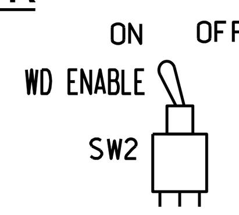
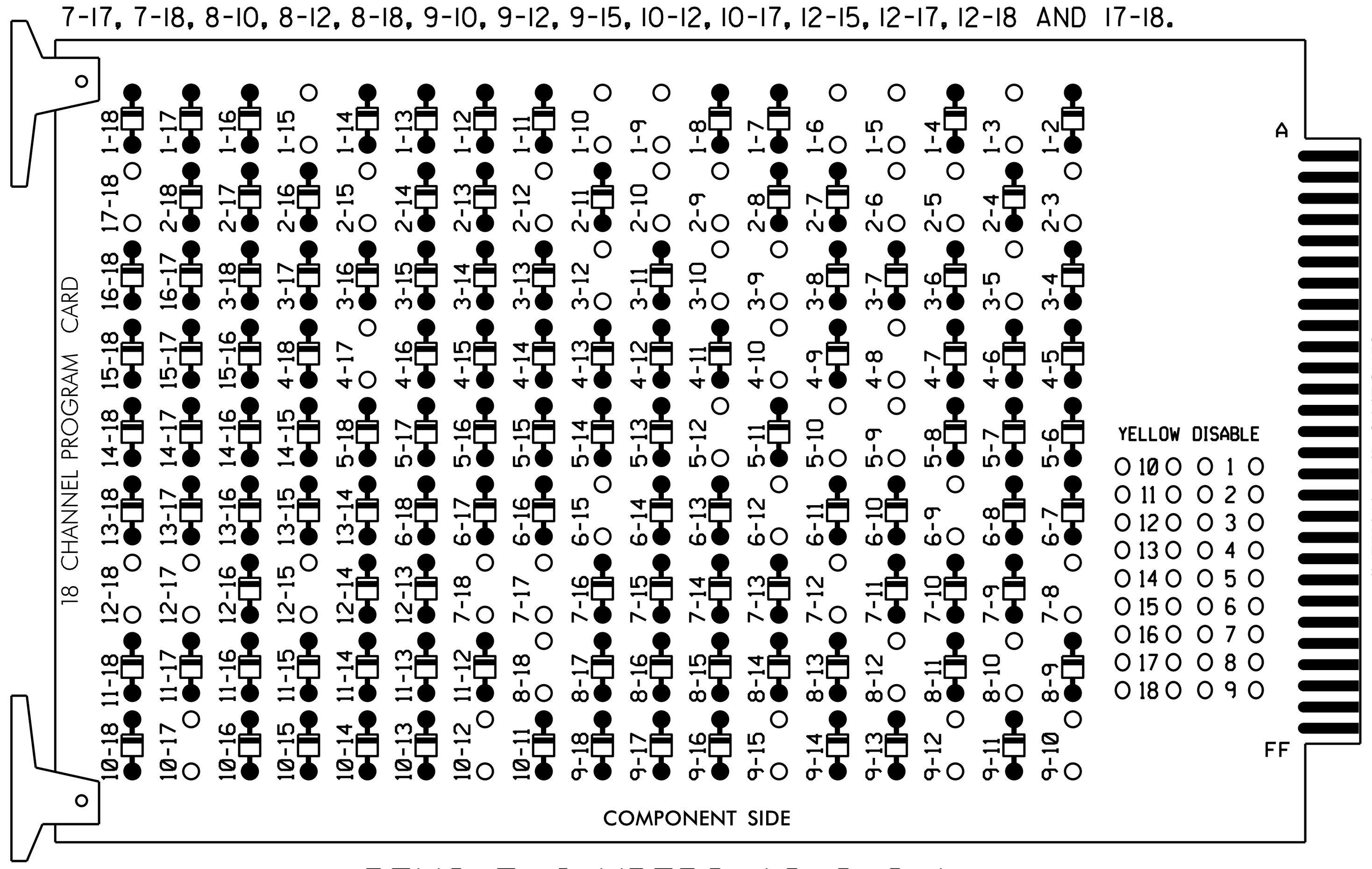
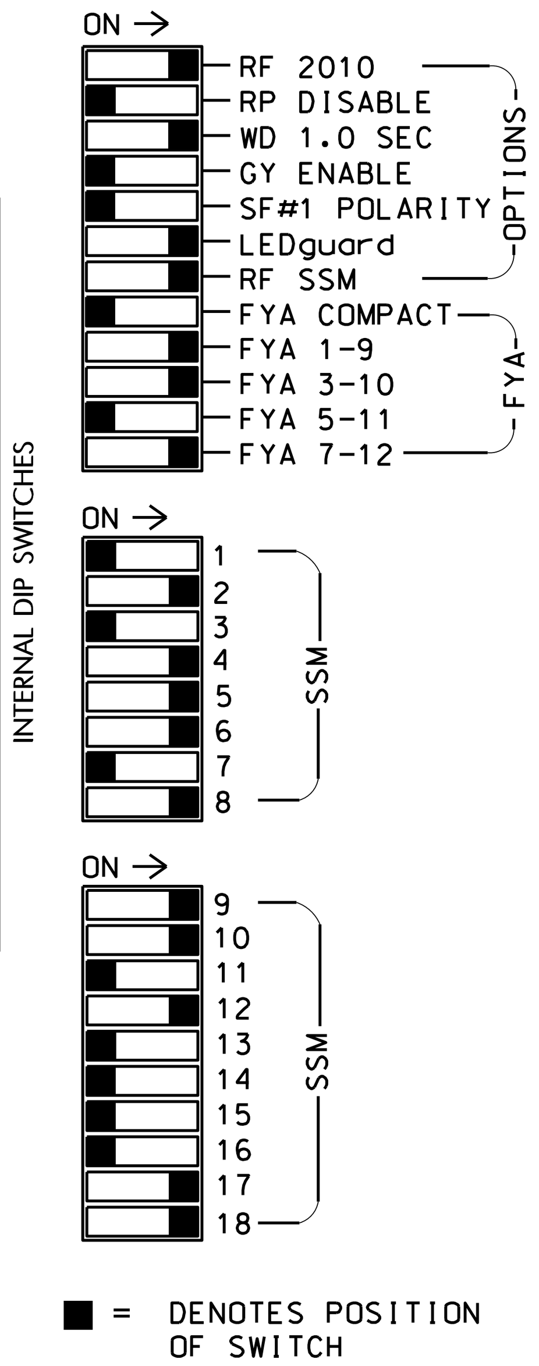
EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



