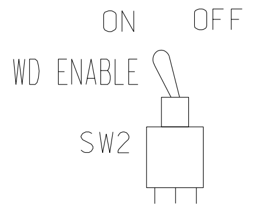
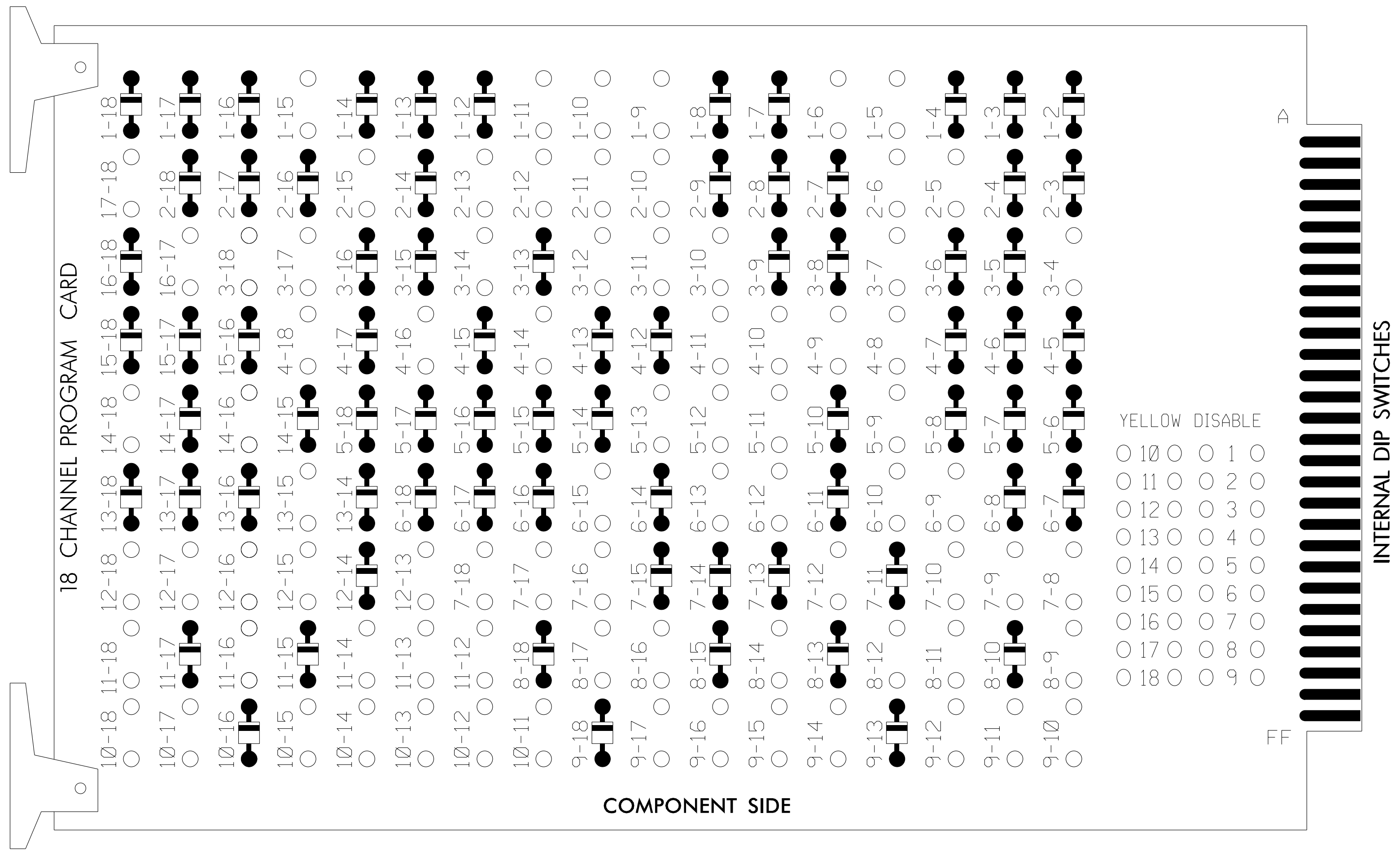
PROJECT REFERENCE NO.	SHEET NO.
U-2729	Sig.17.1

