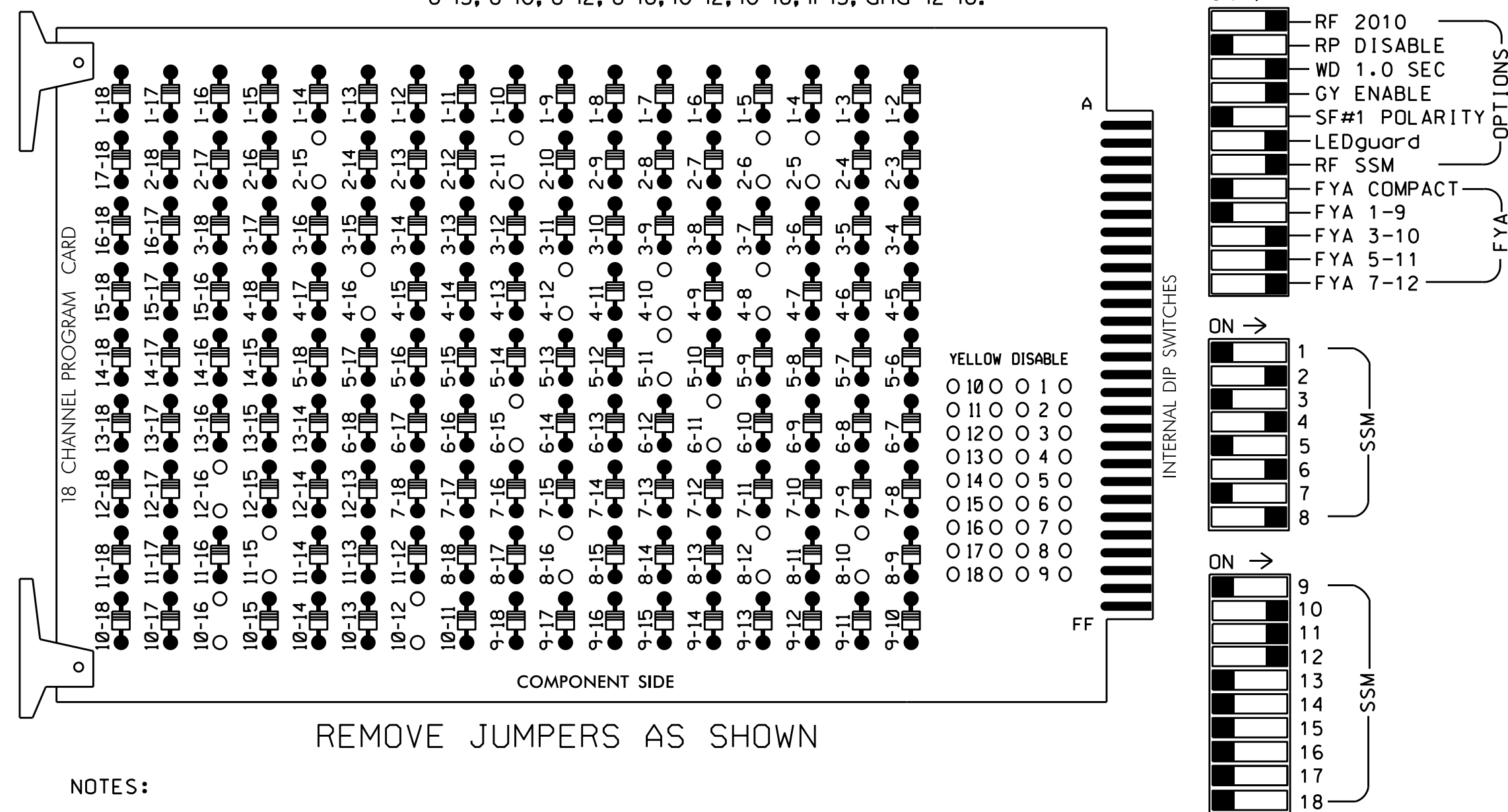


**EDI MODEL 2018ECL-NC CONFLICT MONITOR**

**PROGRAMMING DETAIL**

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 2-5, 2-6, 2-11, 2-15, 4-8, 4-10, 4-12, 4-16, 5-11, 6-11, 6-15, 8-10, 8-12, 8-16, 10-12, 10-16, 11-15, and 12-16.



