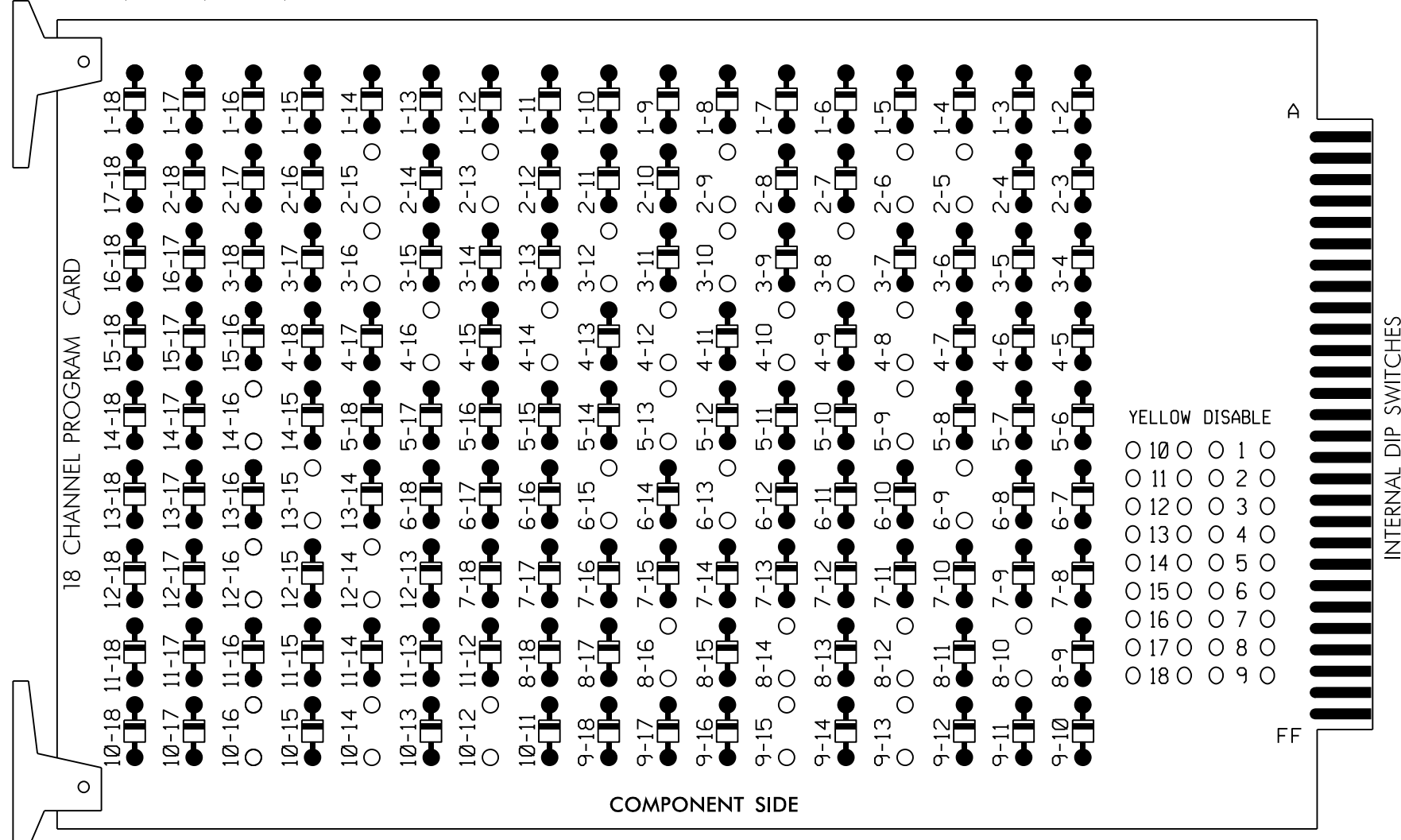


### EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

*(remove jumpers and set switches as shown)*

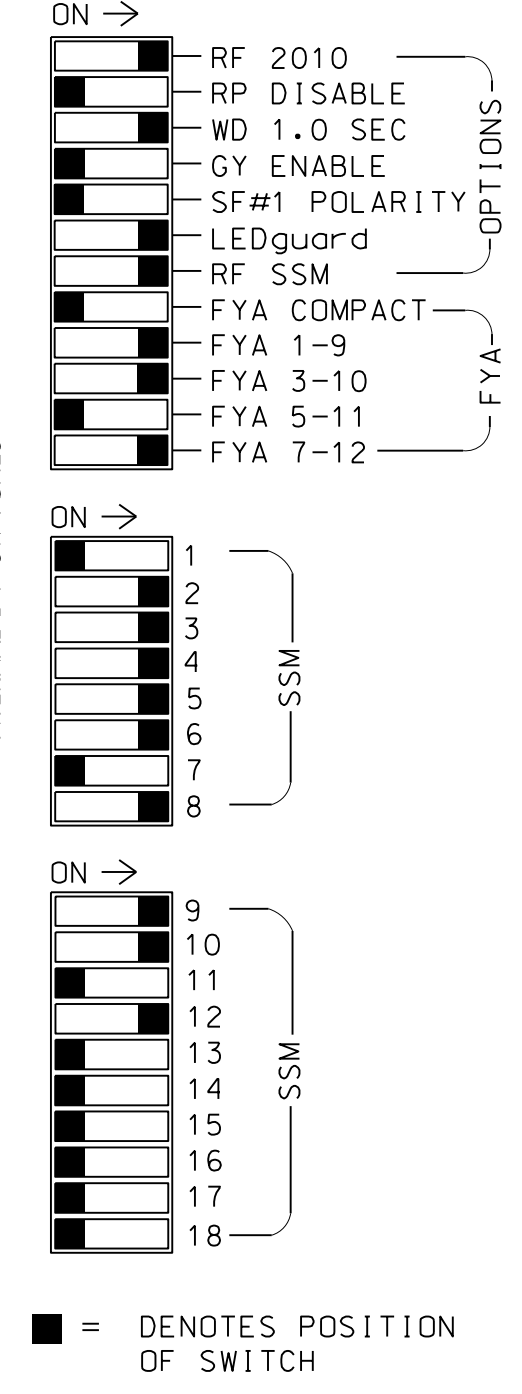
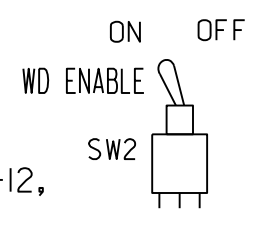
REMOVE DIODE JUMPERS 2-5, 2-6, 2-9, 2-13, 2-15, 3-8, 3-10, 3-12, 3-16, 4-8, 4-10, 4-12, 4-14, 4-16, 5-9, 5-13, 6-9, 6-13, 6-15, 8-10, 8-12, 8-14, 8-16, 9-13, 9-15, 10-12, 10-14, 10-16, 12-14, 12-16, 13-15 AND 14-16.



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.
- Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. 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. The installer shall verify that signal heads flash in accordance with the Signal Plans.
- Program phases 4 and 8 for Dual Entry.
- Enable Simultaneous Gap-Out for all Phases.
- Program phases 2 and 6 for Variable Initial and Gap Reduction.
- Program phases 2 and 6 for Startup In Green.
- Program phases 2, 4, 6, and 8 for Startup Ped Call.
- Program phases 2 and 6 for Yellow Flash, and overlaps 1 and 2 as Wag Overlaps.
- The cabinet and controller are part of the NC 42 (East of Clayton) Closed Loop 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.....S2,S3,S4,S5,S6,S7,S8,S9,S11,S12  
 AUX S1,AUX S2,AUX S5  
 PHASES USED.....2,3,4,5,6,8,2PED,4PED,6PED,8PED  
 OVERLAP "A".....2  
 OVERLAP "B".....3+4  
 OVERLAP "C".....NOT USED  
 OVERLAP "D".....8

### 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	OLA	OLB	SPARE	OLC	OLD	SPARE	
SIGNAL HEAD NO.	NU	21,22	P21, P22	22	31	42,43	P41, P42	43	51,52	62,63	P61, P62	NU	81,82	P81, P82	61	31	NU	41	NU
RED		128		*	101			134			107								
YELLOW		129			102			135			108								
GREEN		130			103			136			109								
RED ARROW								131					A121	A124				A101	
YELLOW ARROW				117				132	132				A122	A125				A102	
FLASHING YELLOW ARROW													A123	A126				A103	
GREEN ARROW				118	118			133	133										
Hand icon								104			119		110						
Foot icon								106			121		112						