18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

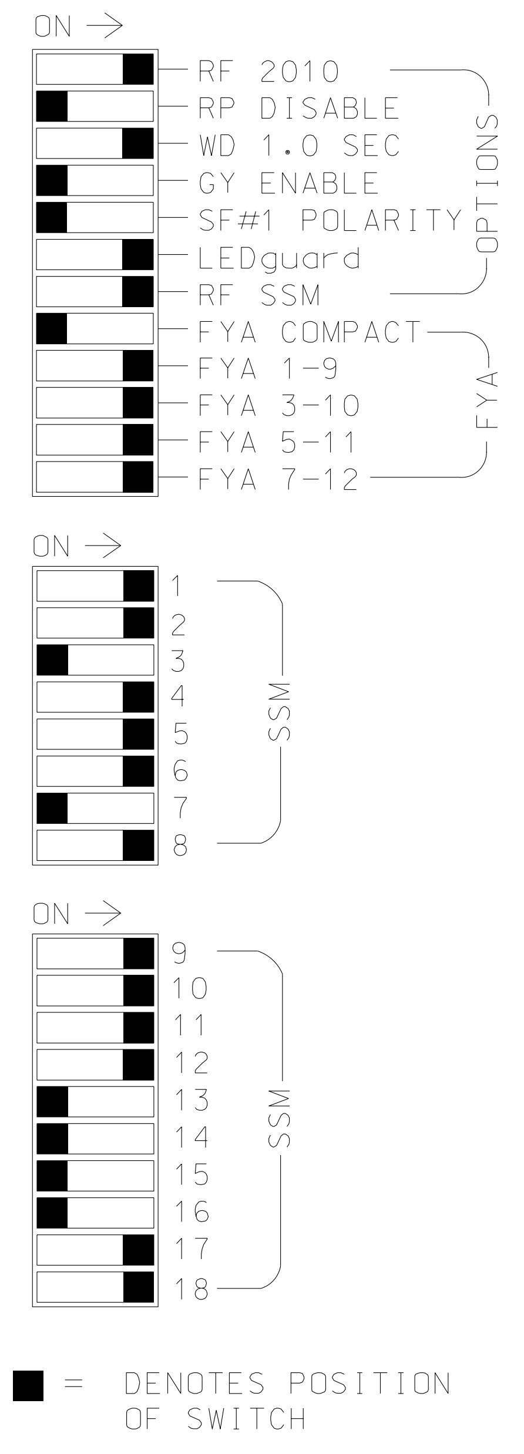
(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-10, 1-11, 1-15, 2-5, 2-6, 2-10, 2-11, 2-12, 2-13, 2-15, 3-4, 3-7, 3-10, 3-11, 3-12, 3-14, 3-17, 3-18, 4-8, 4-9, 4-10, 4-11, 4-14, 4-16, 4-18, 5-9, 5-11, 5-12, 5-13, 6-9, 6-10, 6-12, 6-13, 6-15, 7-8, 7-9, 7-10, 7-12, 7-16, 7-17, 7-18, 8-9, 8-11, 8-12, 8-14, 8-16, 8-17, 9-10, 9-11, 9-12, 9-14, 9-15, 9-16, 9-17, 10-11, 10-12, 10-13, 10-14, 10-15, 10-17, 10-18, 11-12, 11-13, 11-14, 11-16, 11-18, 12-13, 12-15, 12-16, 12-17, 12-18, 13-15, 14-16, 14-18, 16-17, 17-18





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. 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.
5. Program phases 2 and 6 for Yellow Flash and overlaps 1, 2 and 5 as Wag Overlaps.
6. The cabinet and controller are part of the Winston Salem 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,S3,S4,S5,S6,S7,S8,
S9,S10,S11,S12,AUX S1,AUX S2,
AUX S3,AUX S4,AUX S5,AUX S6
PHASES USED.............1,2,2PED,3,4,4PED,
5,6,6PED,7,8,8PED
OVERLAP 'A'.............1+8
OVERLAP 'B'.............6+7
OVERLAP 'C'.............4+5
OVERLAP 'D'.............2+3
OVERLAP 'E'.............3
OVERLAP 'F'.............7
OVERLAP 'G'.............7
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.	11,12	83★	21,22	P21 P22	63★	41,42	P41, P42	51	43★	61,62	P61, P62	23★	81,82	P81, P82	83★	63★	31	43★	23★	71,72
RED			128			101				134			107		A121	A124		A114	A101	
YELLOW			129		✳	102				135		✳	108							
GREEN			130			103				136			109							
RED ARROW	125							131									A111			A104
YELLOW ARROW	126							132							A122	A125	A112	A115	A102	A105
FLASHING YELLOW ARROW															A123	A126		A116	A103	
GREEN ARROW	127	127			118			133	133			124					A113			A106
✋				113			104				119			110						
🚶				115			106				121			112						

