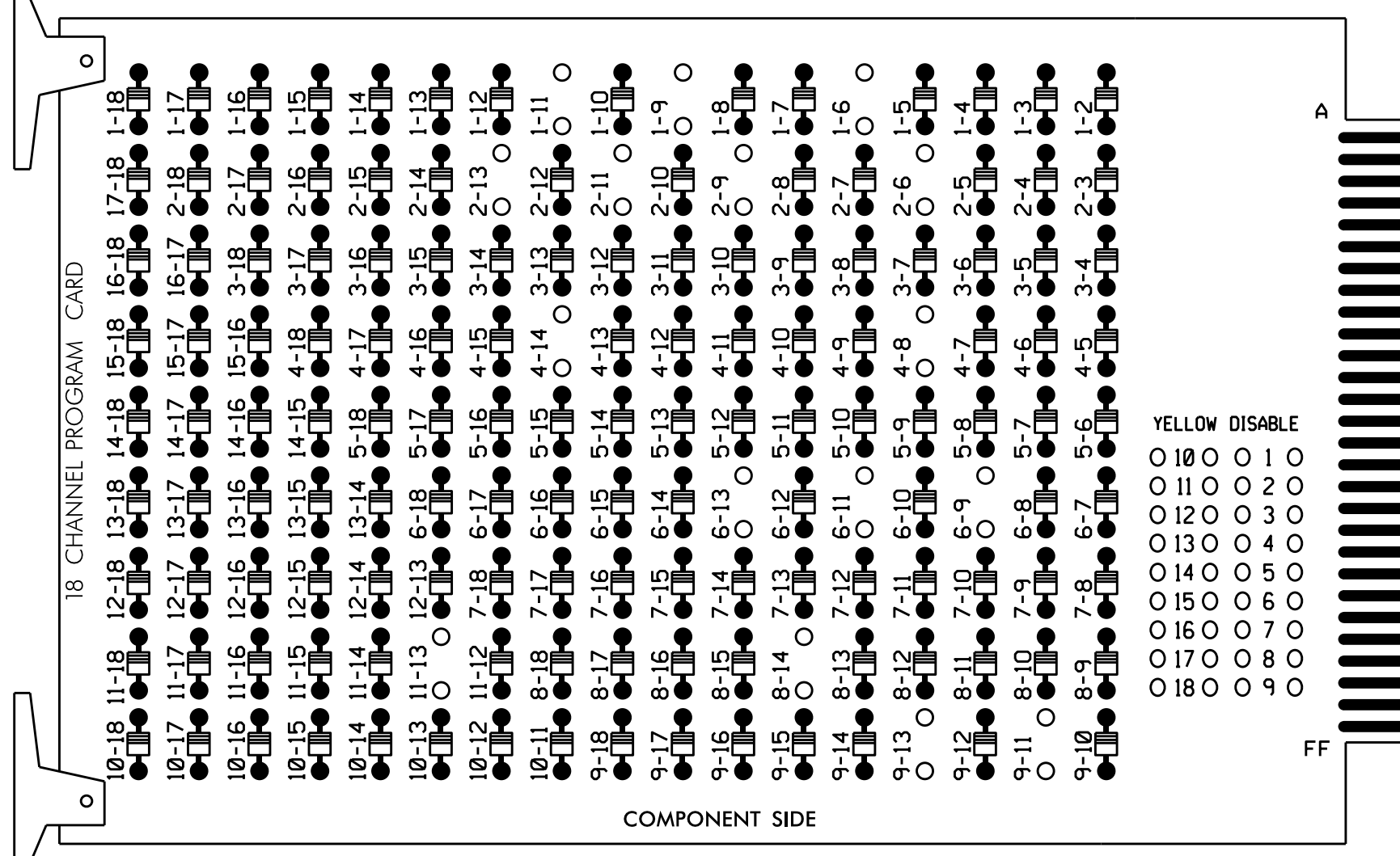


### EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

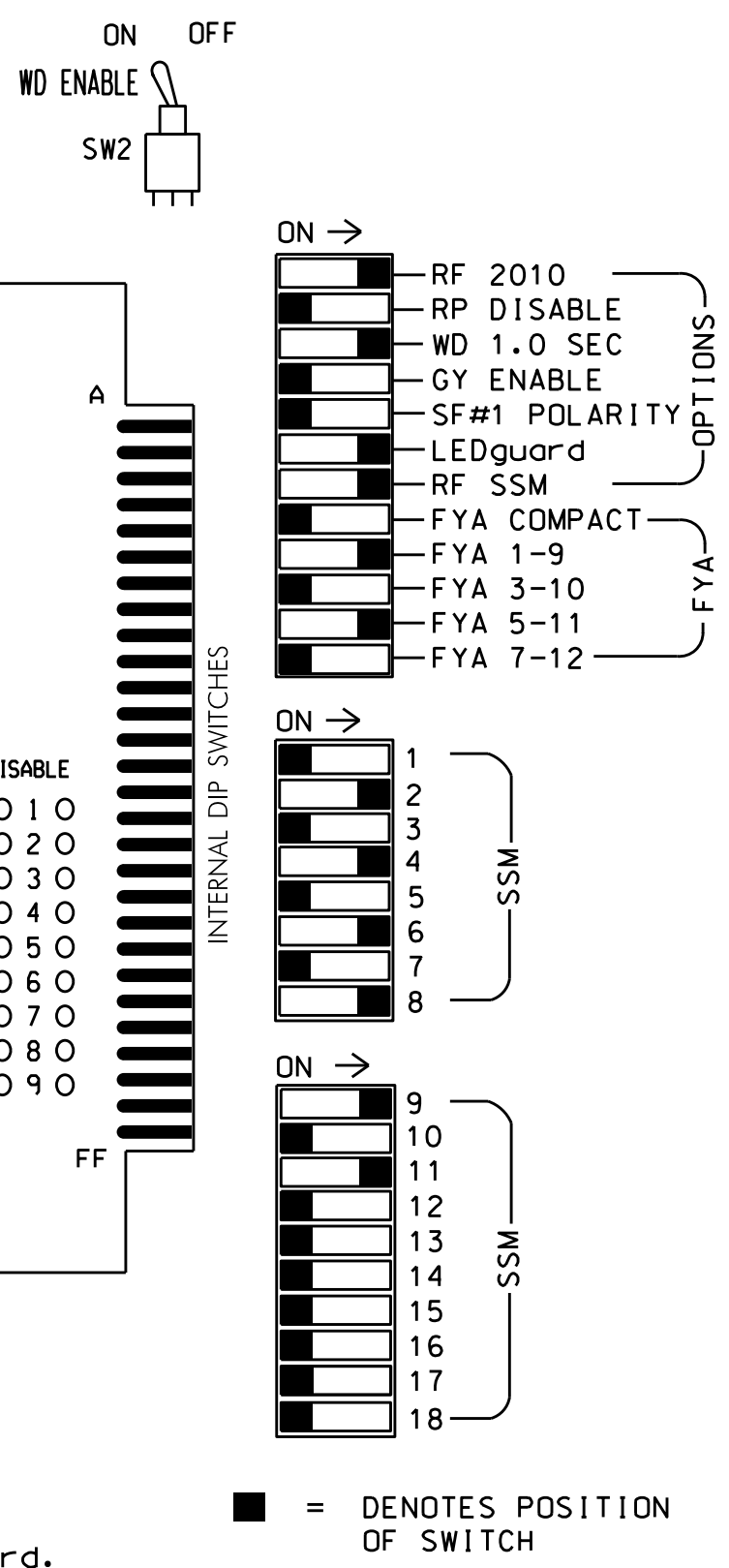
(remove jumpers and set switches as shown)

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.



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 2 and 4.
- 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,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.

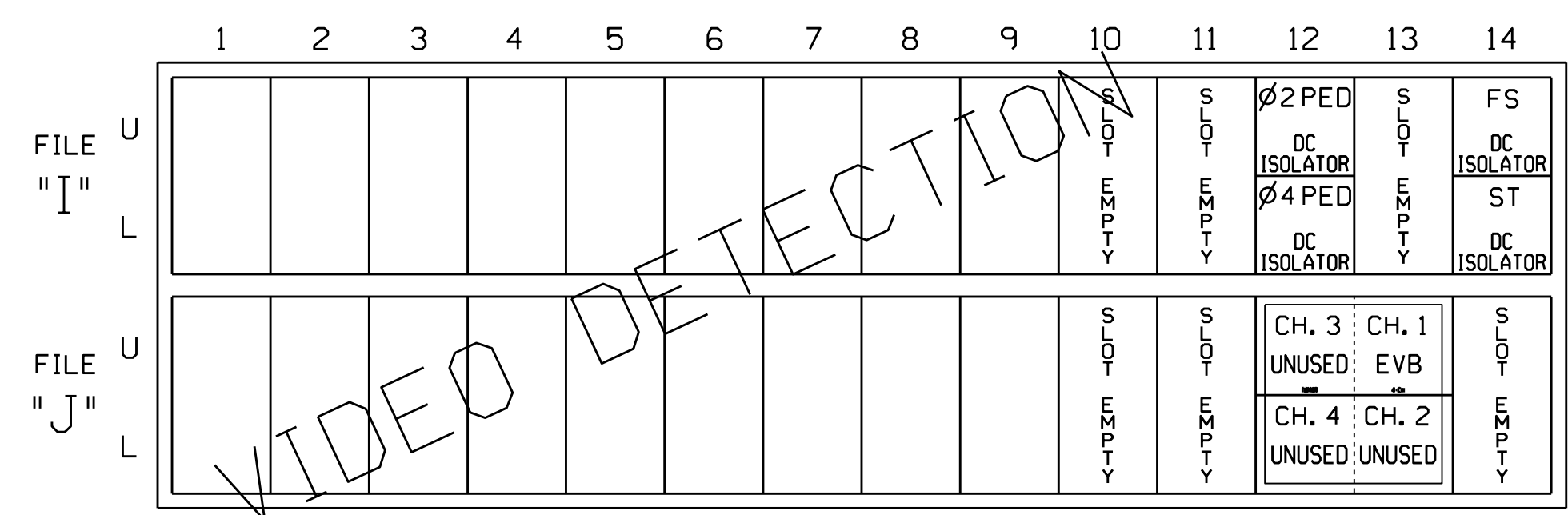
### SIGNAL HEAD HOOK-UP CHART

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	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																	
Hand icon					113			104										
Person icon					115			106										

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

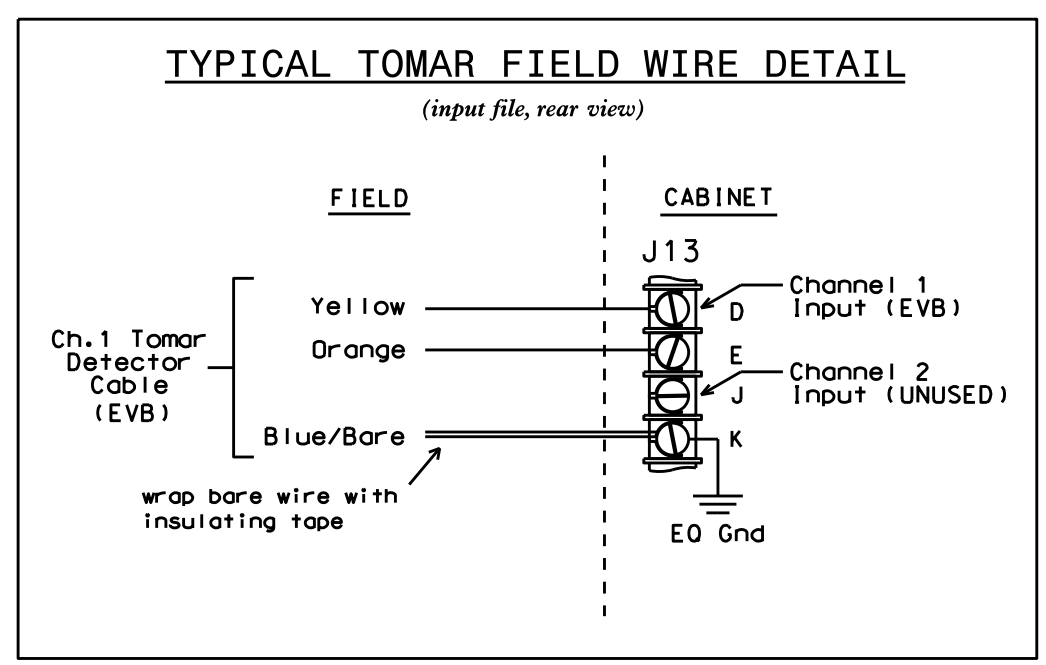
(front view)



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
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 SLOTS 112 AND 113.