REMOVE DIODE JUMPERS 1-3, 1-5, 1-6, 1-9, 1-10, 1-15, 2-3, 2-5, 2-6, 2-9, 2-10, 2-12, 2-15, 3-5, 3-9, 3-10, 3-12, 4-8, 4-10, 4-17, 5-9, 5-10, 5-12, 6-9, 6-12, 6-15, 7-8, 7-12, 7-17, 7-18, 8-10, 8-12, 8-18, 9-10, 9-12, 9-15, 10-12, 10-17, 12-15, 12-17, 12-18 AND 17-18.





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. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. 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. The installer shall verify that signal heads flash in accordance with the Signal Plans.
2. Enable Simultaneous Gap-Out for all Phases.
3. Program phases 2 and 6 for Variable Initial and Gap Reduction.
4. Program phases 2 and 6 for Startup In Green and Yellow Flash.
5. Program phase 6 for Startup Ped Call.
6. Program overlaps 1 and 6 as Wag Overlaps.
7. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
8. The cabinet and controller are part of the Salisbury Signal System.

EQUIPMENT INFORMATION

CONTROLLER..............2070
CABINET.................332 W/ AUX
SOFTWARE................ECONOLITE OASIS
CABINET MOUNT...........BASE
OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE
LOAD SWITCHES USED......S1,S2,S4,S5,S7,S8,S9,S10,S11 AUX S1,AUX S2,AUX S3,AUX S5,AUX S6
PHASES USED.............1,2,3,4,5,6,6PED,7,8
OVERLAP "A".............1+2
OVERLAP "B".............4+5
OVERLAP "C".............NOT USED
OVERLAP "D".............2+3
OVERLAP "E".............7
OVERLAP "F".............3
OVERLAP "G".............5
OVERLAP "H".............3

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	OLG	4	4 PED	5	6	6 PED	OLH	8	8 PED	OLA	OLB	OLE	OLC	OLD	OLF
SIGNAL HEAD NO.	11★	21,22	NU	43★	41,42 44	NU	51	61,62	P61 P62	23★	81,82	NU	11★	43★	71,72	NU	23★	31
RED		128			101			134			107			A124			A101	
YELLOW	✳	129		✳	102			135		✳	108							
GREEN		130			103			136			109							
RED ARROW							131						A121		A111			A104
YELLOW ARROW							132						A122	A125	A112		A102	A105
FLASHING YELLOW ARROW													A123	A126			A103	
GREEN ARROW	127			118			133			124					A113			A106
✋									119									
🚶									121									

