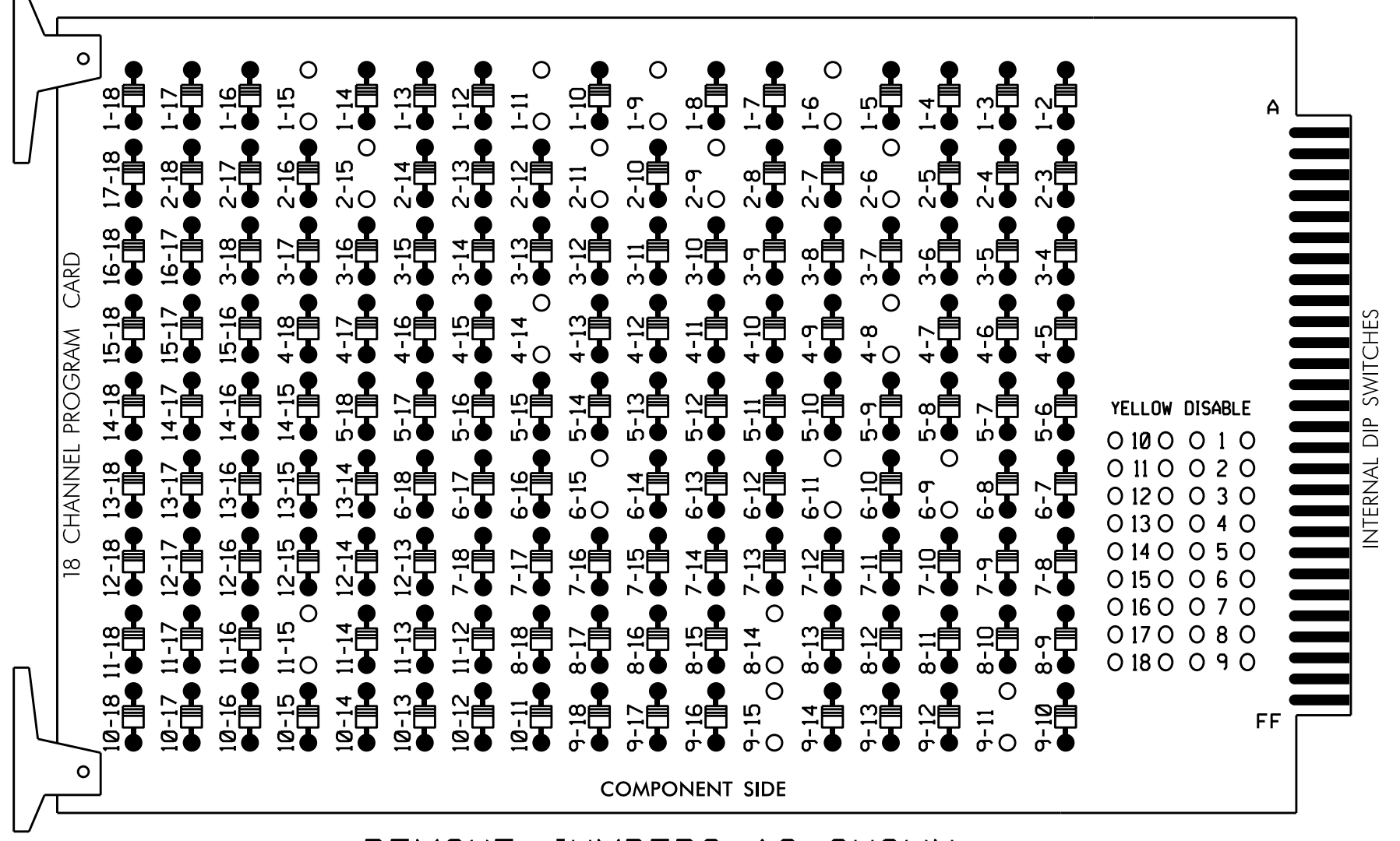


EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

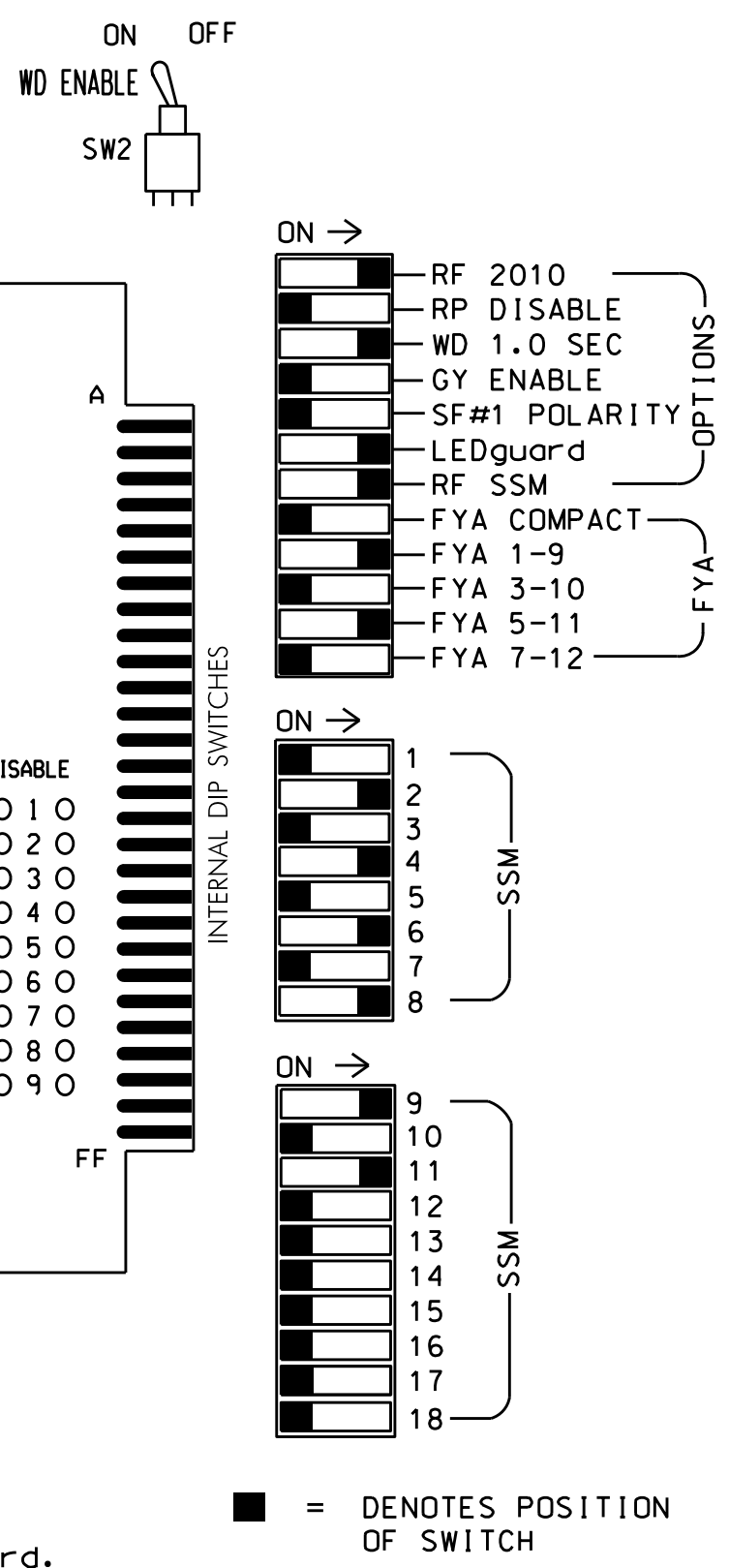
REMOVE DIODE JUMPERS I-6, I-9, I-11, I-15, 2-6, 2-9, 2-11, 2-15, 4-8, 4-14, 6-9, 6-11, 6-15, 8-14, 9-11, 9-15 and II-15.



