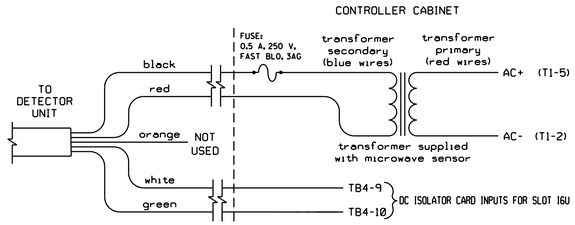
PROJECT REFERENCE NO.	SHEET NO.
C-5558	Sig. 54.2

MICROWAVE DETECTOR WIRING DETAIL

(wire as shown)



TC26B WIRE LIST

COLOR	FUNCTION
black	12V to 24V AC/DC (no polarity)
red	12V to 24V AC/DC (no polarity)
orange	Output Relay Normally Open
white	Output Relay Normally Closed
green	Output Relay Common

NOTES:

1. Sensor is a microwave motion detector mounted on poles as indicated on the Signal Design Plans.
2. Microwave wiring shown above will cause a permanent call unless the Input Assignment Programming and Logical I/O Processor Programming details are entered as shown on this sheet. These programming details will cause a call to be placed upon opening the Normally Closed contact.
3. DC Isolator's LED will be ON when no call is present and will be OFF when a call is present.
4. Important: For proper operation of the microwave detector, remove surge protection from TB4-9, TB4-10, TB4-11, and TB4-12 and insert 242 DC Isolator in slot 16.

INPUT ASSIGNMENT PROGRAMMING DETAIL FOR MICROWAVE DETECTOR INPUT (4)

(program controller as shown below)

FROM MAIN MENU PRESS '5' (INPUTS), THEN '+' UNTIL INPUT 3 (PIN 41) IS REACHED. MODIFY DEFAULT CONDITIONS AS INDICATED BY ARROWS.

```
PAGE: 1 C1 PIN:41  NOT ENABLED
INPUT ASSIGNMENT #.................3
DEBOUNCE TIME (0-25.5 SEC).........0.5
DELAY TIME (0-25.5 SEC)............0.0
HOLD-OVER TIME (0-25.5 SEC)........0.0
ASSIGNMENT SELECTION:
NOT ENABLED (Y/N)..................Y
VEHICLE DETECTOR (1-64)............_
PEDESTRIAN DETECTOR (1-16).........._
ALTERNATE PED DETECTOR (1-16)......_
PREEMPT (1-10)....................._
INVERTED PREEMPT (1-10)............_
STOP TIME (Y/N)...................._
FLASH SENSE (Y/N)..................._
DOOR OPEN (Y/N)...................._
MANUAL CONTROL ENABLE (Y/N)........_
MANUAL CONTROL ADVANCE (Y/N)......._
SPECIAL FUNCTION ALARM (1-8)......._
TOD HOUR SYCHRONIZATION (0-23)....._
FORCE OFF RING (1-4)..............._
HOLD PHASES (1-16)................._
PLAN (65=FLSH,66=FREE)..._  OFFSET#..._
CHANGE PHASE SEQUENCE PAGE (1-12)...._
CHANGE PHASE TIMING PAGE (1-4)....._
CHANGE PHASE CONTROL PAGE (1-4)....._
CHANGE OVERLAP CONTROL PAGE (1-4)...._
CHANGE INPUT PAGE (1-4)............_
CHANGE OUTPUT PAGE (1-4)..........._
OVERRIDE PHASE CONTROL FUNCTION (Y)._
```

