# LOGICAL I/O PROCESSOR PROGRAMMING DETAIL

## TO PRODUCE SPECIAL FYA-PPLT SIGNAL SEQUENCE

*(program controller as shown below)*

1. 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, 2, 3, 4, 5 AND 6.

2. FROM MAIN MENU PRESS '6' (OUTPUTS), THEN '3' (LOGICAL I/O PROCESSOR).

```
LOGICAL I/O COMMAND #1  (+/-COMMAND#)
IF  ACTIVE PHASE      #1   IS ON
AND RED CLEAR ON PHASE #1  IS ON
```
NOTE: LOGIC FOR PHASE 1 RED CLEAR WHEN TRANSITIONING FROM PHASE 1 TO PHASE 2 (HEAD 11).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #50 ON
SET OUTPUT  ASSIGNMENT #51 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #2  (+/-COMMAND#)
IF  ACTIVE PHASE      #1   IS ON
```
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 1 (HEAD 11).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #52 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #3  (+/-COMMAND#)
IF  YELLOW ON PHASE   #1   IS ON
```
NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 1 (HEAD 11).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #51 ON
```
PRESS '+'

```
LOGICAL I/O COMMAND #4  (+/-COMMAND#)
IF  ACTIVE PHASE      #5   IS ON
AND RED CLEAR ON PHASE #5  IS ON
```
NOTE: LOGIC FOR PHASE 5 RED CLEAR WHEN TRANSITIONING FROM PHASE 5 TO PHASE 6 (HEAD 51).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #42 ON
SET OUTPUT  ASSIGNMENT #43 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #5  (+/-COMMAND#)
IF  ACTIVE PHASE      #5   IS ON
```
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 5 (HEAD 51).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #44 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #6  (+/-COMMAND#)
IF  YELLOW ON PHASE   #5   IS ON
```
NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 5 (HEAD 51).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #43 ON
```

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

```
OUTPUT  REFERENCE  SCHEDULE

OUTPUT 42 = Overlap C Red
OUTPUT 43 = Overlap C Yellow
OUTPUT 44 = Overlap C Green
OUTPUT 50 = Overlap A Red
OUTPUT 51 = Overlap A Yellow
OUTPUT 52 = Overlap A Green
```

# OVERLAP PROGRAMMING DETAIL

*(program controller as shown below)*

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

```
PAGE 1: VEHICLE OVERLAP 'A' 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          ← NOTICE GREEN FLASH
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...Y
GREEN EXTENSION (O-255 SEC)........O
YELLOW CLEAR (O=PARENT,3-25.5 SEC)...O.O
RED CLEAR (O=PARENT,O.1-25.5 SEC)...O.O
OUTPUT AS PHASE # (O=NONE, 1-16)....O
```

PRESS '+' TWICE

```
PAGE 1: VEHICLE OVERLAP 'C' 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          ← NOTICE GREEN FLASH
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...Y
GREEN EXTENSION (O-255 SEC)........O
YELLOW CLEAR (O=PARENT,3-25.5 SEC)..O.O
RED CLEAR (O=PARENT,O.1-25.5 SEC)...O.O
OUTPUT AS PHASE # (O=NONE, 1-16)....O
```

OVERLAP PROGRAMMING COMPLETE

# PED 3 PROGRAMMING DETAIL

*(program controller as shown below)*

### CHANGING OUTPUT ASSIGNMENTS

1. FROM MAIN MENU SELECT '6' (OUTPUTS), THEN '1' (OUTPUT ASSIGNMENTS)

2. ENTER 17 (PHASE 8 DW) FOR OUTPUT ASSIGNMENT #.

3. SCROLL DOWN TO 'PEDESTRIAN PHASE' AND ENTER 'Y' REGARDLESS OF DEFAULT PROGRAMMING)

4. ENTER '3' FOR 'SELECT PEDESTRIAN PHASE'. NO CHANGE NEEDED FOR 'SELECT COLOR'

5. BACKUP TO 'OUTPUT ASSIGNMENTS AND SETTINGS MENU:' BY PRESSING THE 'ESC' BUTTON ON KEYBOARD.

6. SELECT '1' (OUTPUT ASSIGNMENTS)

7. ENTER 18 (PHASE 8 W) FOR OUTPUT ASSIGNMENT #.

8. REPEAT STEPS # 3 AND # 4.

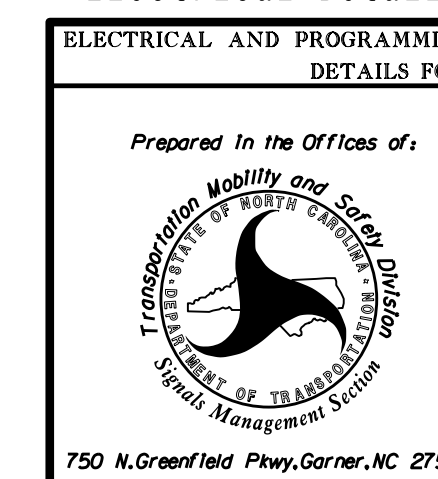### CHANGING INPUT ASSIGNMENTS

1. FROM MAIN MENU SELECT '7' (DETECTORS), THEN '2' (PEDESTRIAN DETECTOR ASSIGNMENTS)

2. CYCLE TO PED DETECTOR #8 BY REPEATEDLY DEPRESSING '+' KEY

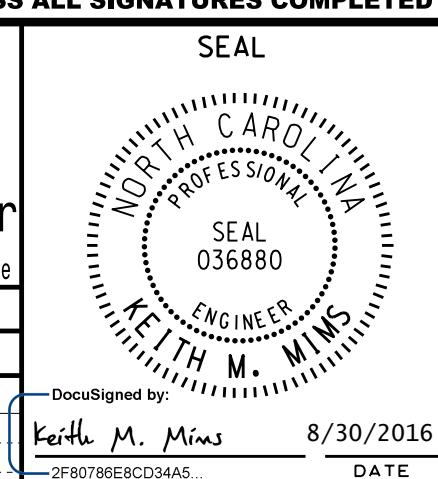3. MODIFY PHASE ASSIGNED TO PED DETECTOR # 8  FROM PHASE 8 TO PHASE 3

### PROGRAMMING COMPLETE

Electrical Detail - Sheet 2 of 2

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 13-0660
DESIGNED: June 2016
SEALED: 8/10/2016
REVISED: N/A

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in the Offices of:

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

US 74A (South Tunnel Road)
at
Entrance to Overlook Village
and Entrance to Shopping Center

| Division 13 | Buncombe County | Asheville |
|---|---|---|
| PLAN DATE: July 2016 | REVIEWED BY: BAS | |
| PREPARED BY: S. Armstrong | REVIEWED BY: | |

| REVISIONS | INIT. | DATE |
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SEAL

NORTH CAROLINA
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KEITH M. MIMS
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Keith M. Mims   8/30/2016
2F8078EE8CCD34A5   DATE

SIG. INVENTORY NO. 13-0660