

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
    
```

NOTE: Logic for Phase 1 RED Clear when transitioning from Phase 1 to Phase 8 (Head 83).

```

LOGICAL I/O COMMAND #2 (+/-COMMAND#)
IF ACTIVE PHASE #1 IS ON

      ↓
    SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #52 OFF
    
```

NOTE: Logic for Switching Flashing Yellow Arrow "OFF" during Phase 1 (Head 83).

```

LOGICAL I/O COMMAND #3 (+/-COMMAND#)
IF YELLOW ON PHASE #1 IS ON

      ↓
    SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #51 ON
    
```

NOTE: Logic for Yellow Arrow Clearance from Phase 1 (Head 83).

```

LOGICAL I/O COMMAND #4 (+/-COMMAND#)
IF ACTIVE PHASE #3 IS ON
AND RED CLEAR ON PHASE #3 IS ON

      ↓
    SCROLL DOWN

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

NOTE: Logic for Phase 3 RED Clear when transitioning from Phase 3 to Phase 2 (Head 23).

```

LOGICAL I/O COMMAND #5 (+/-COMMAND#)
IF ACTIVE PHASE #3 IS ON

      ↓
    SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #49 OFF
    
```

NOTE: Logic for Switching Flashing Yellow Arrow "OFF" during Phase 3 (Head 23).

```

LOGICAL I/O COMMAND #6 (+/-COMMAND#)
IF YELLOW ON PHASE #3 IS ON

      ↓
    SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #48 ON
    
```

NOTE: Logic for Yellow Arrow Clearance from Phase 3 (Head 23).

```

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

NOTE: Logic for Phase 5 RED Clear when transitioning from Phase 5 to Phase 4 (Head 43).

```

LOGICAL I/O COMMAND #8 (+/-COMMAND#)
IF ACTIVE PHASE #5 IS ON

      ↓
    SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #44 OFF
    
```

NOTE: Logic for Switching Flashing Yellow Arrow "OFF" during Phase 5 (Head 43).

```

LOGICAL I/O COMMAND #9 (+/-COMMAND#)
IF YELLOW ON PHASE #5 IS ON

      ↓
    SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #43 ON
    
```

NOTE: Logic for Yellow Arrow Clearance from Phase 5 (Head 43).

```

LOGICAL I/O COMMAND #10 (+/-COMMAND#)
IF ACTIVE PHASE #7 IS ON
AND RED CLEAR ON PHASE #7 IS ON

      ↓
    SCROLL DOWN

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

NOTE: Logic for Phase 7 RED Clear when transitioning from Phase 7 to Phase 6 (Head 63).

```

LOGICAL I/O COMMAND #11 (+/-COMMAND#)
IF ACTIVE PHASE #7 IS ON

      ↓
    SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #41 OFF
    
```

NOTE: Logic for Switching Flashing Yellow Arrow "OFF" during Phase 7 (Head 63).

```

LOGICAL I/O COMMAND #12 (+/-COMMAND#)
IF YELLOW ON PHASE #7 IS ON

      ↓
    SCROLL DOWN

THEN:
SET OUTPUT ASSIGNMENT #40 ON
    
```

NOTE: Logic for Yellow Arrow Clearance from Phase 7 (Head 63).

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

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: 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)...0.0
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 '+'

```

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?...Y
GREEN EXTENSION (0=255 SEC)...0.0
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 '+'

```

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

SELECT VEHICLE OVERLAP OPTIONS: (Y/N)
FLASH YELLOW IN CONTROLLER FLASH?...N
GREEN EXTENSION (0=255 SEC)...0.0
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 '+'

```

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?...Y
GREEN EXTENSION (0=255 SEC)...0.0
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

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

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

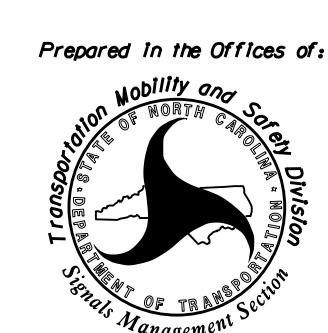
OUTPUT REFERENCE SCHEDULE

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: 06-1336
DESIGNED: June 2015
SEALED: 8/28/15
REVISED: N/A

Electrical Detail - Sheet 2 of 2 - Final

Prepared In the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

ELECTRICAL AND PROGRAMMING DETAILS FOR:		NC 24-210 (Rowan Street)/ NC 24 (Bragg Boulevard) at NC 210 (Murchison Road)/ Bragg Boulevard	
PLAN DATE: July 2015	REVIEWED BY:	Division 6	Cumberland County Fayetteville
PREPARED BY: B. SIMMONS	REVIEWED BY:	REVISIONS	INIT. DATE

SEAL
STATE OF NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL 022013
GEORGE C. BROWN

DocuSigned by:
George C. Brown 8/31/2015
F12061ED08E8434
DATE
SIG. INVENTORY NO. 06-1336

31-AUG-2015 09:05 S:\TSSU\TSS Signal\working\working Folder\Electrical Detail\Division 06\061336_smc.ele_xxx.dgn bis:simmons