PROJECT REFERENCE NO.	SHEET NO.
W-5800	Sig. 3.5

ADVANCE BEACON
OUTPUT ASSIGNMENT PROGRAMMING DETAIL

(program controller as shown below)

FROM MAIN MENU PRESS '6' (OUTPUTS). THEN '1' (OUTPUT ASSIGNMENTS). PRESS '+' UNTIL OUTPUT #33 (PIN 35) IS REACHED.

```
PAGE:1  C1 PIN:35  NOT ENABLED
OUTPUT ASSIGNMENT #.................33
FREQUENCY (0=DEFAULT) (0-25.5 HZ)...1.0
DUTY CYCLE (0=DEFAULT) (0 - 100%)...50
MODE (0=SOLID.1=FLASH)..............1
SELECT ASSIGNMENT:
NOT ENABLED.........................Y
VEHICLE PHASE.......................
PEDESTRIAN PHASE....................
VEHICLE OVERLAP.....................
PEDESTRIAN OVERLAP..................
WATCHDOG............................
DETECTOR RESET......................
ADVANCE BEACON......................Y
OUT OF PHASE FLASHER................
CONTROLLER FLASH....................
RUN FREE............................
RESERVED............................
PREEMPT.............................
SOFT PREEMPT........................
ANY PREEMPT.........................
COORDINATION PLAN...................
OFFSET..............................
PHASE CHECK.........................
PHASE ON............................
PHASE NEXT..........................
```

THE FIRST THREE PROGRAMMING ROWS DEFINE THE OUTPUT TO FLASH. ALONG WITH THE RATE IN WHICH IT WILL FLASH.

THE NOT ENABLED 'Y' WILL REMAIN UNTIL THE FUNCTION OF THIS OUTOUT IS CHANGED. DO NOT ENTER AN 'N'.

```
PAGE:1  C1 PIN:35  NOT ENABLED
SELECT BEACON INDEX (1-4)...........1
```

WHEN A 'Y' IS ENTERED FOR 'ADVANCE BEACON' THE SCREEN SHOWN ABOVE WILL APPEAR. ENTER DATA AS SHOWN.

PRESS THE 'ENT' KEY AFTER INPUTING DATA. THEN 'ESC'.

DISPLAY WILL NOW SHOW THE SPECIFIED OUTPUT ASSIGNED AS 'ADVANCE BEACON' AS SHOWN BELOW.

```
PAGE:1  C1 PIN:35  ADVANCE BEACON
OUTPUT ASSIGNMENT #.................33
FREQUENCY (0=DEFAULT) (0-25.5 HZ)...1.0
DUTY CYCLE (0=DEFAULT) (0 - 100%)...50
MODE (0=SOLID.1=FLASH)..............1
SELECT ASSIGNMENT:
NOT ENABLED.........................
VEHICLE PHASE.......................
PEDESTRIAN PHASE....................
VEHICLE OVERLAP.....................
PEDESTRIAN OVERLAP..................
WATCHDOG............................
DETECTOR RESET......................
ADVANCE BEACON......................Y
OUT OF PHASE FLASHER................
CONTROLLER FLASH....................
RUN FREE............................
RESERVED............................
PREEMPT.............................
SOFT PREEMPT........................
ANY PREEMPT.........................
COORDINATION PLAN...................
OFFSET..............................
PHASE CHECK.........................
PHASE ON............................
PHASE NEXT..........................
```

FROM MAIN MENU PRESS '6' (OUTPUTS). THEN '1' (OUTPUT ASSIGNMENTS). PRESS '+' UNTIL OUTPUT #34 (PIN 36) IS REACHED.

```
PAGE:1  C1 PIN:36  NOT ENABLED
OUTPUT ASSIGNMENT #.................34
FREQUENCY (0=DEFAULT) (0-25.5 HZ)...1.0
DUTY CYCLE (0=DEFAULT) (0 - 100%)...50
MODE (0=SOLID.1=FLASH)..............1
SELECT ASSIGNMENT:
NOT ENABLED.........................Y
VEHICLE PHASE.......................
PEDESTRIAN PHASE....................
VEHICLE OVERLAP.....................
PEDESTRIAN OVERLAP..................
WATCHDOG............................
DETECTOR RESET......................
ADVANCE BEACON......................Y
OUT OF PHASE FLASHER................
CONTROLLER FLASH....................
RUN FREE............................
RESERVED............................
PREEMPT.............................
SOFT PREEMPT........................
ANY PREEMPT.........................
COORDINATION PLAN...................
OFFSET..............................
PHASE CHECK.........................
PHASE ON............................
PHASE NEXT..........................
```

THE FIRST THREE PROGRAMMING ROWS DEFINE THE OUTPUT TO FLASH. ALONG WITH THE RATE IN WHICH IT WILL FLASH.