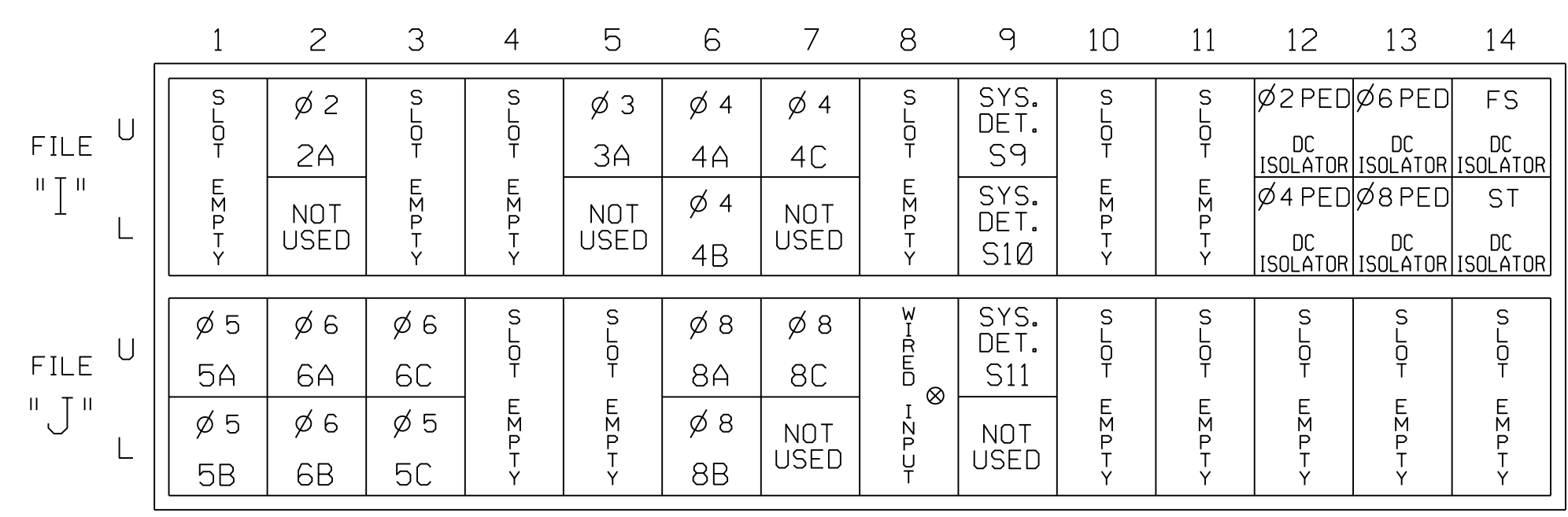
NU = Not Used

\* 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

⊗ Wired Input - Do not populate slot with detector card

### 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
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
3A <sup>1</sup>	TB4-5,6	I5U	58	20	3	3	Y	Y			15
	-	J8U	50	12	28	8	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			
4B	TB4-11,12	I6L	45	7	14	4	Y	Y			
4C	TB6-1,2	I7U	65	27	34	4	Y	Y			
* S9	TB6-9,10	I9U	60	22	11	SYS					
* S10	TB6-11,12	I9L	62	24	13	SYS					
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			
5B	TB3-3,4	J1L	55	17	5	5	Y	Y			
6A	TB3-5,6	J2U	40	2	6	6	Y	Y			
6B	TB3-7,8	J2L	44	6	16	6	Y	Y			
6C	TB3-9,10	J3U	64	26	36	6	Y	Y	Y		3
5C	TB3-11,12	J3L	77	39	46	5	Y	Y			15
8A	TB5-9,10	J6U	42	4	8	8	Y	Y			
8B	TB5-11,12	J6L	46	8	18	8	Y	Y			
8C	TB7-1,2	J7U	66	28	38	8	Y	Y			15
* S11	TB7-9,10	J9U	59	21	15	SYS					
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 112 AND 113.

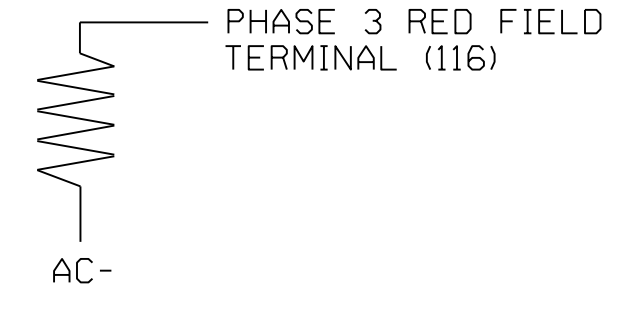
<sup>1</sup>Add jumper from I5-W to J8-W, on rear of input file.

\* System detector only. Remove the vehicle phase assigned to this detector in the default programming.