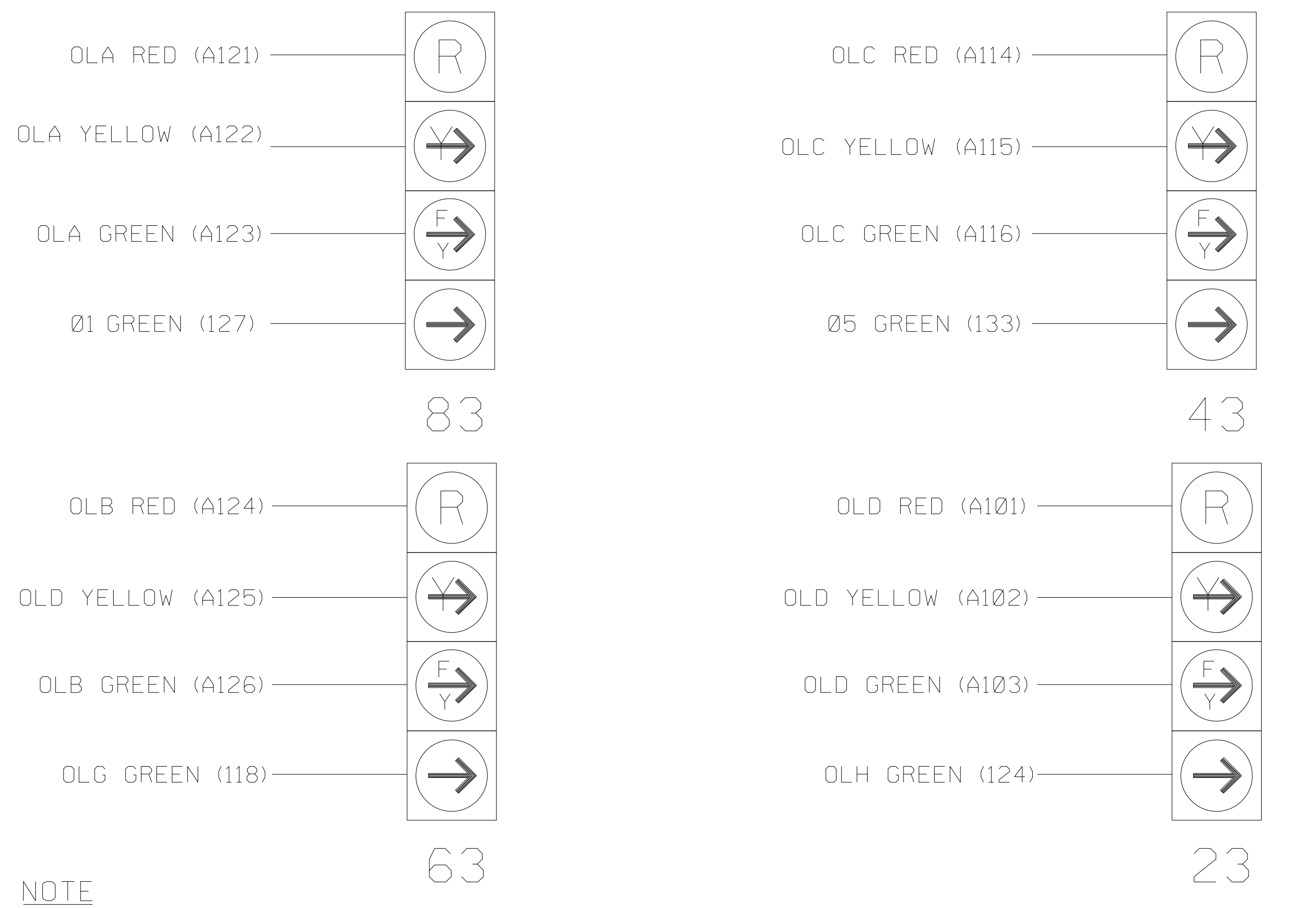
NU = Not Used

✳ 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 23, 43, 63 and 83 require special logic programming. See sheet 4 for programming instructions.

