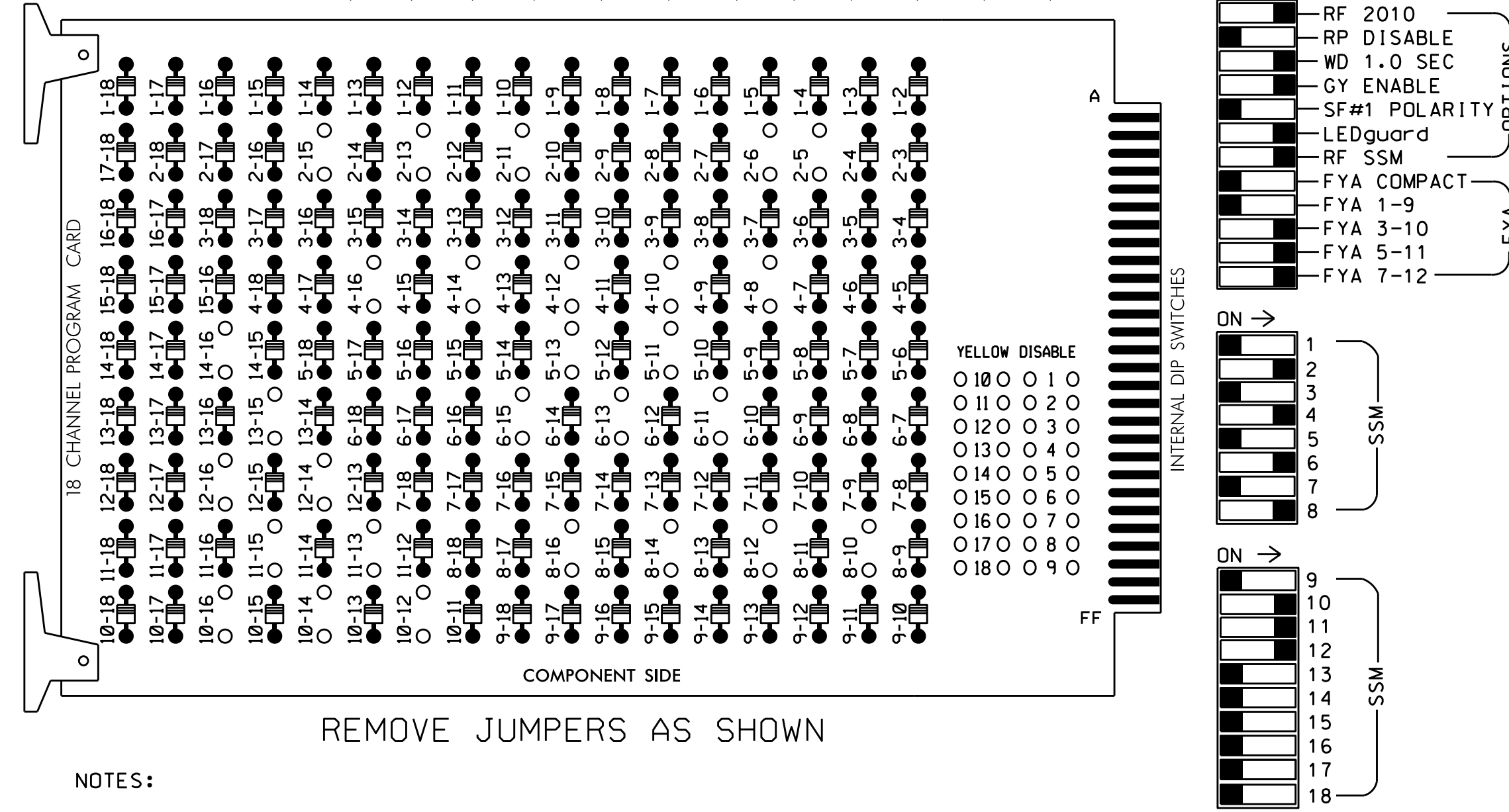


**EDI MODEL 2018ECL-NC CONFLICT MONITOR  
PROGRAMMING DETAIL**

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 2-5, 2-6, 2-11, 2-13, 2-15, 4-8, 4-10, 4-12, 4-14, 4-16, 5-11, 5-13, 6-11, 6-13, 6-15, 8-10, 8-12, 8-14, 8-16, 10-12, 10-14, 10-16, 11-13, 11-15, 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.
- Ensure conflict monitor communicates with 2070.