REMOVE JUMPERS AS SHOWN

NOTES:

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- Ensure that Red Enable is active at all times during normal operation.
- Ensure conflict monitor communicates with 2070.



NOTES

- 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.
- Program controller to Start Up in phases 2 and 6 green.
- 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.
- Enable Simultaneous Gap-Out feature for all phases.
- Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
- Set phase bank 3 maximum limit to 250 seconds for phases used.
- Program phases 4 and 8 for Double Entry.
- Ensure start up flash phases are coordinated with flash program block assignments.
- Program Startup Ped Calls for phases 4 and 6.
- Set the Red Revert interval on the controller to 1 second.
- 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,S5,S6,S8,S9,S11,
 AUX S1,AUX S4
 PHASES USED.....1,2,4,4 PED,6,6 PED,8
 OVERLAP 1.....*
 OVERLAP 2.....NOT USED
 OVERLAP 3.....2+6
 OVERLAP 4.....NOT USED

* See FYA PPLT Programming Detail on Sheet 2.

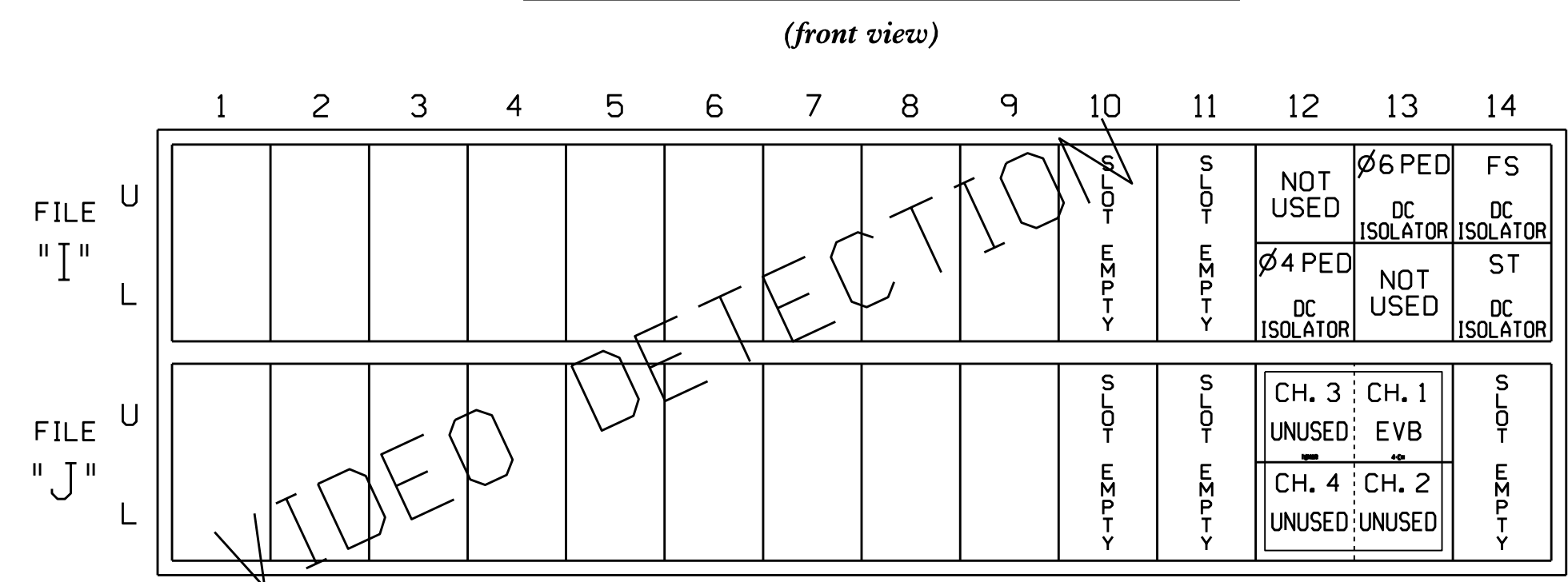
SIGNAL HEAD HOOK-UP CHART

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
CHU 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	NU	NU	41,42	P41, P42	NU	61,62	P61, P62	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																	
						104			119									
						106			121									

NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 * See pictorial of head wiring in detail below.

