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, 6, 7, 8, AND 9.

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 OVERLAP        #7  IS ON
AND RED CLEAR ON OVL      #7  IS ON
```
NOTE: LOGIC FOR OVERLAP G RED CLEAR (HEAD 12).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #47 ON
SET OUTPUT  ASSIGNMENT #48 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #5  (+/-COMMAND#)
IF  ACTIVE OVERLAP        #7  IS ON
```
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" (HEAD 12).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #49 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #6  (+/-COMMAND#)
IF  YELLOW ON OVERLAP     #7  IS ON
```
NOTE: LOGIC FOR YELLOW ARROW (HEAD 12).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #48 ON
```
PRESS '+'

```
LOGICAL I/O COMMAND #7  (+/-COMMAND#)
IF  ACTIVE OVERLAP        #8  IS ON
AND RED CLEAR ON OVL      #8  IS ON
```
NOTE: LOGIC FOR OVERLAP H RED CLEAR. (HEAD 23).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #39 ON
SET OUTPUT  ASSIGNMENT #40 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #8  (+/-COMMAND#)
IF  ACTIVE OVERLAP        #8  IS ON
```
NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" (HEAD 23).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #41 OFF
```
PRESS '+'

```
LOGICAL I/O COMMAND #9  (+/-COMMAND#)
IF  YELLOW ON OVERLAP     #8  IS ON
```
NOTE: LOGIC FOR YELLOW ARROW CLEARANCE (HEAD 23).

SCROLL DOWN

```
THEN:
SET OUTPUT  ASSIGNMENT #40 ON
```

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

OUTPUT REFERENCE SCHEDULE
USE TO INTERPRET LOGIC PROCESSOR

```
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
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
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...Y
GREEN EXTENSION (0-255 SEC).........0
YELLOW CLEAR (O=PARENT.3-25.5 SEC)..0.0
RED CLEAR (O=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE. 1-16)....0
```
← NOTICE GREEN FLASH

PRESS '+'

```
PAGE 1: VEHICLE OVERLAP 'B' SETTINGS
PHASE:               :12345678910111213141516
VEH OVL PARENTS::X        X
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 (O=PARENT.3-25.5 SEC)..0.0
RED CLEAR (O=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE. 1-16)....0
```
← NOTICE GREEN FLASH

PRESS '+'

```
PAGE 1: VEHICLE OVERLAP 'C' SETTINGS
PHASE:               :12345678910111213141516
VEH OVL PARENTS::           X
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?...Y
GREEN EXTENSION (0-255 SEC).........0
YELLOW CLEAR (O=PARENT.3-25.5 SEC)..0.0
RED CLEAR (O=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE. 1-16)....0
```
← NOTICE GREEN FLASH

PRESS '+'

```
PAGE 1: VEHICLE OVERLAP 'D' SETTINGS
PHASE:               :12345678910111213141516
VEH OVL PARENTS:: X      X
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?...Y
GREEN EXTENSION (0-255 SEC).........0
YELLOW CLEAR (O=PARENT.3-25.5 SEC)..0.0
RED CLEAR (O=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE. 1-16)....0
```
← NOTICE GREEN FLASH

PRESS '+' THREE TIMES

```
PAGE 1: VEHICLE OVERLAP 'G' SETTINGS
PHASE:               :12345678910111213141516
VEH OVL PARENTS::X
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 (O=PARENT.3-25.5 SEC)..0.0
RED CLEAR (O=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE. 1-16)....0
```
PRESS '+'

```
PAGE 1: VEHICLE OVERLAP 'H' SETTINGS
PHASE:               :12345678910111213141516
VEH OVL PARENTS::           X
VEH OVL NOT VEH::
VEH OVL NOT PED::
VEH OVL GRN EXT::
STARTUP COLOR: _ RED  _ YELLOW  _ GREEN
FLASH COLORS:  _ RED  _ YELLOW  _ GREEN
SELECT VEHICLE OVERLAP OPTIONS:   (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...N
GREEN EXTENSION (0-255 SEC).........0
YELLOW CLEAR (O=PARENT.3-25.5 SEC)..0.0
RED CLEAR (O=PARENT.0.1-25.5 SEC)...0.0
OUTPUT AS PHASE # (0=NONE. 1-16)....0
```

OVERLAP PROGRAMMING COMPLETE

FLASHER CIRCUIT MODIFICATION DETAIL

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

1. ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.

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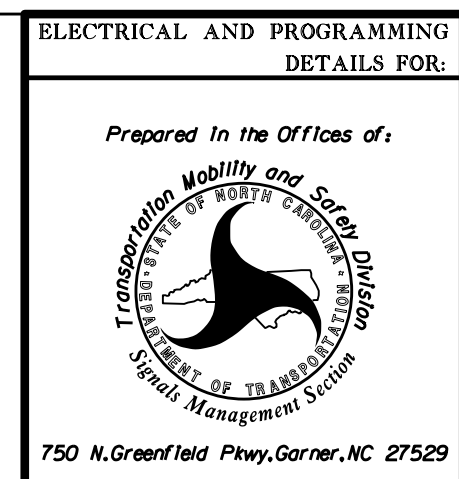
3. REMOVE FLASHER UNIT 2.

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

Electrical Detail - Sheet 2 of 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED