

### LOGICAL I/O PROCESSOR PROGRAMMING DETAIL TO PRODUCE SPECIAL FYA-PPLT SIGNAL SEQUENCE

(program controller as shown below)

- FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE ACT LOGIC COMMANDS 1 THROUGH 6.
- FROM MAIN MENU PRESS '6' (OUTPUTS), THEN '3' (LOGICAL I/O PROCESSOR).

LOGICAL I/O COMMAND #1 (+/-COMMAND#)  
IF ACTIVE PHASE #3 IS ON  
AND RED CLEAR ON PHASE #3 IS ON

NOTE: LOGIC FOR PHASE 3 RED CLEAR WHEN TRANSITIONING FROM PHASE 3 TO PHASE 4 (HEAD 31).

SCROLL DOWN

THEN:  
SET OUTPUT ASSIGNMENT #47 ON  
SET OUTPUT ASSIGNMENT #48 OFF

PRESS '+'

LOGICAL I/O COMMAND #2 (+/-COMMAND#)  
IF ACTIVE PHASE #3 IS ON

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 3 (HEAD 31).

SCROLL DOWN

THEN:  
SET OUTPUT ASSIGNMENT #49 OFF

PRESS '+'

LOGICAL I/O COMMAND #3 (+/-COMMAND#)  
IF YELLOW ON PHASE #3 IS ON

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 3 (HEAD 31).

SCROLL DOWN

THEN:  
SET OUTPUT ASSIGNMENT #48 ON

PRESS '+'

LOGICAL I/O COMMAND #4 (+/-COMMAND#)  
IF ACTIVE PHASE #7 IS ON  
AND RED CLEAR ON PHASE #7 IS ON

NOTE: LOGIC FOR PHASE 7 RED CLEAR WHEN TRANSITIONING FROM PHASE 7 TO PHASE 8 (HEAD 71).

SCROLL DOWN

THEN:  
SET OUTPUT ASSIGNMENT #39 ON  
SET OUTPUT ASSIGNMENT #40 OFF

PRESS '+'

LOGICAL I/O COMMAND #5 (+/-COMMAND#)  
IF ACTIVE PHASE #7 IS ON

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 7 (HEAD 71).

SCROLL DOWN

THEN:  
SET OUTPUT ASSIGNMENT #41 OFF

PRESS '+'

LOGICAL I/O COMMAND #6 (+/-COMMAND#)  
IF YELLOW ON PHASE #7 IS ON

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 7 (HEAD 71).

SCROLL DOWN

THEN:  
SET OUTPUT ASSIGNMENT #40 ON

PRESS '+'

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

#### OUTPUT REFERENCE SCHEDULE

- OUTPUT 39 = Overlap D Red
- OUTPUT 40 = Overlap D Yellow
- OUTPUT 41 = Overlap D Green
- OUTPUT 47 = Overlap B Red
- OUTPUT 48 = Overlap B Yellow
- OUTPUT 49 = Overlap B Green

### FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
- REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

### EMERGENCY VEHICLE PREEMPTION PROGRAMMING DETAIL

(program controller as shown below)

From Main Menu press 'A' (Preemption), then '1' (Standard Preemptions). Press 'NEXT' to advance to Preemption #3 and 5.

PREEMPTION #3	SETTINGS (NEXT:1-10)	INTERVAL/TIMING	CLEAR/DWELL PHASES
1	255 0.0 0.0	X	X
2	0 0.0 0.0		
3	0 0.0 0.0		
4	0 0.0 0.0		
5	0 0.0 0.0		

EXIT CALLS

PRIORITY (Y/N TO SELECT) .....MED

DELAY TIMER (0-255 SEC) .....0

MIN GREEN BEFORE PRE (0=DEFAULT)....1

PED CLEAR BEFORE PRE (0=DEFAULT)....0

YELLOW CLEAR BEFORE PRE (0=DEFAULT).0.0

RED CLEAR BEFORE PRE (0=DEFAULT)....0.0

DWELL MIN TIMER (0-255 SEC) .....12

DWELL MAX TIMER (0=OFF,1-255MIN) ....0

DWELL HOLD-OVER TIMER (0-255) .....0

LATCH CALL? .....N

LINK TO NEXT PREEMPT? .....N

ENABLE BACKUP PROTECTION? .....N

HOLD CLEAR 1 PHASES DURING DELAY? ...N

FAST GREEN FLASH DWELL PHASES? .....N

PED CLEARANCE THROUGH YELLOW? .....N

INHIBIT OVERLAP GREEN EXTENSION? ...N

SERVICE DURING SOFTWARE FLASH? .....N

REST IN RED DURING DWELL INTERVAL? ..N

FLASH DWELL INTERVAL? .....N

ALLOW PDS IN DWELL INTERVAL? .....N

RE-TIME DWELL INTERVAL? .....N

OVERLAPS: ABCDEFGHIJKLMNPO

DWELL INT FLASH YELLOW

OMIT OVERLAPS:

PRESS 'NEXT' TWICE

PREEMPTION #5	SETTINGS (NEXT:1-10)	INTERVAL/TIMING	CLEAR/DWELL PHASES
1	255 0.0 0.0	X	X
2	0 0.0 0.0		
3	0 0.0 0.0		
4	0 0.0 0.0		
5	0 0.0 0.0		

