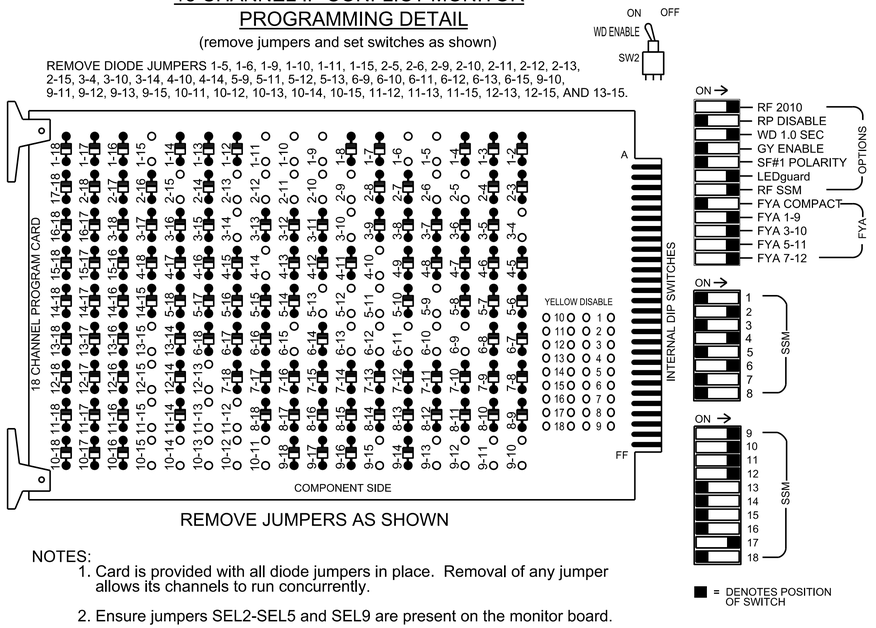
Docusign Envelope ID: 996831A4-A229-401E-B3E7-9B9D35618 9B2

PROJECT REFERENCE NO.	SHEET NO.
U-5798B	Sig. 6.1

18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-10, 1-11, 1-15, 2-5, 2-6, 2-9, 2-10, 2-11, 2-12, 2-13, 2-15, 3-4, 3-10, 3-14, 4-10, 4-14, 5-9, 5-11, 5-12, 5-13, 6-9, 6-10, 6-11, 6-12, 6-13, 6-15, 9-10, 9-11, 9-12, 9-13, 9-15, 10-11, 10-12, 10-13, 10-14, 10-15, 11-12, 11-13, 11-15, 12-13, 12-15, AND 13-15.



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 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 Fayetteville Signal System.

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
AUX S1, AUX S2, AUX S3, AUX S4, AUX S5
Phases Used.....1, 2, 2PED, 3, 4, 4PED, 5, 6, 6PED
Overlap "1".....*
Overlap "2".....*
Overlap "3".....*
Overlap "4".....*
Overlap "5".....*
Overlap "6".....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	8	8 PED	OL1	OL2	OL5		OL3	OL4	SPARE
SIGNAL HEAD NO.	11★	21;22	P21, P22	63★	41,42	43,44	P41, P42	51★	61;62	P61, P62	NU	NU	NU	11★	63★	31,32	33,34	51★	23★	NU
RED	·	128	·	·		101	·	·	134	·					A124		A111		A101	
YELLOW	*	129	·	*		102	·	*	135	·							A112			
GREEN	·	130	·	·		103	·	·	136	·							A113			
RED ARROW	·	·	·	·	101		·	·	·	·				A121		A111		A114		
YELLOW ARROW	·	·	·	·	102		·	·	·	·				A122	A125	A112		A115	A102	
FLASHING YELLOW ARROW	·	·	·	·			·	·	·	·				A123	A126			A116	A103	
GREEN ARROW	127	·	·	118	103		·	133	·	·						A113				
✋	·	·	113	·			104	·	·	119										
🚶	·	·	115	·			106	·	·	121										

