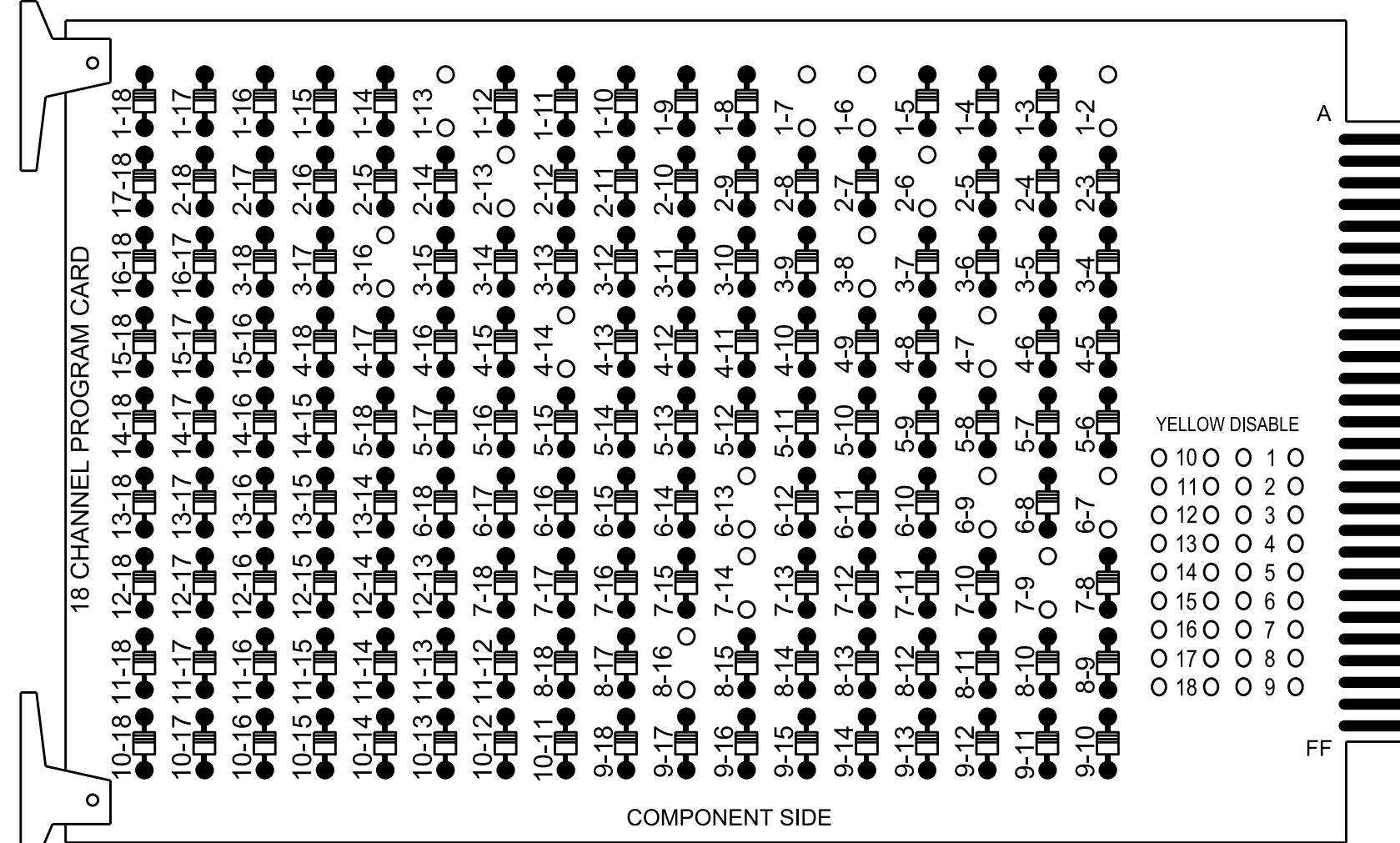


### 18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

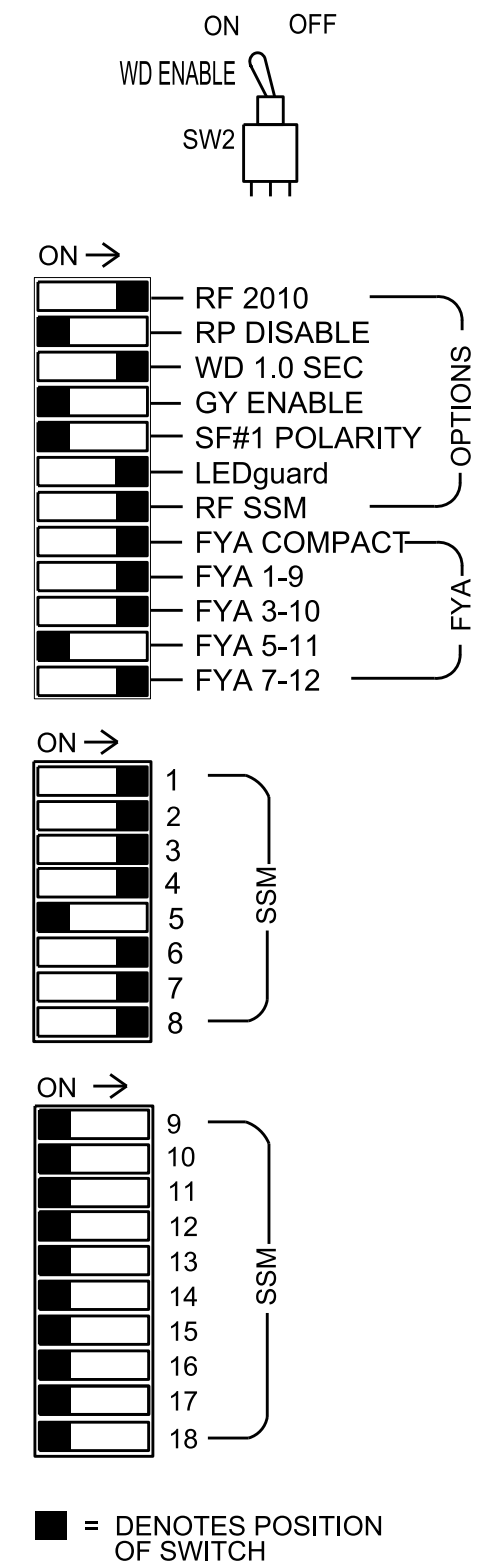
REMOVE DIODE JUMPERS 1-2, 1-6, 1-7, 1-13, 2-6, 2-13, 3-8, 3-16, 4-7, 4-14, 6-7, 6-9, 6-13, 7-9, 7-14, and 8-16.



REMOVE JUMPERS AS SHOWN

**NOTES:**

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
3. Ensure that the Red Enable is active at all times during normal operation.
4. Integrate monitor with Ethernet network in cabinet.



### NOTES

1. 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.
2. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
4. The cabinet and controller are part of the D13-22\_Ashville System.

### EQUIPMENT INFORMATION

Controller.....2070LX  
 Cabinet.....336  
 Software.....Q-Free MAXTIME  
 Cabinet Mount.....Pole  
 Output File Positions.....12  
 Load Switches Used.....S1, S2, S3, S4, S5, S6, S8, S10, S11, S12  
 Phases Used.....1, 2, 2PED, 3, 3 PED, 4, 4PED, 6  
 Overlap "1".....\*  
 Overlap "2".....\*  
 Overlap "3".....NOT USED  
 Overlap "4".....\*

\*See overlap programming detail on Sheet 2.

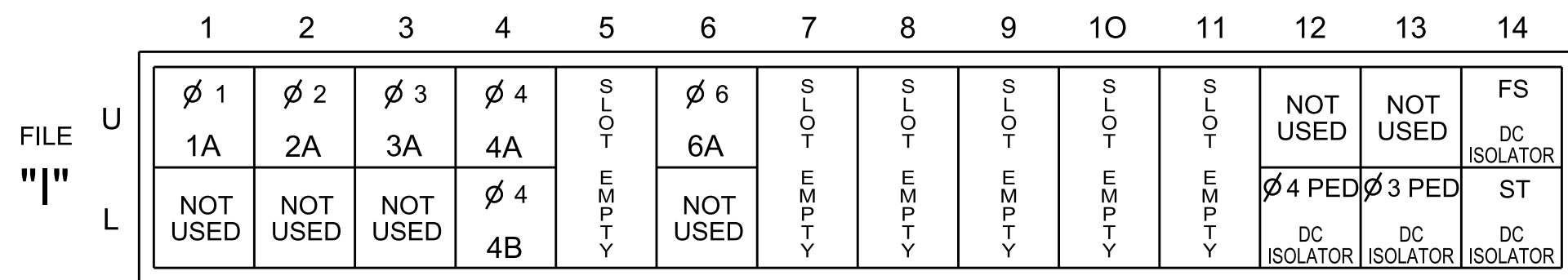
### SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	
CMU CHANNEL NO.	1	2	9	13	3	4	5	6	15	7	8	16	
PHASE	OL1	2	1GRN	2 PED	OL2	4	4 PED	5	6	6 PED	OL4	3	3 PED
SIGNAL HEAD NO.	11*	21,22	11*	P21,P22 P23,P24	31*	41,43	P41, P42	NU	61,62	NU	42*	32	P31, P32
RED		128			116					134		122	107
YELLOW		129								135			
GREEN		130								136			
RED ARROW	125					101							
YELLOW ARROW	126				117	102					123	108	
FLASHING YELLOW ARROW	127				118						124		
GREEN ARROW						103						109	
Hand					113		104						110
PED YELLOW			114				*						*
Walking Ped					115		106						112

\* Denotes install load resistor. See load resistor installation detail this sheet. NU = Not Used  
 \* See pictorial of head wiring in detail this sheet.  
 NOTE: Loadswitches S1, S4, S10, S11, and S12 have been reassigned. See Sheet 2 for programming details.

### INPUT FILE POSITION LAYOUT

(front view)



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

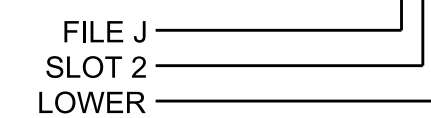
FS = FLASH SENSE  
 ST = STOP TIME

### 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	TB21-1,2	I1U	56	18	1	1	15		X		X	
2A	TB21-3,4	I2U	39	1	2	6			X		X	
3A	TB21-5,6	I3U	58	20	7	3			X		X	
4A	TB21-7,8	I4U	41	3	8	4	3		X		X	
4B	TB23-7,8	I4L	45	7	9	4	15		X		X	
6A	TB21-11,12	I6U	40	2	16	6			X		X	
PED PUSH BUTTONS												
P31,P32	TB24-11,12	I13L	70	36	8	PED 3						
P41,P42	TB24-9,10	I12L	69	35	4	PED 4						

NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.

INPUT FILE POSITION LEGEND: J2L

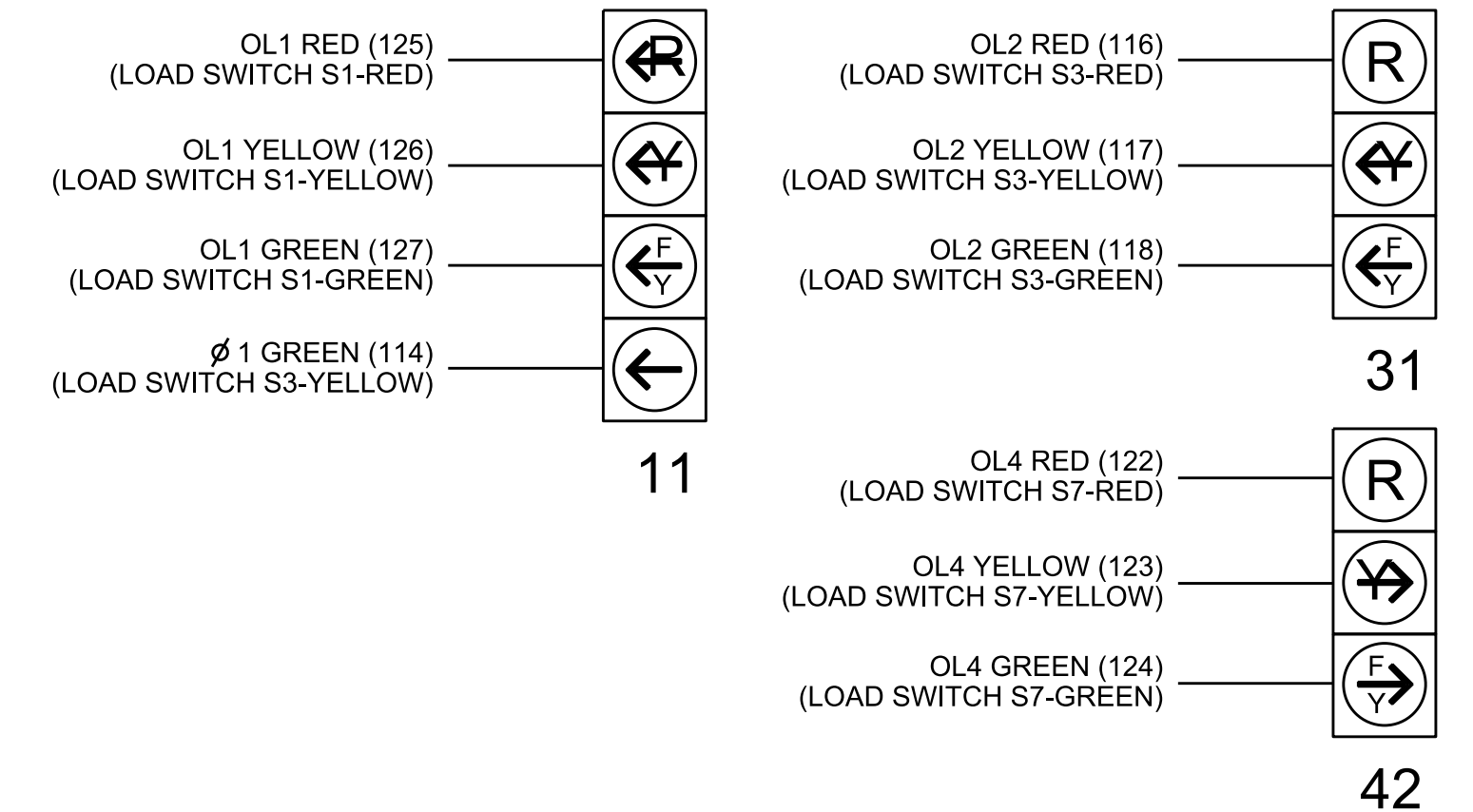


### COUNTDOWN PEDESTRIAN SIGNAL OPERATION

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.

### FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



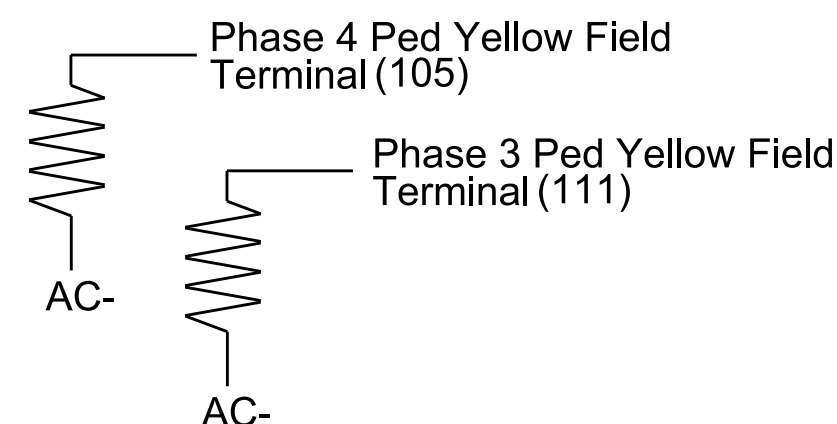
THIS PLAN SUPERSEDES THE PLAN SIGNED AND SEALED ON 12/1/2021.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 13-0404  
 DESIGNED: January 2024  
 SEALED: 2/9/2024  
 REVISED:

### LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

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



Electrical Detail - Sheet 1 of 2

Electrical and Programming Details For: **US 19-23 Bus. (Haywood Road) at SR 3412 (Sand Hill Road) and Vermont Avenue**

Prepared in the Offices of: **Transitional Mobility and Safety Division**

Division 13 Buncombe County Asheville

PLAN DATE: February 2024 REVIEWED BY: D.T.J.

PREPARED BY: D.J. Craddock REVIEWED BY:

REVISIONS: INIT. DATE

750 N. Greenfield Pkwy, Garner, NC 27529

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: **THOMAS CARROLL** ENGINEER 031001

DocuSigned by: **D. Todd Joyce** 02/09/2024

SIG. INVENTORY NO. 13-0404