■ = DENOTES POSITION OF SWITCH

**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, 4, 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,S3,S5,S6,S7,S8,S9,S11,S12,  
 AUX S2,AUX S4,AUX S5  
 PHASES USED.....2,2PED,4,4PED,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	P21, P22	NU	42,43	P41, P42	43	51	61,62	P61, P62	NU	82,83	P81, P82	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				113						119		110							
Person icon				115				106			121		112						

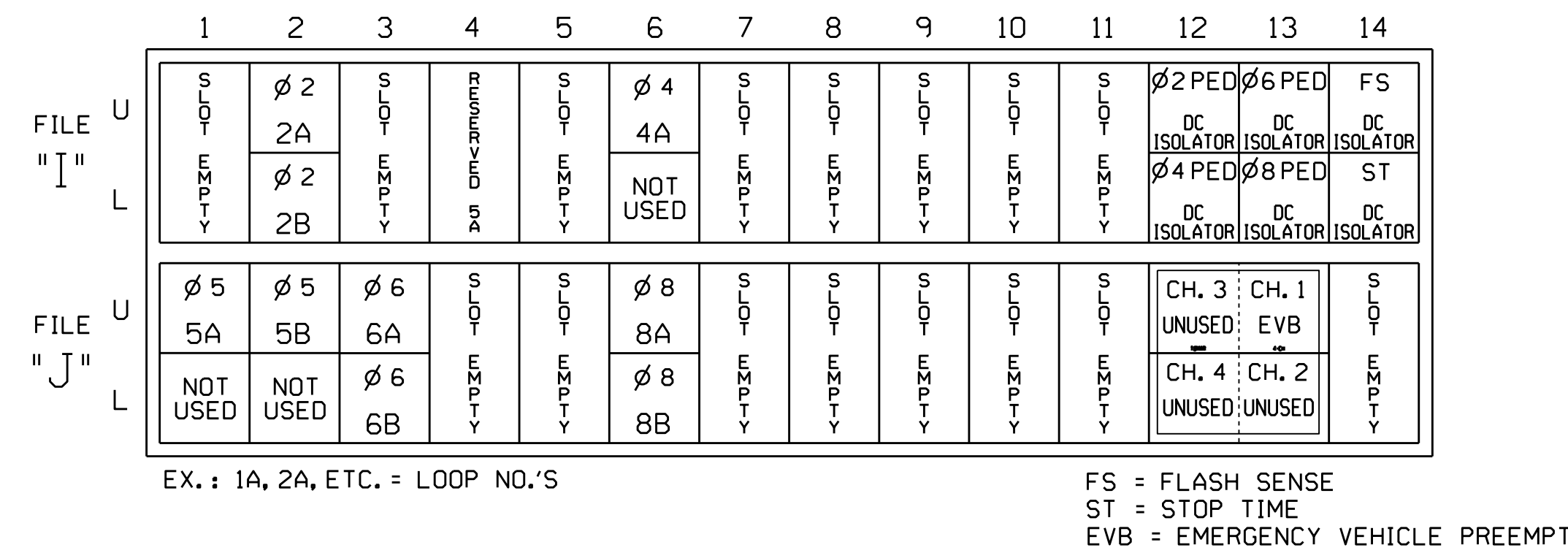
NU = Not Used

\* Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail below.

**INPUT FILE POSITION LAYOUT**

(front view)



FS = FLASH SENSE  
 ST = STOP TIME  
 EVB = EMERGENCY VEHICLE PREEMPT

**INPUT FILE CONNECTION & PROGRAMMING CHART**

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
2A	TB2-5,6	I2U	1	39	5 7 2	2
2B	TB2-7,8	I2L	5	43	5 7 2	2
4A	TB4-9,10	I6U	3	41	5 7 4	4
5A	TB3-1,2	J1U	13	55	5 7 5	5
5B	TB3-5,6	J2U	2	40	5 7 5	5
6A	TB3-9,10	J3U	22	64	5 7 6	6
6B	TB3-11,12	J3L	30	77	5 7 6	6
8A	TB5-9,10	J6U	4	42	5 7 8	8
8B	TB5-11,12	J6L	8	46	5 7 8	8
PED PUSH BUTTONS						
P21,P22	TB8-4,6	I12U	25	67	2	2 PED
P41,P42	TB8-5,6	I12L	27	69	2	4 PED
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

