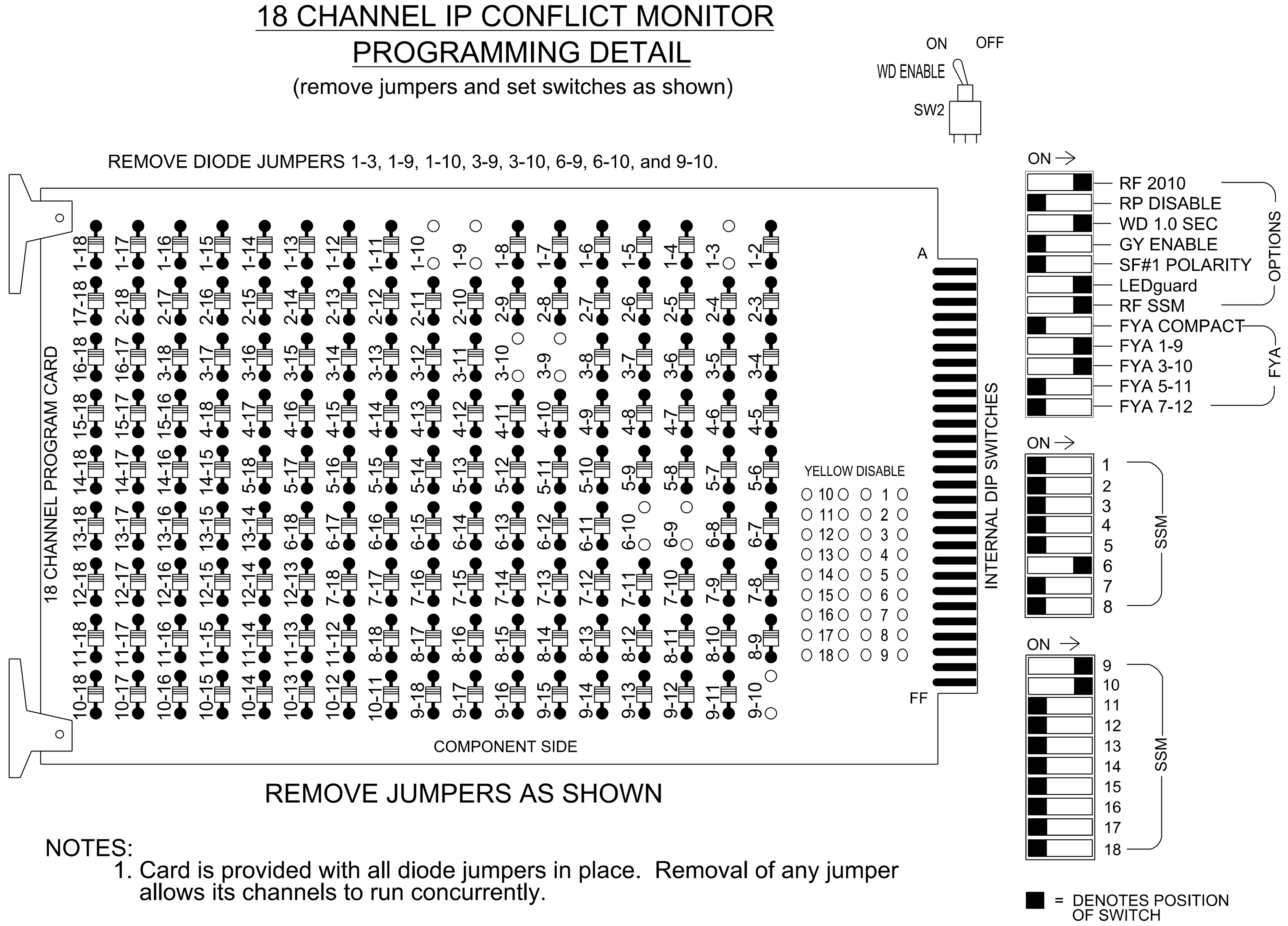
PROJECT REFERENCE NO.	SHEET NO.
U-5808	Sig. 4.1

18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches 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 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 US 74 Indian Trail CLS Signal System #11033.

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, S4, S8, AUX S1, AUX S2
Phases Used.......................................3, 6
Overlap "1"...*
Overlap "2"...*
Overlap "3"...NOT USED
Overlap "4"...NOT USED
Overlap "7"...*

*See overlap programming detail on sheets 2 and 3.

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	OL7	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	31★	NU	NU	32★	NU	NU	NU	61,62	NU	NU	NU	NU	31★	32★	NU	NU	NU	NU
RED								134										
YELLOW	*			*				135										
GREEN																		
RED ARROW													A121	A124				
YELLOW ARROW													A122	A125				
FLASHING YELLOW ARROW													A123	A126				
GREEN ARROW	127			118				136										