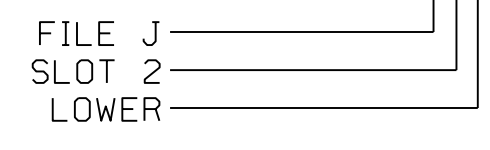
### LOAD RESISTOR INSTALLATION DETAIL

*(remove and install resistors as shown below)*

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

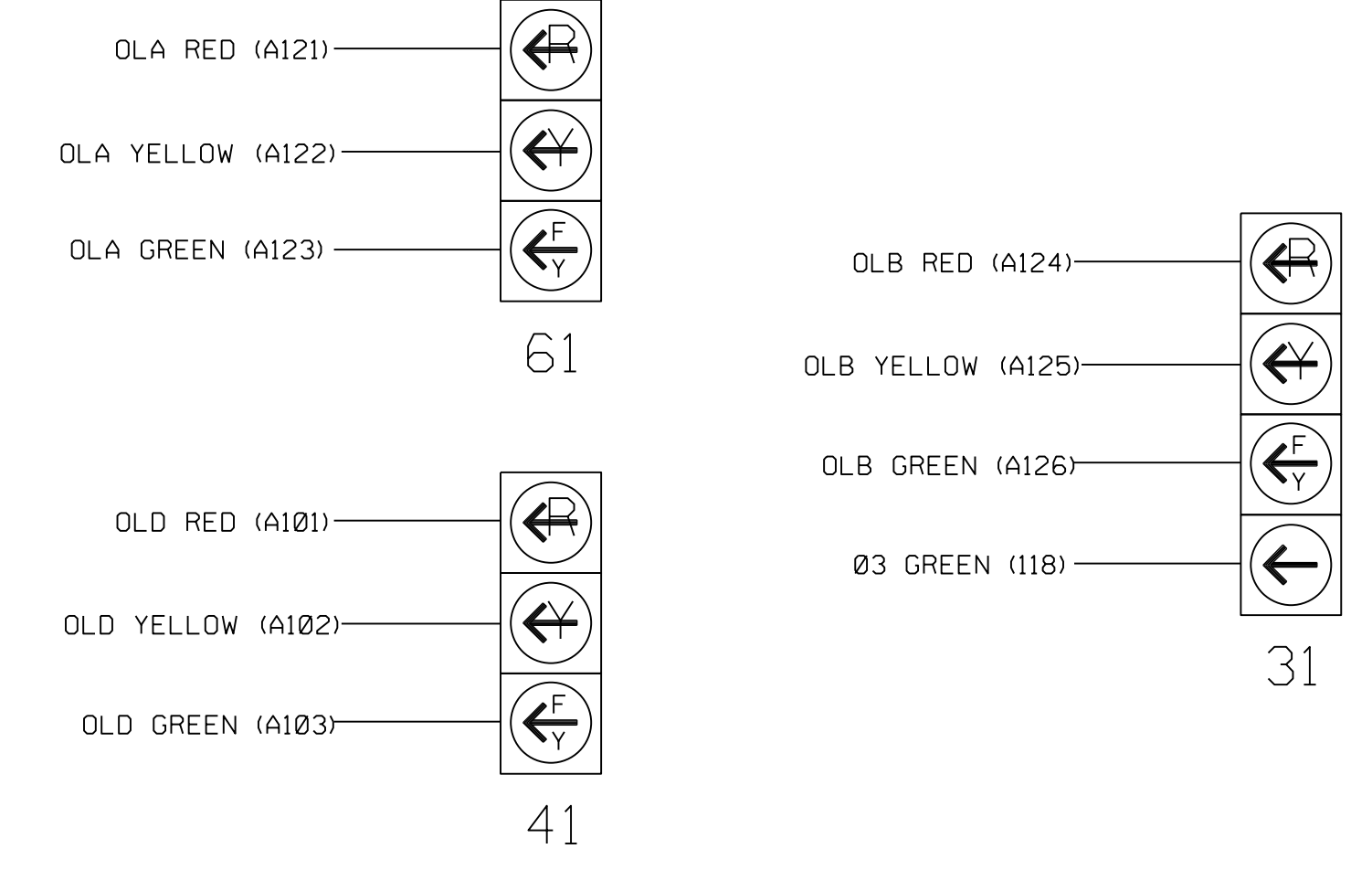


### INPUT FILE POSITION LEGEND: J2L



### FYA SIGNAL WIRING DETAIL

*(wire signal heads as shown)*



**NOTE**

The sequence display for signal head 31 requires special logic programming. See sheet 2 for programming instructions.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 04-0874  
 DESIGNED: January 2018  
 SEALED: 5/25/2018  
 REVISED: N/A

Final Design  
 Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:	NC 42 at SR 1003 (Buffalo Road)		
	Division 4	Johnston County	
Prepared for the Offices of:	PLAN DATE: January 2018	REVIEWED BY: J O Deaton	Documented by: 
Prepared by: M W Valch	REVIEWED BY:		
REVISIONS	INIT.	DATE	
750 N. Greenfield Pkwy, Garner, NC 27529			SIG. INVENTORY NO. 04-0874