INPUT FILE POSITION LAYOUT

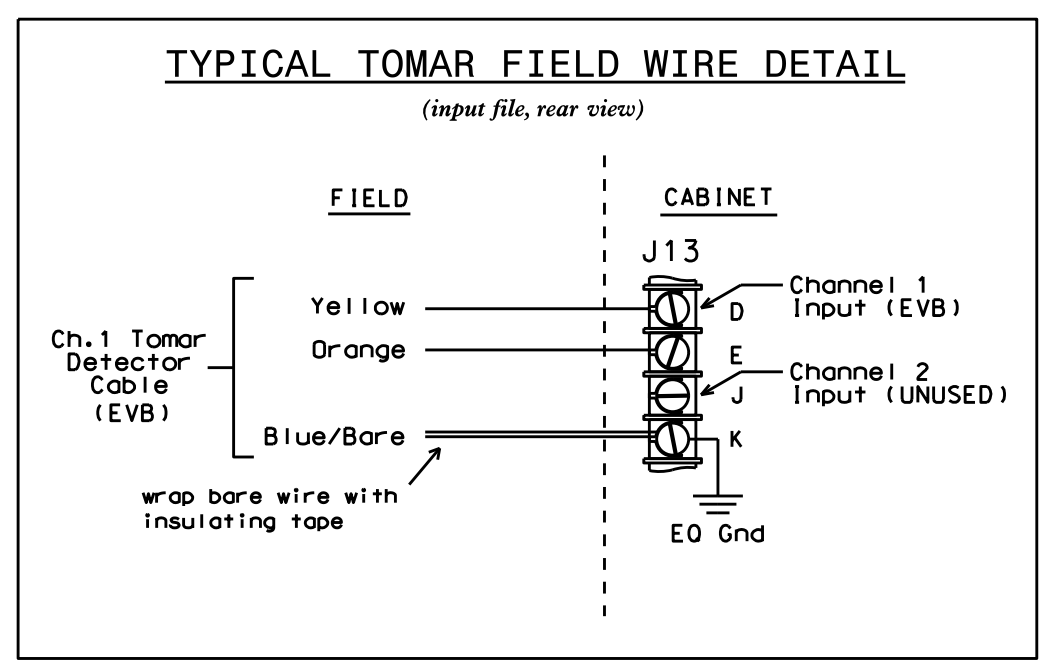
(front view)



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



INPUT FILE CONNECTION & PROGRAMMING CHART

PED PUSH BUTTONS	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
P41,P42	TB8-5,6	I12L	27	69	2	4 PED
P61,P62	TB8-7,9	I13U	26	68	2	6 PED

NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.