- 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 6 and 8.
- 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.....S2,S5,S7,S8,S9,S11,S12,AUX S2,  
 AUX S4,AUX S5  
 PHASES USED.....2,4,5,6,6PED,8,8PED  
 OVERLAP 1.....NOT USED  
 OVERLAP 2.....4+8  
 OVERLAP 3.....\*  
 OVERLAP 4.....4+8

\* See FYA PPLT Programming detail on sheet 2.

**SIGNAL HEAD HOOK-UP CHART**

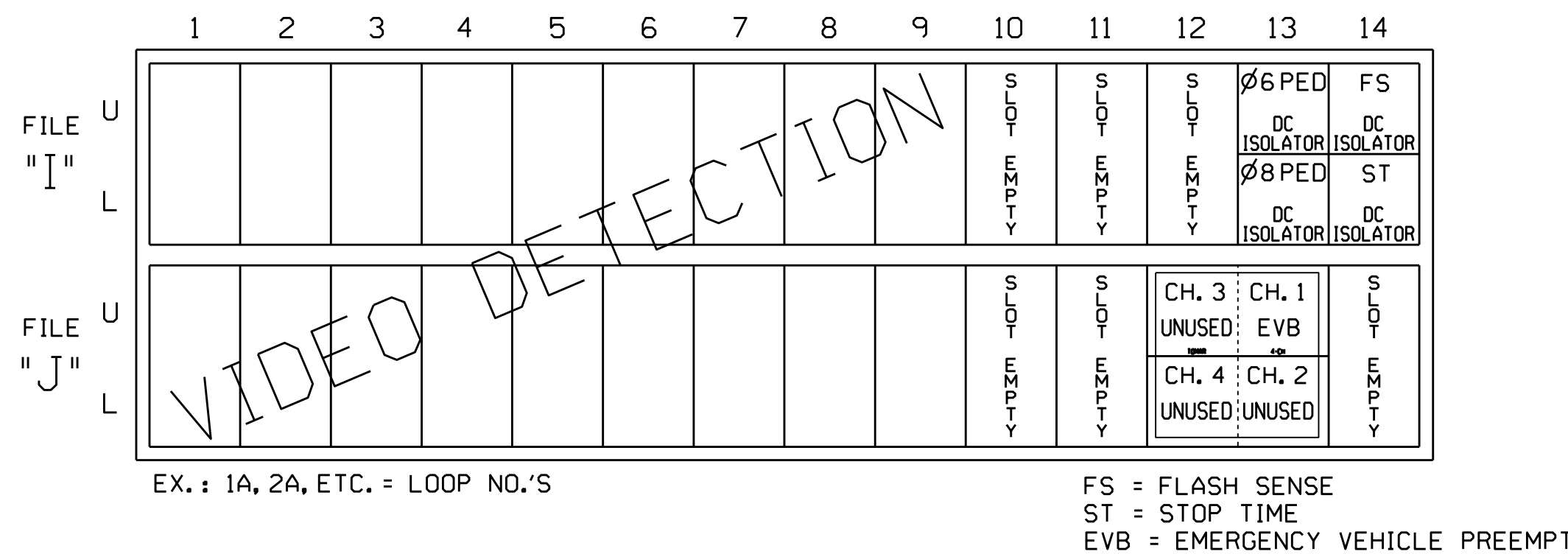
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	NU	21,22	NU	NU	42,43	NU	43	51	61,62	P61, P62	NU	82,83	NU	81	NU	51	41	NU
RED		128			101				134			107						
YELLOW		129			102				135			108						
GREEN		130			103				136			109						
RED ARROW															A124	A114	A101	
YELLOW ARROW							132								A125	A115	A102	
FLASHING YELLOW ARROW															A126	A116	A103	
GREEN ARROW							133	133										
Hand icon										119			110					
Person icon																		

NU = Not Used

\* See pictorial of head wiring in detail below.