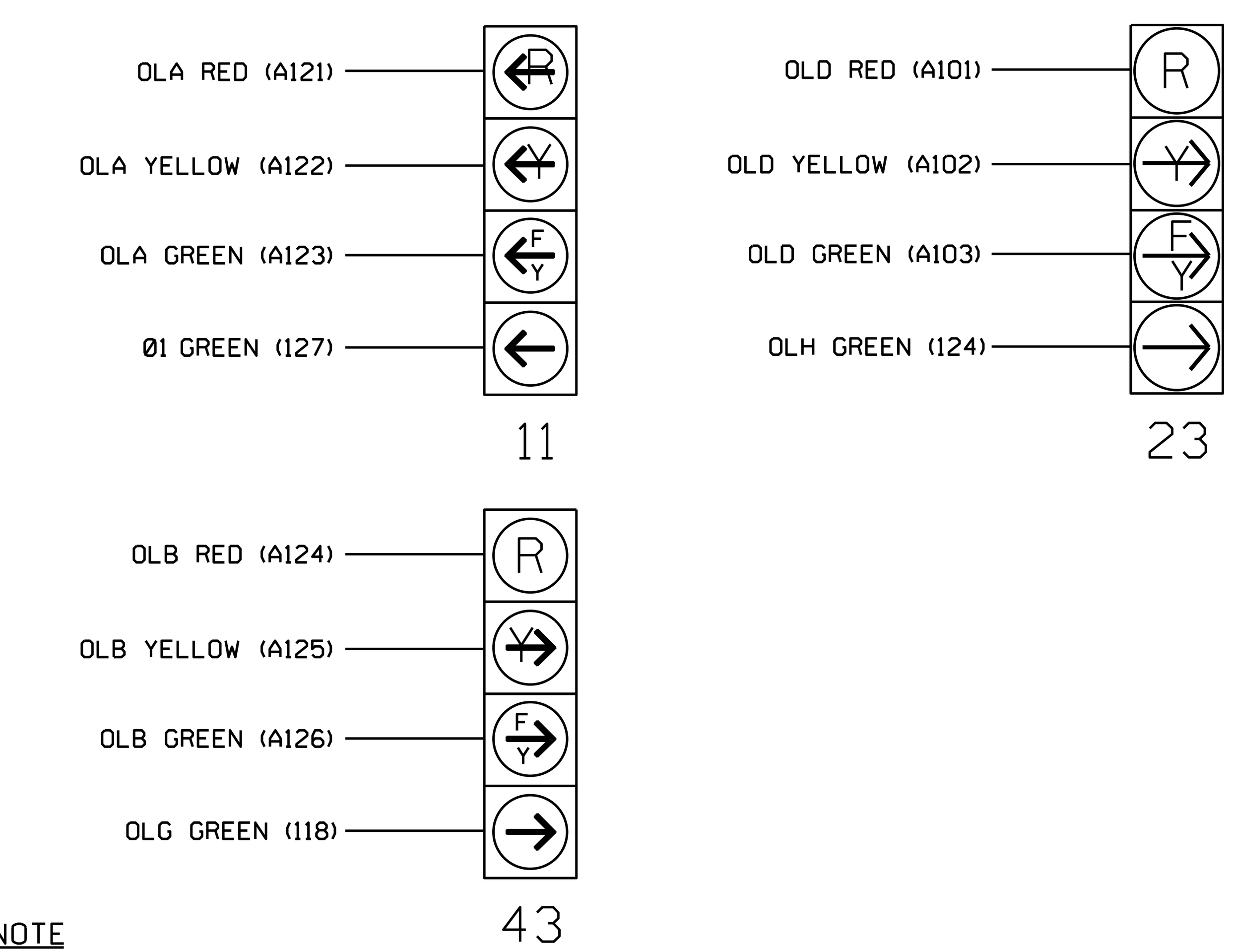
NU = Not Used

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

★ See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NOTE

The sequence display for signal heads 11, 23 and 43 requires special logic programming. See sheet 5 for programming instructions.

INPUT FILE POSITION LAYOUT

(front view)

FILE		1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	Ø 1 1A	Ø2/SYS 2A/S16	SLOT EMPTY	SLOT EMPTY	Ø 3 3A	Ø4/SYS 4A/S15	Ø 4 4C	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	Ø6 PED DC ISOLATOR	FS DC ISOLATOR
	L	NOT USED	Ø2/SYS 2B/S17			NOT USED	Ø 4 4B	NOT USED						NOT USED	ST DC ISOLATOR
FILE "J"	U	Ø 5 5A	Ø 5 5B	Ø6/SYS 6A/S18	WIRED INPUT ⊗	Ø 7 7A	Ø 7 7B	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	✳ GPS EVP		SLOT EMPTY
	L	NOT USED	NOT USED	Ø6/SYS 6B/S19		NOT USED	Ø 8 8A								

EX.: 1A, 2A, ETC. = LOOP NO.'S
•See GPS Preemption Installation Note Below
⊗ Wired Input - Do not populate slot with detector card

FS = FLASH SENSE
ST = STOP TIME

GPS PREEMPTION INSTALLATION NOTE

Install a GPS preemption system. Perform installation according to manufacturer's directions and NCDOT engineer approved mounting location to accomplish the preemption schemes shown on the Signal Design Plans.