EXIT CALLS

PRIORITY (Y/N TO SELECT) .....MED

DELAY TIMER (0-255 SEC) .....0

MIN GREEN BEFORE PRE (0=DEFAULT)....1

PED CLEAR BEFORE PRE (0=DEFAULT)....0

YELLOW CLEAR BEFORE PRE (0=DEFAULT).0.0

RED CLEAR BEFORE PRE (0=DEFAULT)....0.0

DWELL MIN TIMER (0-255 SEC) .....12

DWELL MAX TIMER (0=OFF,1-255MIN) ....0

DWELL HOLD-OVER TIMER (0-255) .....0

LATCH CALL? .....N

LINK TO NEXT PREEMPT? .....N

ENABLE BACKUP PROTECTION? .....N

HOLD CLEAR 1 PHASES DURING DELAY? ...N

FAST GREEN FLASH DWELL PHASES? .....N

PED CLEARANCE THROUGH YELLOW? .....N

INHIBIT OVERLAP GREEN EXTENSION? ...N

SERVICE DURING SOFTWARE FLASH? .....N

REST IN RED DURING DWELL INTERVAL? ..N

FLASH DWELL INTERVAL? .....N

ALLOW PDS IN DWELL INTERVAL? .....N

RE-TIME DWELL INTERVAL? .....N

OVERLAPS: ABCDEFGHIJKLMNPO

DWELL INT FLASH YELLOW

OMIT OVERLAPS:

PROGRAMMING COMPLETE

Program extend time on optical detector unit for 5.0 seconds.

### OVERLAP PROGRAMMING DETAIL

(program controller as shown below)

FROM MAIN MENU PRESS '8' (OVERLAPS), THEN '1' (VEHICLE OVERLAP SETTINGS).

PRESS '+'

PAGE 1: VEHICLE OVERLAP 'B' SETTINGS

PHASE: 12345678910111213141516

VEH OVL PARENTS: XX

VEH OVL NOT VEH:

VEH OVL NOT PED:

VEH OVL GRN EXT:

STARTUP COLOR: - RED - YELLOW - GREEN

FLASH COLORS: - RED - YELLOW X GREEN

SELECT VEHICLE OVERLAP OPTIONS: (Y/N)

FLASH YELLOW IN CONTROLLER FLASH?...N

GREEN EXTENSION (0-255 SEC).....0

YELLOW CLEAR (0=PARENT,3-25.5 SEC)..0.0

RED CLEAR (0=PARENT,0.1-25.5 SEC)...0.0

OUTPUT AS PHASE # (0=NONE, 1-16)....0

← NOTICE GREEN FLASH

PRESS '+' TWICE

PAGE 1: VEHICLE OVERLAP 'D' SETTINGS

PHASE: 12345678910111213141516

VEH OVL PARENTS: XX

VEH OVL NOT VEH:

VEH OVL NOT PED:

VEH OVL GRN EXT:

STARTUP COLOR: - RED - YELLOW - GREEN

FLASH COLORS: - RED - YELLOW X GREEN

SELECT VEHICLE OVERLAP OPTIONS: (Y/N)

FLASH YELLOW IN CONTROLLER FLASH?...N

GREEN EXTENSION (0-255 SEC).....0

YELLOW CLEAR (0=PARENT,3-25.5 SEC)..0.0

RED CLEAR (0=PARENT,0.1-25.5 SEC)...0.0

OUTPUT AS PHASE # (0=NONE, 1-16)....0

← NOTICE GREEN FLASH

OVERLAP PROGRAMMING COMPLETE

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0169T5

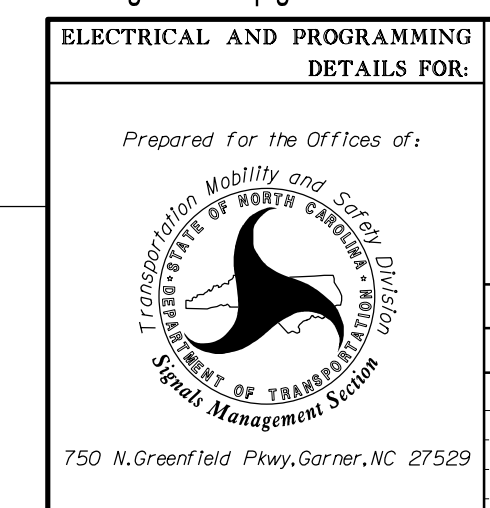
DESIGNED: November 2016

SEALED: 1/30/2017

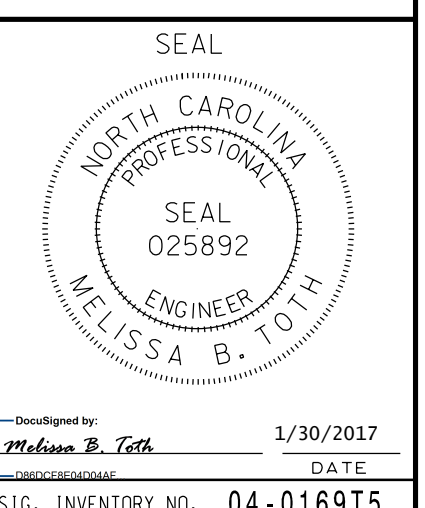
REVISED:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Signal Upgrade - Temporary Design 5 (Electrical Sheet 2 of 2)



ELECTRICAL AND PROGRAMMING DETAILS FOR:		US 301 Byp (N. Wesleyan Blvd)	
Prepared for the Offices of:		at	
Lawrence Circle /		Tarrytown Mall Entrance	
Division 04	Nash County	Rocky Mount	
PLAN DATE: November 2016	REVIEWED BY: LM Moon		
PREPARED BY: AM Encarnacion	REVIEWED BY: MB Toth		
REVISIONS	INIT.	DATE	



30-JAN-2017 17:33  
D:\Transportation\Traffic\U-3330\_Signals\02\_Signals\05des\gn01\_WF.rng\04-0169E15.dgn  
ENC6386 AT LUS200321