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 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
```
PRESS '+'

```
LOGICAL I/O COMMAND #7  (+/-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 #8  (+/-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 #9  (+/-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
```

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 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:              :1234567891011213141516
  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 (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
```
PRESS '+' TWICE

```
PAGE 1: VEHICLE OVERLAP 'C' SETTINGS
  PHASE:              :1234567891011213141516
  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 (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
```
PRESS '+'

```
PAGE 1: VEHICLE OVERLAP 'D' SETTINGS
  PHASE:              :1234567891011213141516
  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?...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
```

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.

DYNAMIC BACK-UP CONTROL PROGRAMMING

(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 Dynamic/Backup Control Function 1.

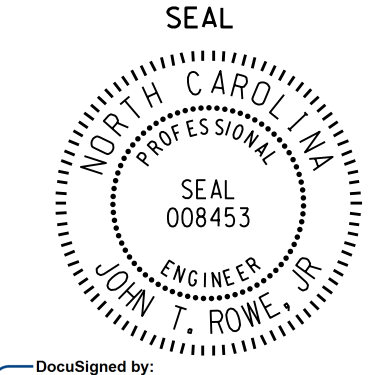2. From Phase Control Functions Menu press '2' (Dynamic/Backup Control Functions).

```
DYNAMIC/BACKUP CONTROL FUNCTION #01
           OVERLAPS::ABCDEFGHIJKLMNOP
IF OVERLAPS ARE ACTIVE :
OR       PHASES::1234567891011213141516
IF PHASES ARE ON :        X
OMIT PHASES      :   X
CALL PHASES      :
```

BACKUP PROTECTION PROGRAMMING COMPLETE

Electrical Detail - Sheet 2 of 2