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A[1]	TB2-1,2	I1U	56	18	1	1	Y	Y			15
	-	J4U	48	10★	26	6	Y	Y	Y		3
	-	I1U	56	18★	51	1	Y	Y			
2A/S16	TB2-5,6	I2U	39	1	2	2/SYS	Y	Y			
2B/S17	TB2-7,8	I2L	43	5	12	2/SYS	Y	Y			
3A	TB4-5,6	I5U	58	20	3	3	Y	Y			3
4A/S15	TB4-9,10	I6U	41	3	4	4/SYS	-	Y		1.9	
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			
✳ 4C	TB6-1,2	I7U	65	27	34	4	Y	Y			
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			3
5B	TB3-5,6	J2U	40	2	6	5	Y	Y			15
6A/S18	TB3-9,10	J3U	64	26	36	6/SYS	Y	Y			
6B/S19	TB3-11,12	J3L	77	39	46	6/SYS	Y	Y			
7A	TB5-5,6	J5U	57	19	7	7	Y	Y			
7B	TB5-9,10	J6U	42	4	8	7	Y	Y			
8A	TB5-11,12	J6L	46	8	18	8	Y	Y			10
PED PUSH BUTTONS											
P61,P62	TB8-7,9	I13U	68	30	PED 6	6 PED					

NOTE: INSTALL DC ISOLATOR IN INPUT FILE SLOT I13.

[1] Add jumper from I1-W to J4-W, on rear of input file.

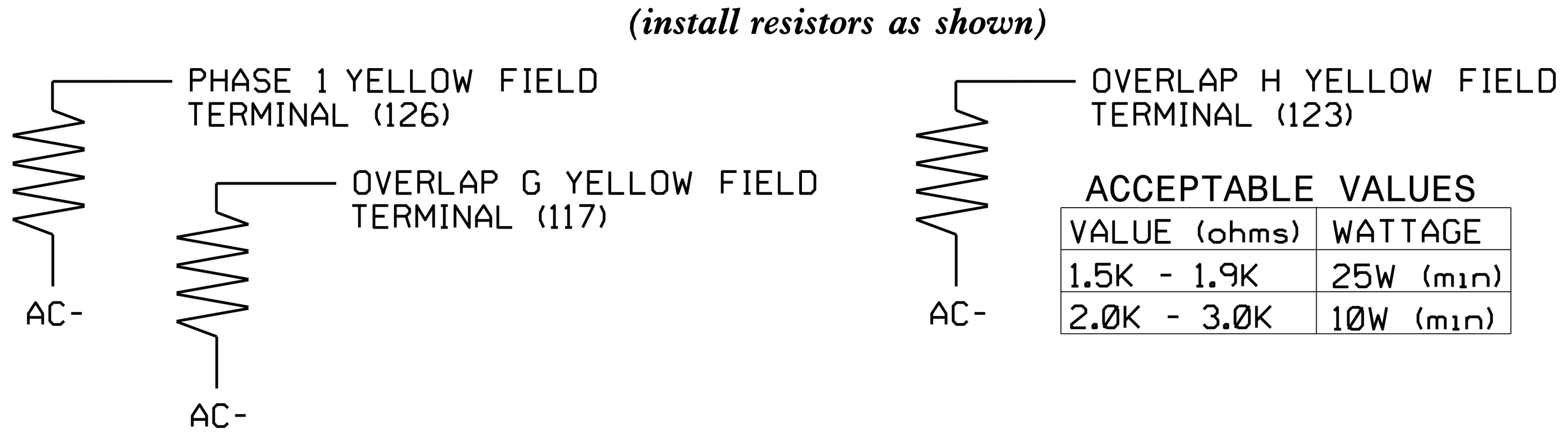
★ See Input Page Assignment programming details on sheets 6 and 7.

✳ Adjust sensitivity setting for bicycle detection.

INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)



ACCEPTABLE VALUES

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

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 09-0640
DESIGNED: January 2022
SEALED: 1/27/2022
REVISED: N/A

Electrical Detail - Sheet 1 of 7

ELECTRICAL AND PROGRAMMING DETAILS FOR:

US 601 (Jake Alexander Blvd S) at SR 2528 (Julian Rd) and Martin Luther King Jr Ave

Division 9 | Rowan County | Salisbury

PLAN DATE: January 2022 | REVIEWED BY: T. Joyce
PREPARED BY: C. Strickland | REVIEWED BY:

REVISIONS	INIT.	DATE

ITS & Signals Management Section, Transportation Mobility and Safety Division, State of North Carolina Department of Transportation
750 N.Greenfield Pkwy,Garner,NC 27529

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DocuSigned by: D. Todd Joyce 01/28/2022
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DATE

SIG. INVENTORY NO. 09-0640

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