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 1A	Ø 2 2A	SLOT EMPTY	SLOT EMPTY	Ø 3 3A	Ø 4 4A	SLOT EMPTY	SLOT EMPTY	Ø 1 1B	SLOT EMPTY	SLOT EMPTY	Ø2 PED DC ISOLATOR	Ø6 PED DC ISOLATOR	FS DC ISOLATOR
	L	NOT USED	Ø 2 2B			NOT USED	Ø 4 4B			Ø 1 1C			Ø4 PED DC ISOLATOR	Ø8 PED DC ISOLATOR	ST DC ISOLATOR
FILE "J"	U	Ø 5 5A	Ø 6 6A	SLOT EMPTY	SLOT EMPTY	Ø 7 7A	Ø 8 8A	SLOT EMPTY	SLOT EMPTY	Ø 5 5B	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY	SLOT EMPTY
	L	NOT USED	Ø 6 6B			NOT USED	Ø 8 8B			Ø 7 7B					

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.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A	TB2-1,2	I1U	56	18	1	1	Y	Y			3
1B	TB6-9,10	I9U	60	22	11	1	Y	Y			
1C	TB6-11,12	I9L	62	24	13	1	Y	Y			15
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
3A	TB4-5,6	I5U	58	20	3	3	Y	Y			3
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			3
5B	TB7-9,10	J9U	59	21	15	5	Y	Y			15
6A	TB3-5,6	J2U	40	2	6	6	Y	Y			
6B	TB3-7,8	J2L	44	6	16	6	Y	Y			
7A	TB5-5,6	J5U	57	19	7	7	Y	Y			3
7B	TB7-11,12	J9L	61	23	17	7	Y	Y			
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			
8B	TB5-11,12	J6L	46	8	18	8	Y	Y			
PED PUSH BUTTONS											
P21,P22	TB8-4,6	I12U	67	29	PED 2	2 PED					
P41,P42	TB8-5,6	I12L	69	31	PED 4	4 PED					
P61,P62	TB8-7,9	I13U	68	30	PED 6	6 PED					
P81,P82	TB8-8,9	I13L	70	32	PED 8	8 PED					

NOTE:
INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.

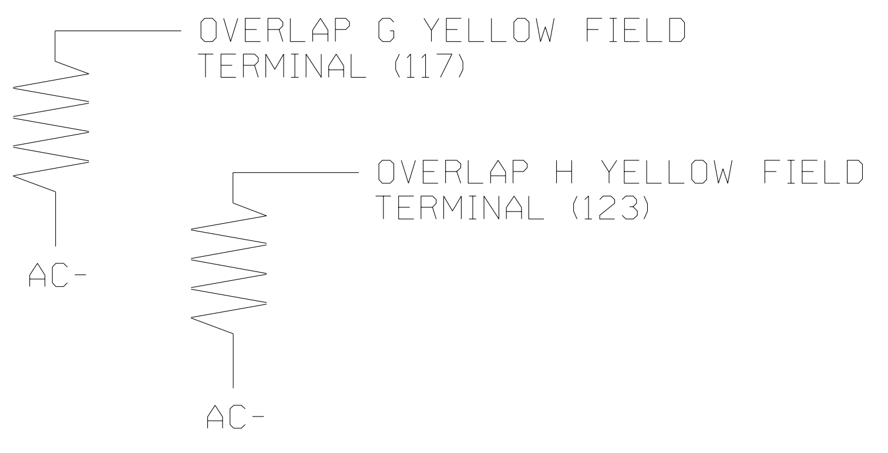
INPUT FILE POSITION LEGEND: J2L
FILE J
SLOT 2
LOWER

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: 09-0557T4
DESIGNED: March 2023
SEALED: April 25, 2023
REVISED:

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

Electrical Detail - Temporary Design 4 - Sheet 1 of 5

MOTT MACDONALD
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www.mottmac.com
License No. F-0669

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Transportation Mobility and Safety Division
ITS & Signals Management Section
750 N.Greenfield Pkwy, Garner, NC 27529

SR 4000 (University Parkway)
at
SR 1672 (Hanes Mill Rd)

Division 9 Forsyth County Winston-Salem

PLAN DATE:	March 2023	REVIEWED BY:	RW Thompson
PREPARED BY:	LD Stouchko	REVIEWED BY:	

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
SEAL 032711
RUSSELL W. THOMPSON

DocuSigned by:
Russell W. Thompson
A1985B6399B44D4...
4/25/2023
DATE

SIG. INVENTORY NO. 09-0557T4

4/25/2023
G:*308350_DDC.12*RC_U-2729*Traffic*Signals*09-0557*260_370_090557-20230425e1-t4.dgn
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