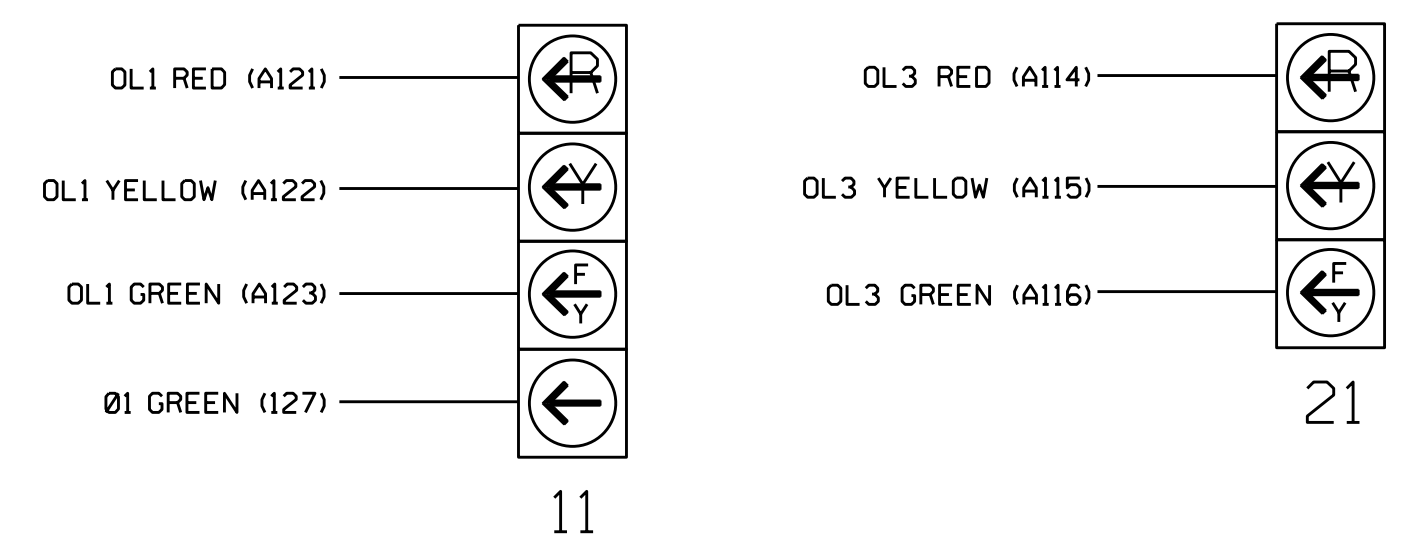
- DETECTOR ATTRIBUTES LEGEND: INPUT FILE POSITION LEGEND: J2L
- 1-FULL TIME DELAY
  - 2-PED CALL
  - 3-RESERVED
  - 4-COUNTING
  - 5-EXTENSION
  - 6-TYPE 3
  - 7-CALLING
  - 8-ALTERNATE
- FILE J  
 SLOT 2  
 LOWER

### 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

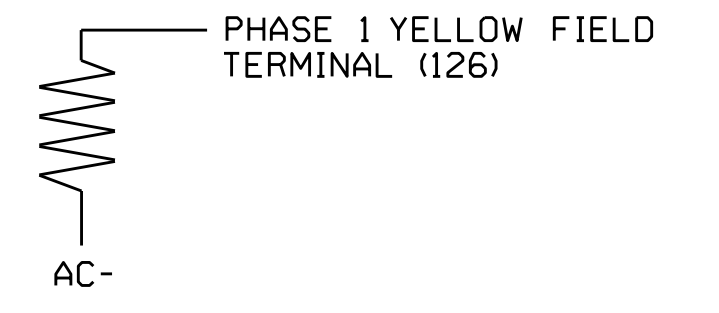
(wire signal heads as shown)



### 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 2 - Sheet 1 of 2

<p>Prepared In the Offices of:</p> <p>750 N. Greenfield Pkwy, Garner, NC 27529</p>	<p>NC 55 (South Alston Avenue)                  at                  SR 1926 (Angier Avenue)</p> <p>Division 5 Durham County Durham</p> <p>PLAN DATE: November 2014 REVIEWED BY: T. Joyce</p> <p>PREPARED BY: C. Strickland REVIEWED BY:</p>	<p>SEAL</p> <p>DocuSigned by:                  George C. Brown 4/2/2015</p>								
<p>THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1026T2                  DESIGNED: September 2014                  SEALED: 04/02/2015                  REVISED: N/A</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DESCRIPTION	INIT.	DATE					<p>SIG. INVENTORY NO. 05-1026T2</p>
NO.	DESCRIPTION	INIT.	DATE							

C:\Users\jgibson\Documents\Signal\work\garner\05-1026-smc-le-xxx.dgn  
 05-1026-2015 13:35  
 S:\IT\Signal\work\garner\05-1026-smc-le-xxx.dgn  
 05-1026-2015 13:35