ENTER 'YES' for Not Enabled

PRESS '-' until Input Assignment #64 is reached

```
PAGE: 1 C1 PIN:0  VEHICLE DETECTOR
INPUT ASSIGNMENT #.................64
DEBOUNCE TIME (0-25.5 SEC).........0.5
DELAY TIME (0-25.5 SEC)............0.0
HOLD-OVER TIME (0-25.5 SEC)........0.0
ASSIGNMENT SELECTION:
NOT ENABLED (Y/N)..................._
VEHICLE DETECTOR (1-64)............4
PEDESTRIAN DETECTOR (1-16)........._
ALTERNATE PED DETECTOR (1-16)......_
PREEMPT (1-10)....................._
INVERTED PREEMPT (1-10)............_
STOP TIME (Y/N)...................._
FLASH SENSE (Y/N)..................._
DOOR OPEN (Y/N)...................._
MANUAL CONTROL ENABLE (Y/N)........_
MANUAL CONTROL ADVANCE (Y/N)......._
SPECIAL FUNCTION ALARM (1-8)......._
TOD HOUR SYCHRONIZATION (0-23)....._
FORCE OFF RING (1-4)..............._
HOLD PHASES (1-16)................._
PLAN (65=FLSH,66=FREE)..65 OFFSET#..._
CHANGE PHASE SEQUENCE PAGE (1-12)...._
CHANGE PHASE TIMING PAGE (1-4)....._
CHANGE PHASE CONTROL PAGE (1-4)....._
CHANGE OVERLAP CONTROL PAGE (1-4)...._
CHANGE INPUT PAGE (1-4)............_
CHANGE OUTPUT PAGE (1-4)..........._
OVERRIDE PHASE CONTROL FUNCTION (Y)._
```

ENTER '4' for Vehicle Detector

PROGRAMMING COMPLETE

NOTE:

This remapping removes the default detector from the microwave's physical input and reassigns it to unused INPUT 64. The Logical I/O Processor Programming Detail on this sheet will invert the disabled input and control INPUT 64 and the reassigned detector.

LOGICAL I/O PROCESSOR PROGRAMMING DETAIL TO INVERT INPUT FROM MICROWAVE DETECTOR

(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 and 4.
2. From Main Menu press '6' (Outputs). Then '3' (Logical I/O Processor).

```
LOGICAL I/O COMMAND #1  (+/-COMMAND#)
IF  INPUT   ASSIGNMENT #3 IS ON
                 ↓
            SCROLL DOWN
THEN:
SET  INPUT  ASSIGNMENT #64 OFF
```

NOTE: MICROWAVE DETECTOR CONTACTS ARE CLOSED. SO NO CALL IS 'DETECTED' ON LOOP 4A.

PRESS '+'

```
LOGICAL I/O COMMAND #2  (+/-COMMAND#)
IF  INPUT   ASSIGNMENT #3 IS OFF
                 ↓
            SCROLL DOWN
THEN:
SET  INPUT  ASSIGNMENT #64 ON
```

NOTE: MICROWAVE DETECTOR CONTACTS ARE OPEN. SO A CALL IS 'DETECTED' ON LOOP 4A.

PRESS '+'

```
LOGICAL I/O COMMAND  #3 (+/-COMMAND#)
IF  INPUT   ASSIGNMENT  #4 IS ON
                 ↓
            SCROLL DOWN
THEN:
SET  INPUT  ASSIGNMENT #63 OFF
```

NOTE: MICROWAVE DETECTOR CONTACTS ARE CLOSED. SO NO CALL IS 'DETECTED' ON LOOP 8A.

PRESS '+'

```
LOGICAL I/O COMMAND  #4  (+/-COMMAND#)
IF  INPUT   ASSIGNMENT  #4 IS OFF
                 ↓
            SCROLL DOWN
THEN:
SET  INPUT  ASSIGNMENT #63 ON
```

NOTE: MICROWAVE DETECTOR CONTACTS ARE OPEN. SO A CALL IS 'DETECTED' ON LOOP 8A.

LOGIC I/O PROCESSOR PROGRAMMING COMPLETE

REFERENCE SCHEDULE

INPUT 3 = Microwave Detector Physical Input (Not Enabled)
INPUT 64 = Dummy Microwave Detector Input (Detector 4)

INPUT 4 = Microwave Detector Physical Input (Not Enabled)
INPUT 63 = Dummy Microwave Detector Input (Detector 8)

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 07-0786
DESIGNED: May 2015
SEALED: 5-11-15
REVISED: N/A

Electrical Detail - 2 of 3

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared in 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

SR 1009 (South Main Street) at Commerce Avenue

Division 7 Guilford County DS High Point

PLAN DATE:	May 2015	REVIEWED BY:	JTR
PREPARED BY:	James Peterson	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 008453 ENGINEER JOHN T. ROWE, JR.

DocuSigned by: John T. Rowe, Jr. 5/12/2015
641D60C145E5EF5
DATE

SIG. INVENTORY NO. 07-0786

12-MAY-2015 13:18
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jtpeterson