THE NOT ENABLED 'Y' WILL REMAIN UNTIL THE FUNCTION OF THIS OUTOUT IS CHANGED. DO NOT ENTER AN 'N'.

```
PAGE:1  C1 PIN:36  NOT ENABLED
SELECT BEACON INDEX (1-4)...........2
```

WHEN A 'Y' IS ENTERED FOR 'ADVANCE BEACON' THE SCREEN SHOWN ABOVE WILL APPEAR. ENTER DATA AS SHOWN.

PRESS THE 'ENT' KEY AFTER INPUTING DATA. THEN 'ESC'.

DISPLAY WILL NOW SHOW THE SPECIFIED OUTPUT ASSIGNED AS 'ADVANCE BEACON' AS SHOWN BELOW.

```
PAGE:1  C1 PIN:36  ADVANCE BEACON
OUTPUT ASSIGNMENT #.................34
FREQUENCY (0=DEFAULT) (0-25.5 HZ)...1.0
DUTY CYCLE (0=DEFAULT) (0 - 100%)...50
MODE (0=SOLID.1=FLASH)..............1
SELECT ASSIGNMENT:
NOT ENABLED.........................
VEHICLE PHASE.......................
PEDESTRIAN PHASE....................
VEHICLE OVERLAP.....................
PEDESTRIAN OVERLAP..................
WATCHDOG............................
DETECTOR RESET......................
ADVANCE BEACON......................Y
OUT OF PHASE FLASHER................
CONTROLLER FLASH....................
RUN FREE............................
RESERVED............................
PREEMPT.............................
SOFT PREEMPT........................
ANY PREEMPT.........................
COORDINATION PLAN...................
OFFSET..............................
PHASE CHECK.........................
PHASE ON............................
PHASE NEXT..........................
```

Output *33 = Ø2 Ped Yellow
Output *34 = Ø6 Ped Yellow
Output *35 = Ø4 Ped Yellow
Output *36 = Ø8 Ped Yellow

FROM MAIN MENU PRESS '6' (OUTPUTS). THEN '1' (OUTPUT ASSIGNMENTS). PRESS '+' UNTIL OUTPUT #35 (PIN 37) IS REACHED.

```
PAGE:1  C1 PIN:37  NOT ENABLED
OUTPUT ASSIGNMENT #.................35
FREQUENCY (0=DEFAULT) (0-25.5 HZ)...0.0
DUTY CYCLE (0=DEFAULT) (0 - 100%)...0
MODE (0=SOLID.1=FLASH)..............0
SELECT ASSIGNMENT:
NOT ENABLED.........................Y
VEHICLE PHASE.......................
PEDESTRIAN PHASE....................
VEHICLE OVERLAP.....................
PEDESTRIAN OVERLAP..................
WATCHDOG............................
DETECTOR RESET......................
ADVANCE BEACON......................
OUT OF PHASE FLASHER................Y
CONTROLLER FLASH....................
RUN FREE............................
RESERVED............................
PREEMPT.............................
SOFT PREEMPT........................
ANY PREEMPT.........................
COORDINATION PLAN...................
OFFSET..............................
PHASE CHECK.........................
PHASE ON............................
PHASE NEXT..........................
```

THE NOT ENABLED 'Y' WILL REMAIN UNTIL THE FUNCTION OF THIS OUTOUT IS CHANGED. DO NOT ENTER AN 'N'.

```
PAGE:1  C1 PIN:37  NOT ENABLED
SELECT OUTPUT ASSIGNMENT (1-64).......33
```

WHEN A 'Y' IS ENTERED FOR 'OUT OF PHASE FLASHER' THE SCREEN SHOWN ABOVE WILL APPEAR. ENTER DATA AS SHOWN.

PRESS THE 'ENT' KEY AFTER INPUTING DATA. THEN 'ESC'.

