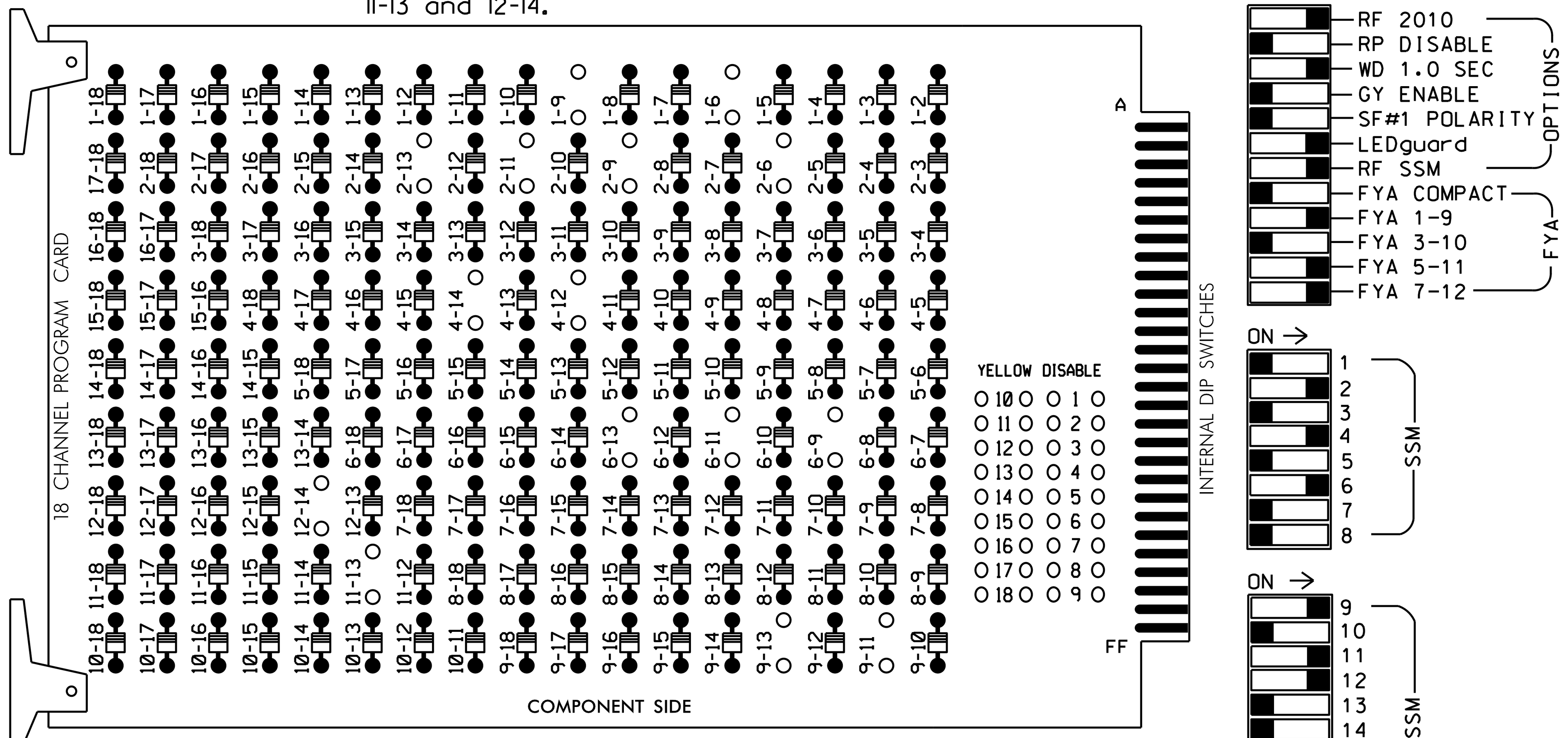
PROJECT REFERENCE NO.	SHEET NO.
R-2303E	Sig.3.1

EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-6, 1-9, 2-6, 2-9, 2-11, 2-13, 4-12, 4-14, 6-9, 6-11, 6-13, 9-11, 9-13, 11-13 and 12-14.



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 Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

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 Plans.
2. Enable Simultaneous Gap-Out for all Phases.
3. Program phases 2 and 6 for Variable Initial and Gap Reduction.
4. Program phases 2 and 6 for Startup In Green.
5. Program phases 2 and 4 for Startup Ped Call.
6. Program phases 2 and 6 for Yellow Flash, and overlaps 1 as Wag Overlaps.
7. The cabinet and controller are part of the NC 24 (Sunset Avenue) Closed Loop System.

