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PROJECT REFERENCE NO.	SHEET NO.
U-4751	Sig. 8.8

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, 9, 10, 11, AND 12.

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

NOTE: LOGIC FOR PHASE 1 RED CLEAR WHEN TRANSITIONING FROM PHASE 1 TO PHASE 2 (HEAD 11).

```
LOGICAL I/O COMMAND #2  (+/-COMMAND#)
IF  ACTIVE PHASE       #1  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #52 OFF
PRESS '+'
```

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 1 (HEAD 11).

```
LOGICAL I/O COMMAND #3  (+/-COMMAND#)
IF  YELLOW ON PHASE    #1  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #51 ON
PRESS '+'
```

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 1 (HEAD 11).

```
LOGICAL I/O COMMAND #4  (+/-COMMAND#)
IF  ACTIVE PHASE       #5  IS ON
AND RED CLEAR ON PHASE #5  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #42 ON
SET OUTPUT  ASSIGNMENT #43 OFF
PRESS '+'
```

NOTE: LOGIC FOR PHASE 5 RED CLEAR WHEN TRANSITIONING FROM PHASE 5 TO PHASE 6 (HEAD 51).

```
LOGICAL I/O COMMAND #5  (+/-COMMAND#)
IF  ACTIVE PHASE       #5  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #44 OFF
PRESS '+'
```

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 5 (HEAD 51).

```
LOGICAL I/O COMMAND #6  (+/-COMMAND#)
IF  YELLOW ON PHASE    #5  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #43 ON
PRESS '+'
```

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 5 (HEAD 51).

```
LOGICAL I/O COMMAND #7  (+/-COMMAND#)
IF  ACTIVE OVERLAP       #7  IS ON
AND RED CLEAR ON OVERLAP #7  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #47 ON
SET OUTPUT  ASSIGNMENT #48 OFF
PRESS '+'
```

NOTE: LOGIC FOR OLG RED CLEAR (HEAD 83).

```
LOGICAL I/O COMMAND #8  (+/-COMMAND#)
IF  ACTIVE OVERLAP     #7  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #49 OFF
PRESS '+'
```

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" (HEAD 83).

```
LOGICAL I/O COMMAND #9  (+/-COMMAND#)
IF  YELLOW ON OVERLAP  #7  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #48 ON
PRESS '+'
```

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE (HEAD 83).

```
LOGICAL I/O COMMAND #10 (+/-COMMAND#)
IF  ACTIVE OVERLAP       #8  IS ON
AND RED CLEAR ON OVERLAP #8  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #39 ON
SET OUTPUT  ASSIGNMENT #40 OFF
PRESS '+'
```

NOTE: LOGIC FOR OLH RED CLEAR (HEAD 23).

```
LOGICAL I/O COMMAND #11 (+/-COMMAND#)
IF  ACTIVE OVERLAP     #8  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #41 OFF
PRESS '+'
```

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" (HEAD 23).

```
LOGICAL I/O COMMAND #12 (+/-COMMAND#)
IF  YELLOW ON OVERLAP  #8  IS ON
SCROLL DOWN
THEN:
SET OUTPUT  ASSIGNMENT #40 ON
PRESS '+'
```

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE (HEAD 23).

LOGIC I/O PROCESSOR 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.

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 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

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 03-0076
DESIGNED: April 2017
SEALED: 06/15/2017
REVISED:

ELECTRICAL DETAIL SHEET 2 OF 8

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 17 Business (Market Street) at SR 1403 (Middle Sound Loop Road)

Division 03 New Hanover County Wilmington

PLAN DATE: April 2017	REVIEWED BY: MB Toth		
PREPARED BY: LD Stouchko	REVIEWED BY:		
REVISIONS		INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

DocuSigned by: Melissa B. Toth 6/15/2017
SIGNATURE DATE
DOCUSENDOR

SIG. INVENTORY NO. 03-0076

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