DISPLAY WILL NOW SHOW THE SPECIFIED OUTPUT ASSIGNED AS 'OUT OF PHASE FLASHER' AS SHOWN BELOW.

```
PAGE:1  C1 PIN:37  OUT OF PHASE FLASHER
OUTPUT ASSIGNMENT #.................35
FREQUENCY (0=DEFAULT) (0-25.5 HZ)...0.0
DUTY CYCLE (0=DEFAULT) (0 - 100%)...0
MODE (0=SOLID.1=FLASH)..............0
SELECT ASSIGNMENT:
NOT ENABLED.........................
VEHICLE PHASE.......................
PEDESTRIAN PHASE....................
VEHICLE OVERLAP.....................
PEDESTRIAN OVERLAP..................
WATCHDOG............................
DETECTOR RESET......................
ADVANCE BEACON......................
OUT OF PHASE FLASHER................Y
CONTROLLER FLASH....................
RUN FREE............................
RESERVED............................
PREEMPT.............................
SOFT PREEMPT........................
ANY PREEMPT.........................
COORDINATION PLAN...................
OFFSET..............................
PHASE CHECK.........................
PHASE ON............................
PHASE NEXT..........................
```

FROM MAIN MENU PRESS '6' (OUTPUTS). THEN '1' (OUTPUT ASSIGNMENTS). PRESS '+' UNTIL OUTPUT #36 (PIN 38) IS REACHED.

```
PAGE:1  C1 PIN:38  NOT ENABLED
OUTPUT ASSIGNMENT #.................36
FREQUENCY (0=DEFAULT) (0-25.5 HZ)...0.0
DUTY CYCLE (0=DEFAULT) (0 - 100%)...0
MODE (0=SOLID.1=FLASH)..............0
SELECT ASSIGNMENT:
NOT ENABLED.........................Y
VEHICLE PHASE.......................
PEDESTRIAN PHASE....................
VEHICLE OVERLAP.....................
PEDESTRIAN OVERLAP..................
WATCHDOG............................
DETECTOR RESET......................
ADVANCE BEACON......................
OUT OF PHASE FLASHER................Y
CONTROLLER FLASH....................
RUN FREE............................
RESERVED............................
PREEMPT.............................
SOFT PREEMPT........................
ANY PREEMPT.........................
COORDINATION PLAN...................
OFFSET..............................
PHASE CHECK.........................
PHASE ON............................
PHASE NEXT..........................
```

THE NOT ENABLED 'Y' WILL REMAIN UNTIL THE FUNCTION OF THIS OUTOUT IS CHANGED. DO NOT ENTER AN 'N'.

```
PAGE:1  C1 PIN:38  NOT ENABLED
SELECT OUTPUT ASSIGNMENT (1-64).......34
```

WHEN A 'Y' IS ENTERED FOR 'OUT OF PHASE FLASHER' THE SCREEN SHOWN ABOVE WILL APPEAR. ENTER DATA AS SHOWN.

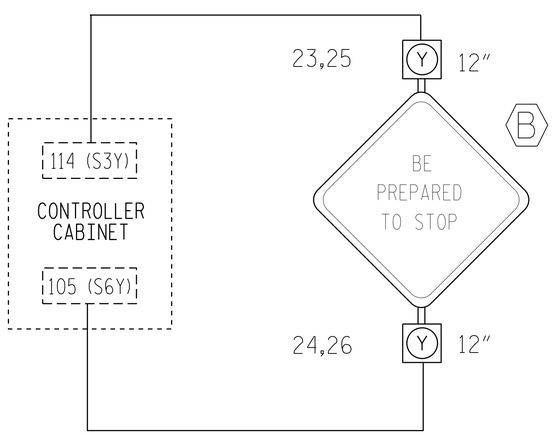
PRESS THE 'ENT' KEY AFTER INPUTING DATA. THEN 'ESC'.