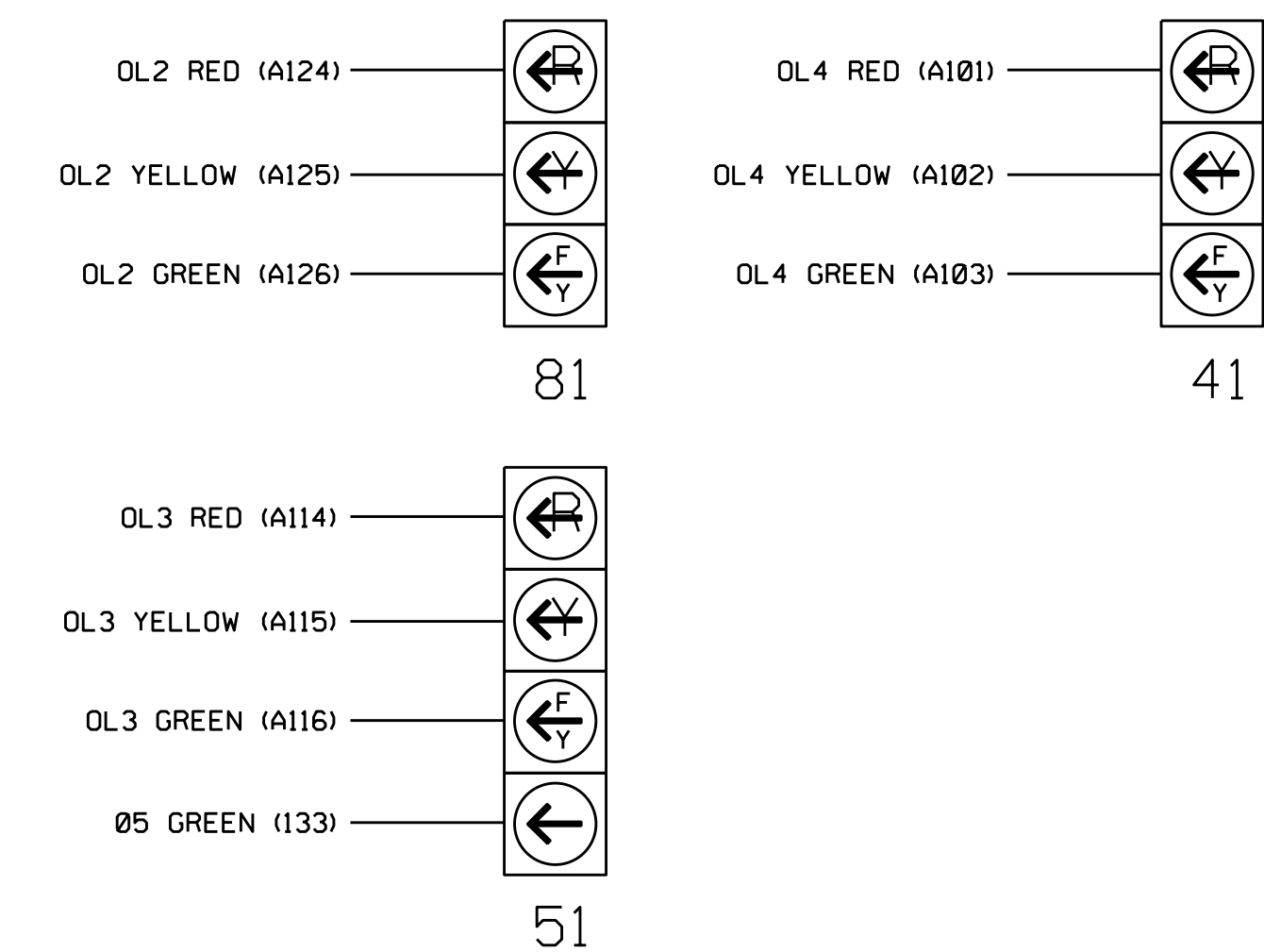
**INPUT FILE POSITION LEGEND: J2L**

- FILE J
- SLOT 2
- LOWER

NOTE:  
 INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.

**FYA SIGNAL WIRING DETAIL**

(wire signal heads as shown)



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

Electrical Detail - Final Design - 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: **Transporatio Mobility and Safety Solutions**

Division 5 Durham County

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

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

750 N. Greenfield Pkwy, Garner, NC 27529

SEAL: JOHN T. ROWE, INC. ENGINEER

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

SIG. INVENTORY NO. 05-0284

27-MAR-2015 08:55  
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 sarmstrong