DETECTOR ATTRIBUTES LEGEND: INPUT FILE POSITION LEGEND: J2L

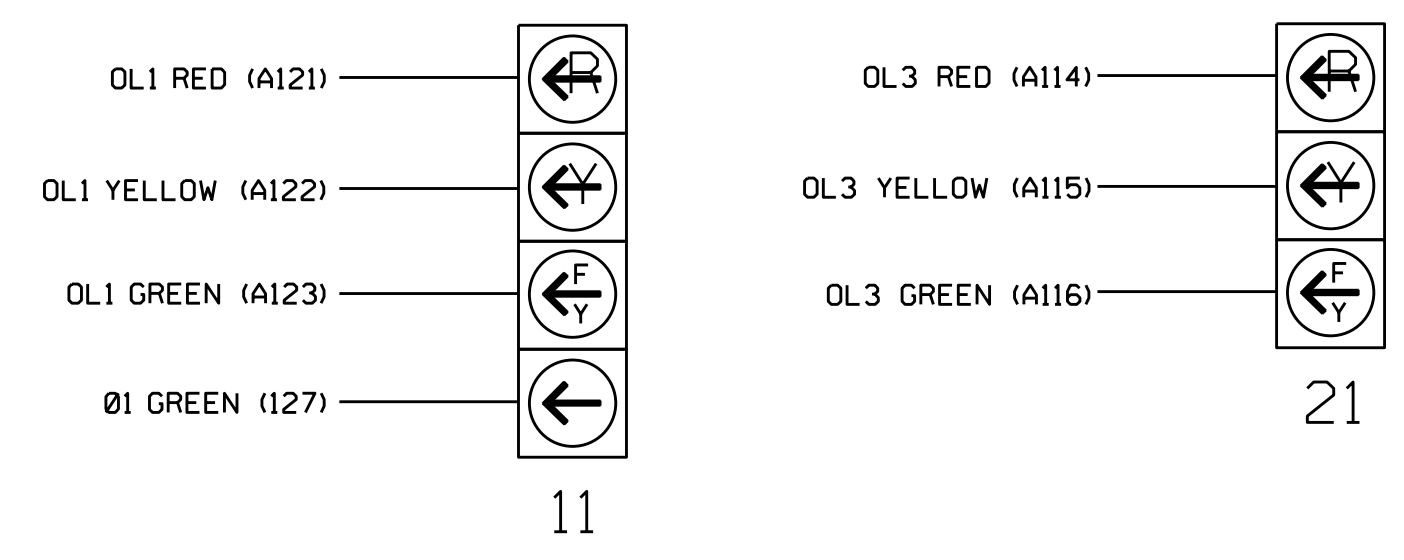
- 1-FULL TIME DELAY
 2-PED CALL
 3-RESERVED
 4-COUNTING
 5-EXTENSION
 6-TYPE 3
 7-CALLING
 8-ALTERNATE
- FILE J
 SLOT 2
 LOWER

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.

FYA SIGNAL WIRING DETAIL

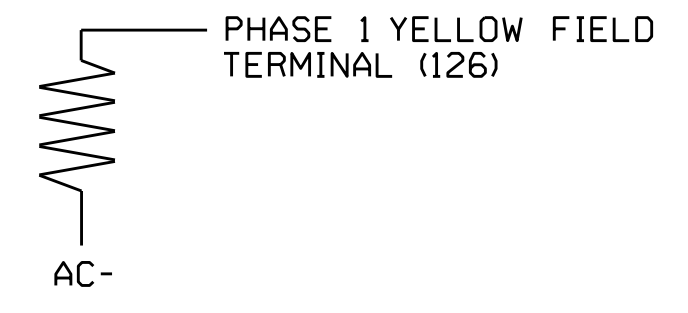
(wire signal heads as shown)



LOAD RESISTOR INSTALLATION DETAIL

(install resistor as shown below)

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



Electrical Detail - Temporary 3 - Sheet 1 of 2

Electrical and Programming Details For: **NC 55 (South Alston Avenue) at SR 1926 (Angier Avenue)**

Prepared In the Offices of: **TRANSPO-MOBILITY AND SAFETY CONSULTANTS, INC.**
 750 N. Greenfield Pkwy, Garner, NC 27529

Division 5 Durham County Durham
 PLAN DATE: November 2014 REVIEWED BY: T. Joyce
 PREPARED BY: C. Strickland REVIEWED BY:

SEAL: **George C. Brown**, ENGINEER, No. 022013, State of North Carolina

DocuSigned by: **George C. Brown** 4/2/2015
 F12001E0D08B439 DATE

SIG. INVENTORY NO. 05-1026T3

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1026T3
 DESIGNED: September 2014
 SEALED: 04/02/2015
 REVISED: N/A

C:\p05-2015_13-38_S:\IT\GIS\GIS\TSS\Signal\work\p05-2015_13-38_Sig\land\051026_sme.le.xxx.dgn
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 05/11/2015 10:10:10 AM