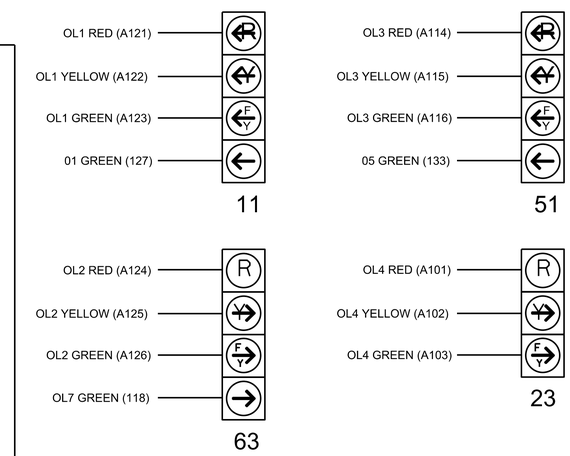
NU = Not Used

* 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)

		1	2	3	4	5	6	7	8	9	1O	11	12	13	14
FILE "I"	U	Ø 1 1A	Ø 2 2A	SLOT EMPTY	SLOT EMPTY	Ø 3 3A	Ø 3 3B	Ø 4 4A	SLOT EMPTY	SYS. DET. S2A	SLOT EMPTY	SLOT EMPTY	Ø 2 PED DC ISOLATOR	Ø 6 PED DC ISOLATOR	FS DC ISOLATOR
	L	NOT USED	Ø 2 2B			NOT USED	Ø 3 3C	Ø 4 4B		SYS. DET. S2B			Ø 4 PED DC ISOLATOR	NOT USED	ST DC ISOLATOR
FILE "J"	U	Ø 5 5A	Ø 4 4C	Ø 6 6A	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L	NOT USED	NOT USED	Ø 6 6B											

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

FS = FLASH SENSE
ST = STOP TIME

NOTE: Remove jumper from J1-W to I4-W and from I1-W to J4-W if present.

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	_
				-	29★	6	3.0	...	X	_	X	X
2A	TB2-5,6	I2U	39	1	2	2	...	...	X	X	X	_
2B	TB2-7,8	I2L	43	5	3	2	...	...	X	X	X	_
3A	TB4-5,6	I5U	58	20	7	3	3.0	...	X	_	X	_
3B	TB4-9,10	I6U	41	3	8	3	...	...	X	_	X	_
3C	TB4-11,12	I6L	45	7	9	3	10.0	...	X	_	X	_
4A	TB6-1,2	I7U	65	31	10	4	3.0	...	X	_	X	_
4B	TB6-3,4	I7L	78	44	11	4	...	...	X	_	X	_
4C	TB3-5,6	J2U	40	2	16	4	10.0	...	X	_	X	_
*S2A	TB6-9,10	I9U	60	22	13	SYS	...	...	-	_	-	_
*S2B	TB6-11,12	I9L	62	24	14	SYS	...	...	-	_	-	_
5A	TB3-1,2	J1U	55	17	15★	5	15.0	...	X	_	X	_
				-	31★	2	3.0	...	X	_	X	X
6A	TB3-9,10	J3U	64	30	18	6	...	...	X	X	X	_
6B	TB3-11,12	J3L	77	43	19	6	...	...	X	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						

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

*System detector only. Remove any assigned vehicle phase.

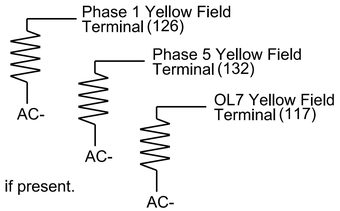
★ For the detectors to work as shown on the signal design plan, see the Detector Programming Detail for Alternate Phasing on sheet 3.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

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)



NOTE: Remove load resistor from terminal 123 if present.

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 ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 06-1243
DESIGNED: June 2025
SEALED: 6/12/2025
REVISED: _____

Electrical Detail - Sheet 1 of 3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:
Transportation Mobility and Safety Division
ITS & Signals Management Section
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
750 N.Greenfield Pkwy,Garner,NC 27529

SR 1102 (Gillis Hill Road) at Shopping Center Driveway and Spiritine Drive

Division 6 Cumberland County Fayetteville

PLAN DATE: June 2025	REVIEWED BY: D. Drobny
PREPARED BY: S.G. Haynie	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 029531 ENGINEER STEVEN G. HAYNIE

DocuSigned by: Steven G. Haynie 6/12/2025
DESIGNER SIGNATURE DATE
SIG. INVENTORY NO. 06-1243

$$$$SIGNATURE$$$$
$$$$SIGNATURE$$$$
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