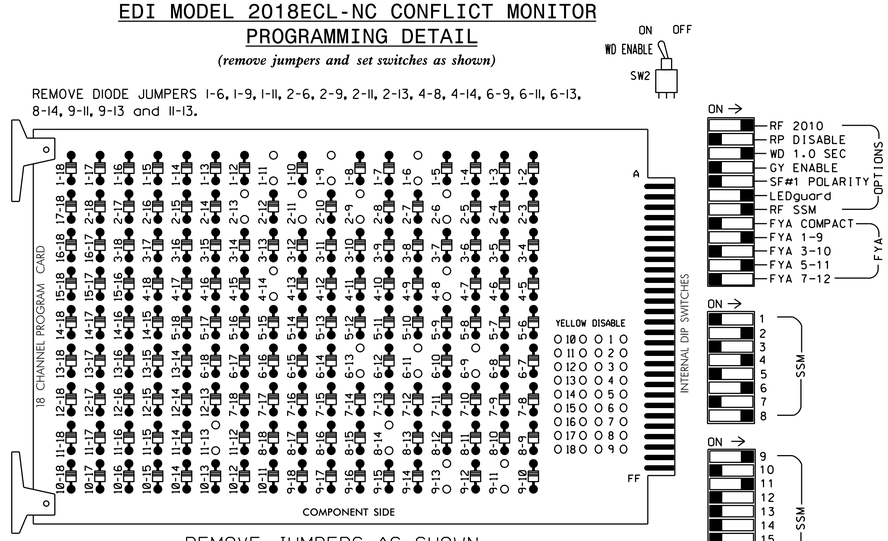
PROJECT REFERENCE NO.	SHEET NO.
U-3308	Sig. 27.1

EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-6, 1-9, 1-11, 2-6, 2-9, 2-11, 2-13, 4-8, 4-14, 6-9, 6-11, 6-13, 8-14, 9-11, 9-13 and 11-13.



■ = DENOTES POSITION OF SWITCH

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. 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. Verify that signal heads flash in accordance with the signal plans.
2. Program controller to Start Up in phases 2 and 6 green.
3. Set power-up flash time to 0 seconds within the controller programming. The conflict monitor will govern startup flash. Ensure STARTUP "RED START" is set to 0 seconds.
4. Enable Simultaneous Gap-Out feature for all phases.
5. Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
6. Set phase bank 3 maximum limit to 250 seconds for phases used.
7. Program phases 4 and 8 for Double Entry.
8. Ensure start up flash phases are coordinated with flash program block assignments.
9. Program Startup Ped Calls for phases 2 and 4.
10. Set the Red Revert interval on the controller to 1 second.
11. This cabinet and controller are part of the Durham Signal System.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
CABINET.....332 W/ AUX
SOFTWARE.....McCAIN 2033
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...18 WITH AUX FILE
LOAD SWITCHES USED.....S1,S2,S3,S5,S6,S8,S11,AUX S1,AUX S4
PHASES USED.....**1,2,2 PED,4,4 PED,6,8
OVERLAP 1.....*
OVERLAP 2.....NOT USED
OVERLAP 3.....2+6
OVERLAP 4.....NOT USED

* See FYA PPLT Programming Detail on Sheet 2.
** Phase used only during Preempt.

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	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11★	22,23	P21, P22	NU	41,42	P41, P42	NU	61,62	NU	NU	81,82	NU	11★	NU	NU	21★	NU	NU
RED		128			101			134			107							
YELLOW	✳	129			102			135			108							
GREEN		130			103			136			109							
RED ARROW													A121			A114		
YELLOW ARROW													A122			A115		
FLASHING YELLOW ARROW													A123			A116		
GREEN ARROW	127																	
✋			113			104												
🚶			115			106												

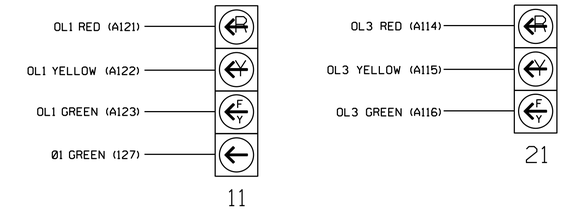
NU = Not Used

✳ Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail below.

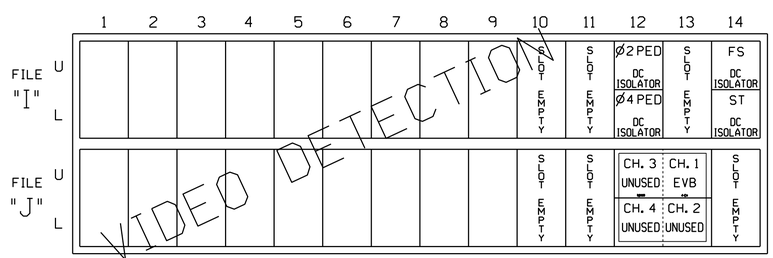
FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT

(front view)



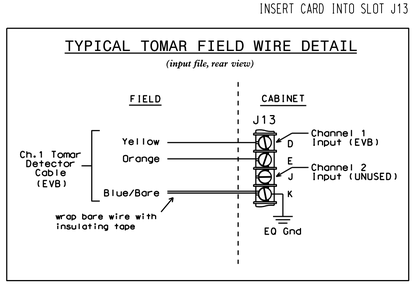
EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME
EVx = EMERGENCY VEHICLE PREEMPT

4 CHANNEL TOMAR OSP CARD
INSERT CARD INTO SLOT J13

TYPICAL TOMAR FIELD WIRE DETAIL

(input file, rear view)



INPUT FILE CONNECTION & PROGRAMMING CHART

PED PUSH BUTTONS	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
P21,P22	TB8-4,6	I12U	25	67	2	2 PED
P41,P42	TB8-5,6	I12L	27	69	2	4 PED

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOT I12.

DETECTOR ATTRIBUTES LEGEND:

1-FULL TIME DELAY
2-PED CALL
3-RESERVED
4-COUNTING
5-EXTENSION
6-TYPE 3
7-CALLING
8-ALTERNATE

INPUT FILE POSITION LEGEND: J2L

FILE J
SLOT 2
LOWER

SPECIAL DETECTOR NOTE

Install a video detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer-approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-0228T6
DESIGNED: September 2014
SEALED: 04/02/2015
REVISED: N/A

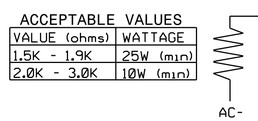
STARTUP CALLS PROGRAMMING

Prevents Veh Call to phase 1 during Startup. Phase 1 used only during Preempt.
Main Menu - 9) UTILITIES - 1) STARTUP
VEHICLE CALLS 2,4,6,8

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)



Electrical Detail - Temporary 6 - Sheet 1 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:

NC 55 (North Alston Avenue) at Taylor Street

Division 5 | Durham County | Durham

PLAN DATE: November 2014 | REVIEWED BY: T. Joyce

PREPARED BY: C. Strickland | REVIEWED BY:

REVISIONS	INIT.	DATE

Prepared in the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 022013 ENGINEER GEORGE C. BROWN

DocuSigned by: George C. Brown 4/2/2015
F5280E1ED08E8434... DATE

SIG. INVENTORY NO. 05-0228T6

27-MAR-2015 15:10
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