**INPUT FILE POSITION LAYOUT**

(front view)

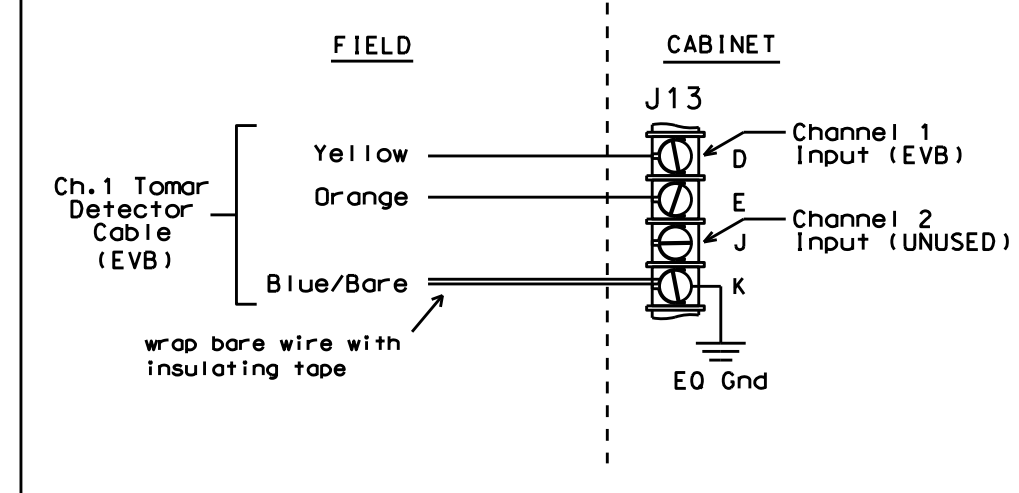


**SPECIAL DETECTOR NOTE**

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.

**TYPICAL TOMAR FIELD WIRE DETAIL**

(input file, rear view)



**INPUT FILE CONNECTION & PROGRAMMING CHART**

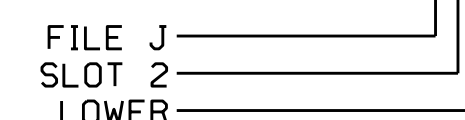
PED PUSH BUTTONS	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
P61,P62	TB8-7,9	I13U	26	68	2	6 PED
P81,P82	TB8-8,9	I13L	28	70	2	8 PED