EQUIPMENT INFORMATION

CONTROLLER..............2070
CABINET.................332 /W/ AUX
SOFTWARE................ECONOLITE OASIS
CABINET MOUNT...........BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED......S1,S2,S3,S5,S6,S8,AUX S1 AUX S4, AUX S5
PHASES USED.............1,2,2 PED,4,4 PED,6
OVERLAP "A".............1+2
OVERLAP "B".............NOT USED
OVERLAP "C".............2
OVERLAP "D".............4

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	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11★	21,22	P21, P22	NU	41,42	P41, P42	NU	61,62	NU	NU	NU	NU	11★	NU	NU	23,24★	43,44★	NU
RED		128						134								A114	A101	
YELLOW	✳	129						135										
GREEN		130						136										
RED ARROW					101								A121					
YELLOW ARROW					102								A122			A115	A102	
FLASHING YELLOW ARROW													A123			A116	A103	
GREEN ARROW	127				103													
(hand symbol)			113			104												
(walking person symbol)			115			106												

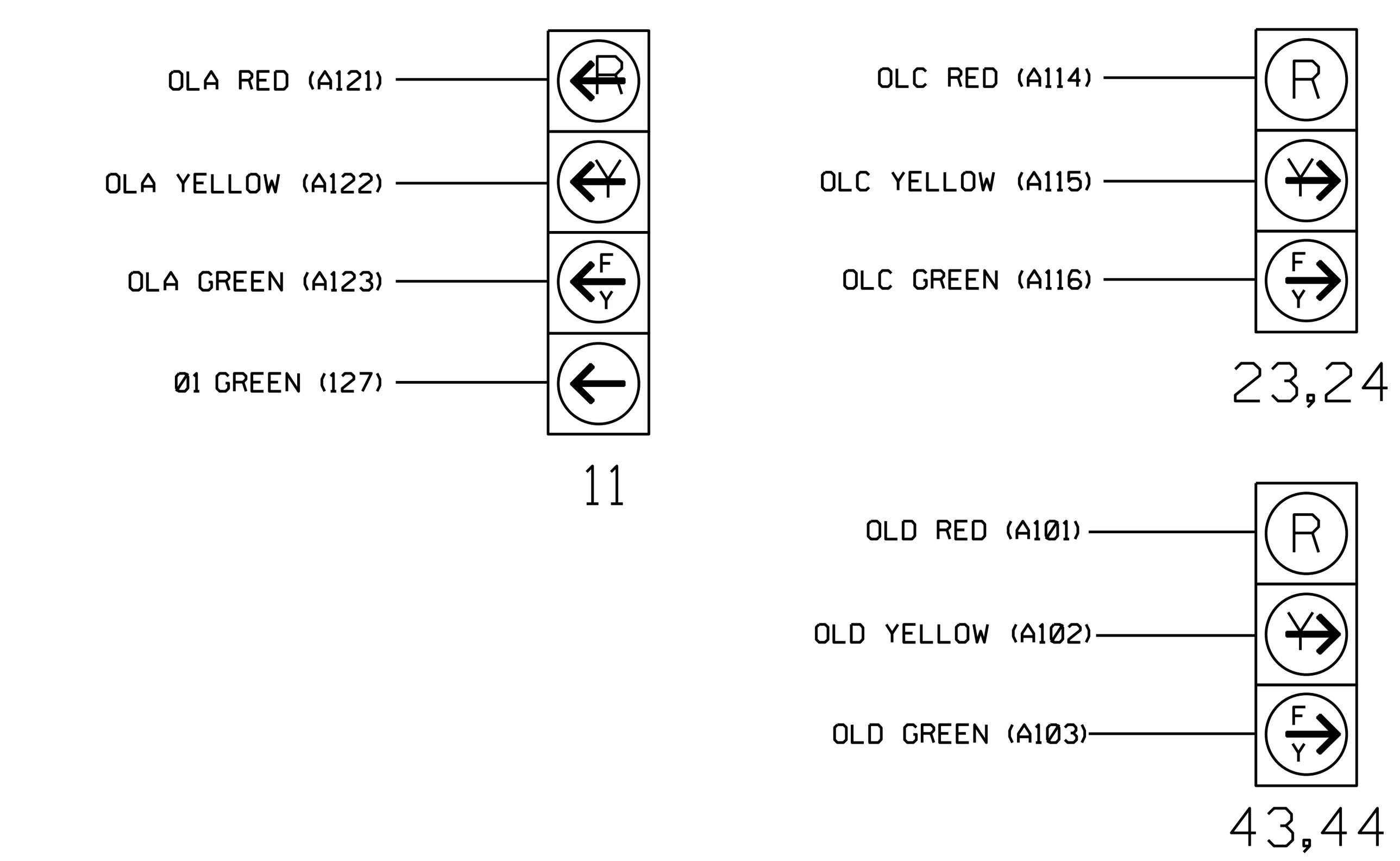
NU = Not Used

✳ 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)



1. The sequence display for signal head 11 requires special logic programming. See sheet 2 of 4 for programming instructions.

INPUT FILE POSITION LAYOUT

(front view)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	Ø1 1A	Ø2 2A,2B	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	Ø4 4A	Ø4 4C	SLOT EMPTY	SYS. DET. S21	SLOT EMPTY	SLOT EMPTY	Ø2 PED DC ISOLATOR	SLOT EMPTY	FS DC ISOLATOR
FILE "I"	L	NOT USED	Ø2 2C,2D				Ø4 4B	NOT USED		SYS. DET. S22			Ø4 PED DC ISOLATOR		ST DC ISOLATOR
FILE "J"	U	SLOT EMPTY	Ø6 6A,6B	SLOT EMPTY	WIRED INPUT ⊗	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SYS. DET. S23	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
FILE "J"	L		NOT USED							SYS. DET. S24					

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

FS = FLASH SENSE
ST = STOP TIME

⊗ Wired Input - Do not populate slot with detector card

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A[1]	TB2-1,2	I1U	56	18	1	1	Y	Y			15
	-	J4U	48	10 ★	26	6	Y	Y			
	-	I1U	56	18 ★	51	1	Y	Y			
2A,2B	TB2-5,6	I2U	39	1	2	2	Y	Y			
2C,2D	TB2-7,8	I2L	43	5	12	2	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			10
4C	TB6-1,2	I7U	65	27	34	4	Y	Y			10
6A,6B	TB3-5,6	J2U	40	2	6	6	Y	Y			
✳S21	TB6-9,10	I9U	60	22	11	SYS					
✳S22	TB6-11,12	I9L	62	24	13	SYS					
✳S23	TB7-9,10	J9U	59	21	15	SYS					
✳S24	TB7-11,12	J9L	61	23	17	SYS					
PED PUSH BUTTONS											
P21,P22	TB8-4,6	I12U	67	29	PED 2	2 PED					
P41,P42	TB8-5,6	I12L	69	31	PED 4	4 PED					

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOT I12.

[1] Add jumper from I1-W to J4-W, on rear of input file.

✳ System detector only. Remove the vehicle phase assigned to this detector in the default programming.

★ See Input Page Assignment programming details on sheet 3.

INPUT FILE POSITION LEGEND: J2L

FILE J
SLOT 2
LOWER

LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

ACCEPTABLE VALUES

VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)

PHASE 1 YELLOW FIELD TERMINAL (126)

AC-

△1

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 03-1068
DESIGNED: Sep 2019
SEALED: 9/12/2019
REVISED: 11/2/2021

ELECTRICAL DETAIL SHEET 1 OF 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISION △1 SEAL

NORTH CAROLINA PROFESSIONAL SEAL 031001 ENGINEER D. TODD JOYCE

DocuSigned by: D. Todd Joyce A90CADFDBD4241D... 11/10/2021 DATE

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:

ITS & Signals Management Section, Transportation Mobility and Safety Division, State of North Carolina Department of Transportation

750 N.Greenfield Pkwy,Garner,NC 27529

NC 24 (Sunset Avenue)
at
US 421-701/NC 24 SB Ramps

Division 3 Sampson County Clinton

PLAN DATE: Sep 2018	REVIEWED BY: D.J. Darity
PREPARED BY: D.J. Darity	M&N PROJECT NO.: 8522-07

REVISIONS	INIT.	DATE
△1 Remove MP#14, install MP#1 and Relocate Cabinet (ZZ)	DJD	11/10/21

SEAL

Not a certified document as to the Original Document but Only as to the Revisions - This document originally issued and sealed by Donald J. Darity, 19713, on 9/12/2019. This document is only certified as to the revisions.

DATE

SIG. INVENTORY NO. 03-1068