PROJECT REFERENCE NO.	SHEET NO.
W-5705C	Sig. 4.1

EDI MODEL 2010ECL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE JUMPERS AS SHOWN

■ = DENOTES POSITION OF SWITCH

NOTES:

1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Make sure jumpers SEL2-SEL5 are present on the monitor board.

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. Ensure that Red Enable is active at all times during normal operation. To prevent Red Failures on unused monitor channels 3,7,8,9,10,11,12,13,14,15 and 16 tie unused red monitor inputs to load switch AC+ per the cabinet manufacturer's instructions.
3. Program controller to Start Up in phases 2 and 6 green.
4. 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.
5. Enable Simultaneous Gap-Out feature for all phases.
6. Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
7. Set phase bank 3 maximum limit to 250 seconds for phases used.
8. Ensure start up flash phases are coordinated with flash program block assignments.
9. Set the Red Revert interval on the controller to 1 second.
10. This cabinet and controller are part of the Durham Signal System.

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1		S2	S2P	S3	S4		S4P	S5	S6	S6P	S7	S8	S8P
PHASE	1		2	2 PED	3	4		4 PED	OL5	6	6 PED	7	8	8 PED
SIGNAL HEAD NO.	11,12	42	22,23	NU	NU	23	41,42	NU	21 ★	61,62	NU	NU	NU	NU
RED			128				101			134				
YELLOW			129				102			135				
GREEN			130				103			136				
RED ARROW	125								131					
YELLOW ARROW	126	126				102			132					
FLASHING YELLOW ARROW									133					
GREEN ARROW	127	127				103								

NU = Not Used

★ See pictorial of head wiring in detail below.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
CABINET.....332
SOFTWARE.....McCAIN 2033
CABINET MOUNT.....BASE
OUTPUT FILE POSITIONS...12
LOAD SWITCHES USED.....S1,S2,S4,S5,S6
PHASES USED.....1,2,4,6
OVERLAP 5.....6

FYA SIGNAL WIRING DETAIL

(wire signal head as shown)

INPUT FILE POSITION LAYOUT

(front view)

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

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.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
1A,1B	TB2-1,2	I1U	14	56	5 7	1
1C	TB6-9,10	I9U	18	60	5 7	1
2A,2B	TB2-5,6	I2U	1	39	5 7	2
2C,2D	TB2-7,8	I2L	5	43	5 7	2
4A	TB4-9,10	I6U	3	41	5 7	4
4B	TB4-11,12	I6L	7	45	5 7	4
6A,6B	TB3-5,6	J2U	2	40	5 7	6
6C,6D	TB3-7,8	J2L	6	44	1 5 7	6

NOTE: PROGRAM DETECTOR DELAY AND CARRYOVER TIMES AS SPECIFIED ON SIGNAL DESIGN PLANS.

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

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-1659
DESIGNED: July 2017
SEALED: 8/31/2017
REVISED: N/A

Electrical Detail- Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:

Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
Signal Management Section

750 N.Greenfield Pkwy,Garner,NC 27529

US 15-501 Business (Durham-Chapel Hill Blvd.) at Shannon Road

Division 5 Durham County Durham

PLAN DATE:	August 2017	REVIEWED BY:	
PREPARED BY:	S. Armstrong	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 036880 ENGINEER KEITH M. MIMS

DocuSigned by:
Keith M. Mims
2F8D7B6E8CD34A5...
9/11/2017
DATE

SIG. INVENTORY NO. 05-1659

07-SEP-2017 07:42
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