PROJECT REFERENCE NO.	SHEET NO.
U-2729	Sig.17.4

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, 12, 13, 14, 15 AND 16.

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).

PRESS '+'

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).

PRESS '+'

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).

PRESS '+'

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 #39 ON
SET OUTPUT ASSIGNMENT #40 OFF

NOTE: LOGIC FOR PHASE 3 RED CLEAR WHEN TRANSITIONING FROM PHASE 3 TO PHASE 2 (HEAD 23).

PRESS '+'

LOGICAL I/O COMMAND #5 (+/-COMMAND#)
IF ACTIVE PHASE #3 IS ON
SCROLL DOWN
THEN:
SET OUTPUT ASSIGNMENT #41 OFF

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 3 (HEAD 23).

PRESS '+'

LOGICAL I/O COMMAND #6 (+/-COMMAND#)
IF YELLOW ON PHASE #3 IS ON
SCROLL DOWN
THEN:
SET OUTPUT ASSIGNMENT #40 ON

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 3 (HEAD 23).

PRESS '+'

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).

PRESS '+'

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).

PRESS '+'

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 23).

PRESS '+'

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 #47 ON
SET OUTPUT ASSIGNMENT #48 OFF

NOTE: LOGIC FOR PHASE 6 RED CLEAR WHEN TRANSITIONING FROM PHASE 7 TO PHASE 6 (HEAD 63).

PRESS '+'

LOGICAL I/O COMMAND #11 (+/-COMMAND#)
IF ACTIVE PHASE #7 IS ON
SCROLL DOWN
THEN:
SET OUTPUT ASSIGNMENT #49 OFF

NOTE: LOGIC FOR SWITCHING FLASHING YELLOW ARROW "OFF" DURING PHASE 7 (HEAD 63).

PRESS '+'

LOGICAL I/O COMMAND #12 (+/-COMMAND#)
IF YELLOW ON PHASE #7 IS ON
SCROLL DOWN
THEN:
SET OUTPUT ASSIGNMENT #48 ON

NOTE: LOGIC FOR YELLOW ARROW CLEARANCE FROM PHASE 7 (HEAD 63).

PRESS '+'

OUTPUT REFERENCE SCHEDULE

OUTPUT 2 = PHASE 4 WALK
OUTPUT 5 = PHASE 4 GREEN
OUTPUT 10 = PHASE 2 WALK
OUTPUT 13 = PHASE 2 GREEN
OUTPUT 18 = PHASE 8 WALK
OUTPUT 21 = PHASE 8 GREEN
OUTPUT 26 = PHASE 6 WALK
OUTPUT 29 = PHASE 6 GREEN
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

LOGICAL I/O COMMAND #13 (+/-COMMAND#)
IF OUTPUT ASSIGNMENT #18 IS ON
AND OUTPUT ASSIGNMENT #21 IS OFF
SCROLL DOWN
THEN:
SET OUTPUT ASSIGNMENT #52 OFF
SET OUTPUT ASSIGNMENT #51 OFF
SET OUTPUT ASSIGNMENT #50 ON

NOTE: LOGIC STATEMENT FOR ADVANCE WALK WITH FYA'S. TURN FYA HEAD 83 "OFF" DURING PED 8 ADVANCE WALK.

PRESS '+'

LOGICAL I/O COMMAND #14 (+/-COMMAND#)
IF OUTPUT ASSIGNMENT #10 IS ON
AND OUTPUT ASSIGNMENT #13 IS OFF
SCROLL DOWN
THEN:
SET OUTPUT ASSIGNMENT #41 OFF
SET OUTPUT ASSIGNMENT #40 OFF
SET OUTPUT ASSIGNMENT #39 ON

NOTE: LOGIC STATEMENT FOR ADVANCE WALK WITH FYA'S. TURN FYA HEAD 23 "OFF" DURING PED 2 ADVANCE WALK.

PRESS '+'

LOGICAL I/O COMMAND #15 (+/-COMMAND#)
IF OUTPUT ASSIGNMENT #2 IS ON
AND OUTPUT ASSIGNMENT #5 IS OFF
SCROLL DOWN
THEN:
SET OUTPUT ASSIGNMENT #44 OFF
SET OUTPUT ASSIGNMENT #43 OFF
SET OUTPUT ASSIGNMENT #42 ON

NOTE: LOGIC STATEMENT FOR ADVANCE WALK WITH FYA'S. TURN FYA HEAD 43 "OFF" DURING PED 4 ADVANCE WALK.

PRESS '+'

LOGICAL I/O COMMAND #16 (+/-COMMAND#)
IF OUTPUT ASSIGNMENT #26 IS ON
AND OUTPUT ASSIGNMENT #29 IS OFF
SCROLL DOWN
THEN:
SET OUTPUT ASSIGNMENT #49 OFF
SET OUTPUT ASSIGNMENT #48 OFF
SET OUTPUT ASSIGNMENT #47 ON

NOTE: LOGIC STATEMENT FOR ADVANCE WALK WITH FYA'S. TURN FYA HEAD 63 "OFF" DURING PED 6 ADVANCE WALK.

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 09-0557T4
DESIGNED: March 2023
SEALED: April 25, 2023
REVISED:

Electrical Detail - Temporary Design 4 - Sheet 4 of 5

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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ELECTRICAL AND PROGRAMMING DETAILS FOR:

Transportation Mobility and Safety Division — STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION — ITS & Signals Management Section
750 N.Greenfield Pkwy, Garner, NC 27529

SR 4000 (University Parkway)
at
SR 1672 (Hanes Mill Rd)

Division 9 Forsyth County Winston-Salem

PLAN DATE: March 2023	REVIEWED BY: RW Thompson
PREPARED BY: LD Stouchko	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032711 RUSSELL W. THOMPSON
DocuSigned by: Russell W. Thompson
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4/25/2023
DATE

SIG. INVENTORY NO. 09-0557T4

4/25/2023
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