**DETECTOR ATTRIBUTES LEGEND:**

- FULL TIME DELAY
- PED CALL
- RESERVED
- COUNTING
- EXTENSION
- TYPE 3
- CALLING
- ALTERNATE

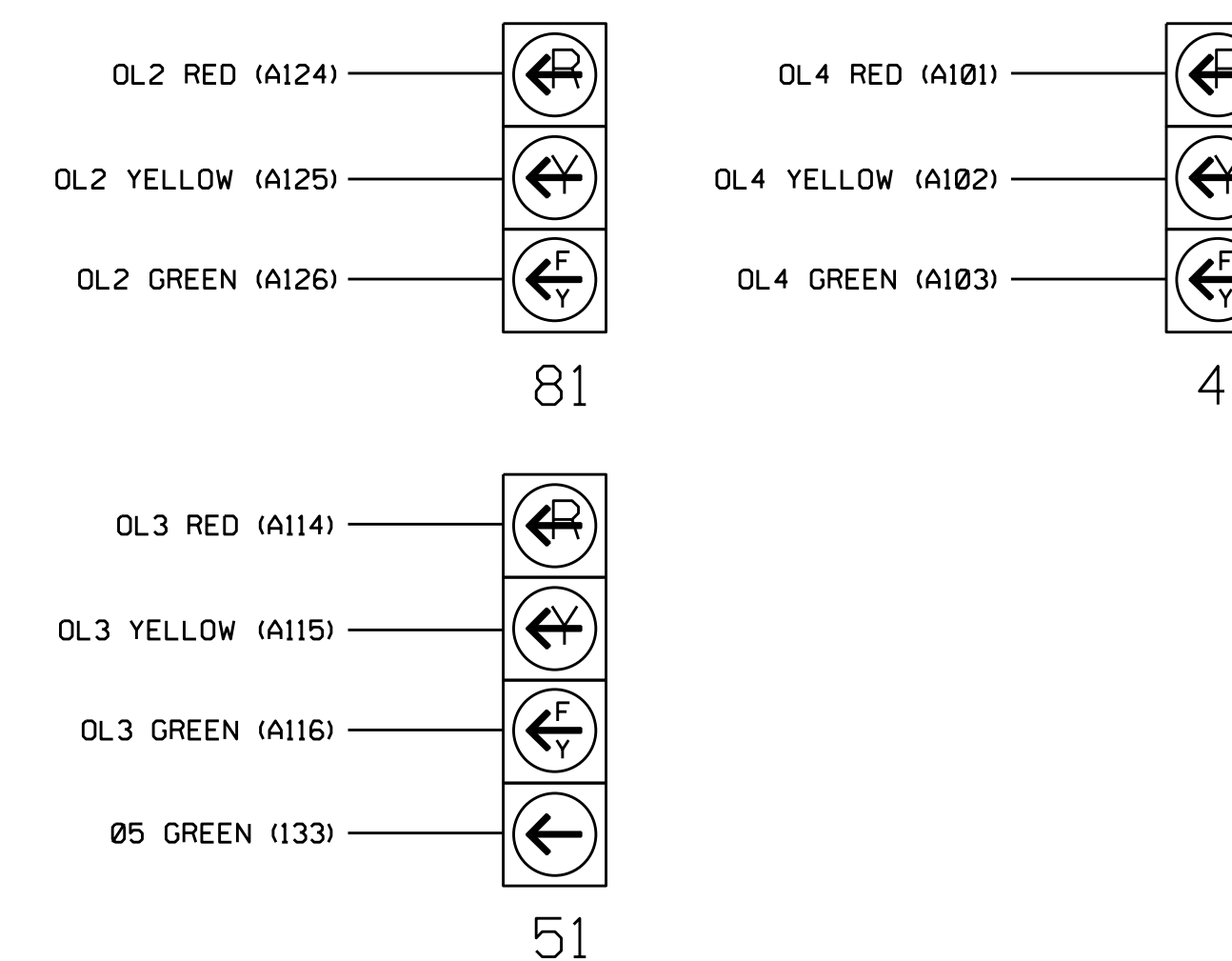
NOTE:  
 INSTALL DC ISOLATOR IN INPUT FILE SLOT I13.

**INPUT FILE POSITION LEGEND: J2L**



**FYA SIGNAL WIRING DETAIL**

(wire signal heads as shown)



Electrical Detail - Temporary Design 4 (TMP Phase 2, Steps 1-6) - Sheet 1 of 2  
 Electrical Detail - Temporary Design 6 (TMP Phase 2, Steps 7-12) - Sheet 1 of 2

Electrical and Programming Details for: **NC 55 (South Alston Avenue) at NC 147 NB Ramp / Gann Street**

Prepared in the Offices of: **Transportation Mobility and Safety Solutions**

Division 5, Durham County, Durham, NC

PLAN DATE: November 2014, REVIEWED BY: [Signature]

PREPARED BY: S. Armstrong, REVIEWED BY: [Signature]

SEAL: JOHN T. ROWE, JR., ENGINEER, SEAL 008453

DocuSigned by: John T. Rowe, Jr., 4/2/2015

750 N. Greenfield Pkwy, Garner, NC 27529

SIG. INVENTORY NO. 05-0284T4/T6

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-0284T4/T6  
 DESIGNED: September 2014  
 SEALED: 4/2/15  
 REVISED: N/A

27-MAR-2015 09:50 S:\MITS\15\SIGNAL\work\hgr\cds\g\_Maps\mstr\eng\050284\_sml\_elec\_xxx.dgn somstr009