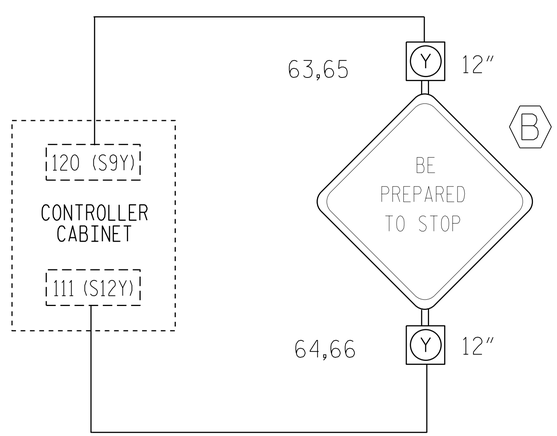
DISPLAY WILL NOW SHOW THE SPECIFIED OUTPUT ASSIGNED AS 'OUT OF PHASE FLASHER' AS SHOWN BELOW.

```
PAGE:1  C1 PIN:38  OUT OF PHASE FLASHER
OUTPUT ASSIGNMENT #.................36
FREQUENCY (0=DEFAULT) (0-25.5 HZ)...0.0
DUTY CYCLE (0=DEFAULT) (0 - 100%)...0
MODE (0=SOLID.1=FLASH)..............0
SELECT ASSIGNMENT:
NOT ENABLED.........................
VEHICLE PHASE.......................
PEDESTRIAN PHASE....................
VEHICLE OVERLAP.....................
PEDESTRIAN OVERLAP..................
WATCHDOG............................
DETECTOR RESET......................
ADVANCE BEACON......................
OUT OF PHASE FLASHER................Y
CONTROLLER FLASH....................
RUN FREE............................
RESERVED............................
PREEMPT.............................
SOFT PREEMPT........................
ANY PREEMPT.........................
COORDINATION PLAN...................
OFFSET..............................
PHASE CHECK.........................
PHASE ON............................
PHASE NEXT..........................
```

ADVANCE BEACON WIRING DETAIL

(wire flashers as shown below)





IMPORTANT

1. REMOVE, TAPE AND LABEL CONFLICT MONITOR WIRE ATTACHED TO THE REAR OF TERMINAL 114 (2PY) AND TERMINAL 105 (4PY).
2. INSERT LOADSWITCH FOR S3 AND S6.
3. MAKE SURE LOAD RESISTORS ARE IN PLACE AS SHOWN ON LOAD RESISTOR INSTALLATION DETAIL ON SHEET 1 OF 5.
4. TO PRODUCE FLASHING OPERATION AS INDICATED ON THE SIGNAL PLANS, RE-ASSIGN OUTPUTS 33 AND 35 AS SHOWN ON THIS SHEET.

IMPORTANT

1. REMOVE, TAPE AND LABEL CONFLICT MONITOR WIRE ATTACHED TO THE REAR OF TERMINAL 120 (6PY) AND TERMINAL 111 (8PY).
2. INSERT LOADSWITCH FOR S9 AND S12.
3. MAKE SURE LOAD RESISTORS ARE IN PLACE AS SHOWN ON LOAD RESISTOR INSTALLATION DETAIL ON SHEET 1 OF 5.
4. TO PRODUCE FLASHING OPERATION AS INDICATED ON THE SIGNAL PLANS, RE-ASSIGN OUTPUTS 34 AND 36 AS SHOWN ON THIS SHEET.

ADVANCE BEACON PROGRAMMING DETAIL

(program controller as shown below)

1. FROM MAIN MENU PRESS '6' (OUTPUTS). THEN '2' (OUTPUT BEACON SETTINGS).

```
          OUTPUT BEACON SETTINGS
TRIGGER PHASES:  123456789101112131415 16
BEACON #1 OFF    X
BEACON #2 OFF        X
BEACON #3 OFF
BEACON #4 OFF
                BEACON    1   2   3   4
OFF DELAY TIME (0-255)    0   0   0   0
ON DELAY TIME  (0-255)    0   0   0   0
STOP-TIME HOLD (0-255)    2   2   0   0
```

SCROLL DOWN TO VIEW ALL DATA

ADVANCE BEACON PROGRAMMING COMPLETE

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 04-1029T
DESIGNED: June 2019
SEALED: 6-19-19
REVISED: N/A

NOTE: AN OUTPUT HAS TO BE ASSIGNED AS AN ADVANCE BEACON IN ORDER FOR PROPER OPERATION TO OCCUR. SEE OUTPUT ASSIGNMENT DETAIL ON THIS SHEET.

Electrical Detail - Temp. - Phase 2 - Sheet 5 of 5

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared In the Offices of:
Traffic Engineering Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signals Management Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 70
at
SR 1913 (Wilson's Mills Road)

Division 4 Johnston County W. of Selma

PLAN DATE: June 2019	REVIEWED BY:
PREPARED BY: James Peterson	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 036833 ENGINEER RYAN W. HOUGH

DocuSigned by:
Ryan W. Hough
430320FAA2654C3...
6/20/2019
DATE

SIG. INVENTORY NO. 04-1029T

19-JUN-2019 14:36
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jrpeterson