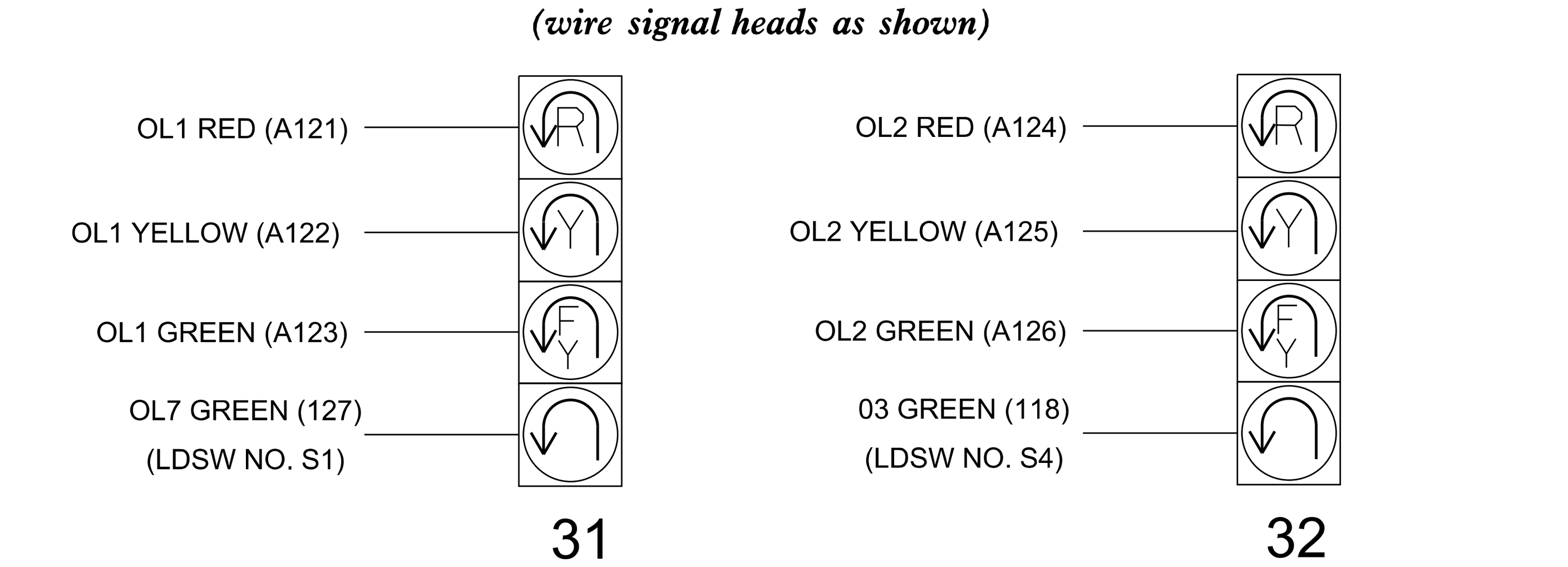
NU = Not Used

* 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)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U	SLOT	SLOT	SLOT	SLOT	Ø 3 3A	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	FS DC ISOLATOR
"I"	L	EMPTY	EMPTY	EMPTY	EMPTY	NOT USED	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	ST DC ISOLATOR
"J"	U	SLOT	Ø 6 6A	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT	SLOT
"J"	L	EMPTY	Ø 6 6B	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY

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
3A	TB4-5,6	I5U	58	20	7	3	15.0	-	X	-	X	-
6A	TB3-5,6	J2U	40	2	16	6	-	-	X	X	X	-
6B	TB3-7,8	J2L	44	6	17	6	-	-	X	X	X	-

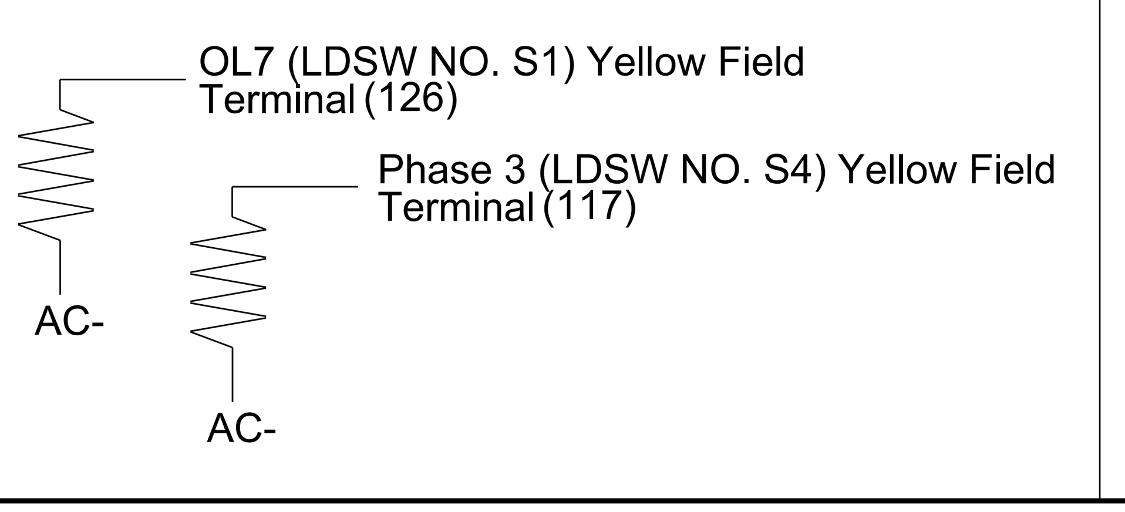
INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 10-2424
DESIGNED: July 2023
SEALED: July 13, 2023
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)



RS&H
NC FIRM LICENSE No: F-0493
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615
(919) 926-4100

Electrical Detail - Sheet 1 of 3
New installation

Electrical and Programming Details For:

US 74 (Independence Boulevard)
at
EB US 74 U-Turn

Prepared in the Offices of:
Transportation Mobility and Safety Division
ITS & Signals Management Section
750 N. Greenfield Pkwy, Garner, NC 27529

Division 10 Union County Indian Trail
PLAN DATE: July 2023 REVIEWED BY: O. Drobny
PREPARED BY: S. G. Haynie REVIEWED BY:
REVISIONS INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 029531 ENGINEER STEVEN G. HAYNIE
DocuSigned by: Steven G. Haynie 7/13/2023
DATE
SIG. INVENTORY NO. 10-2424