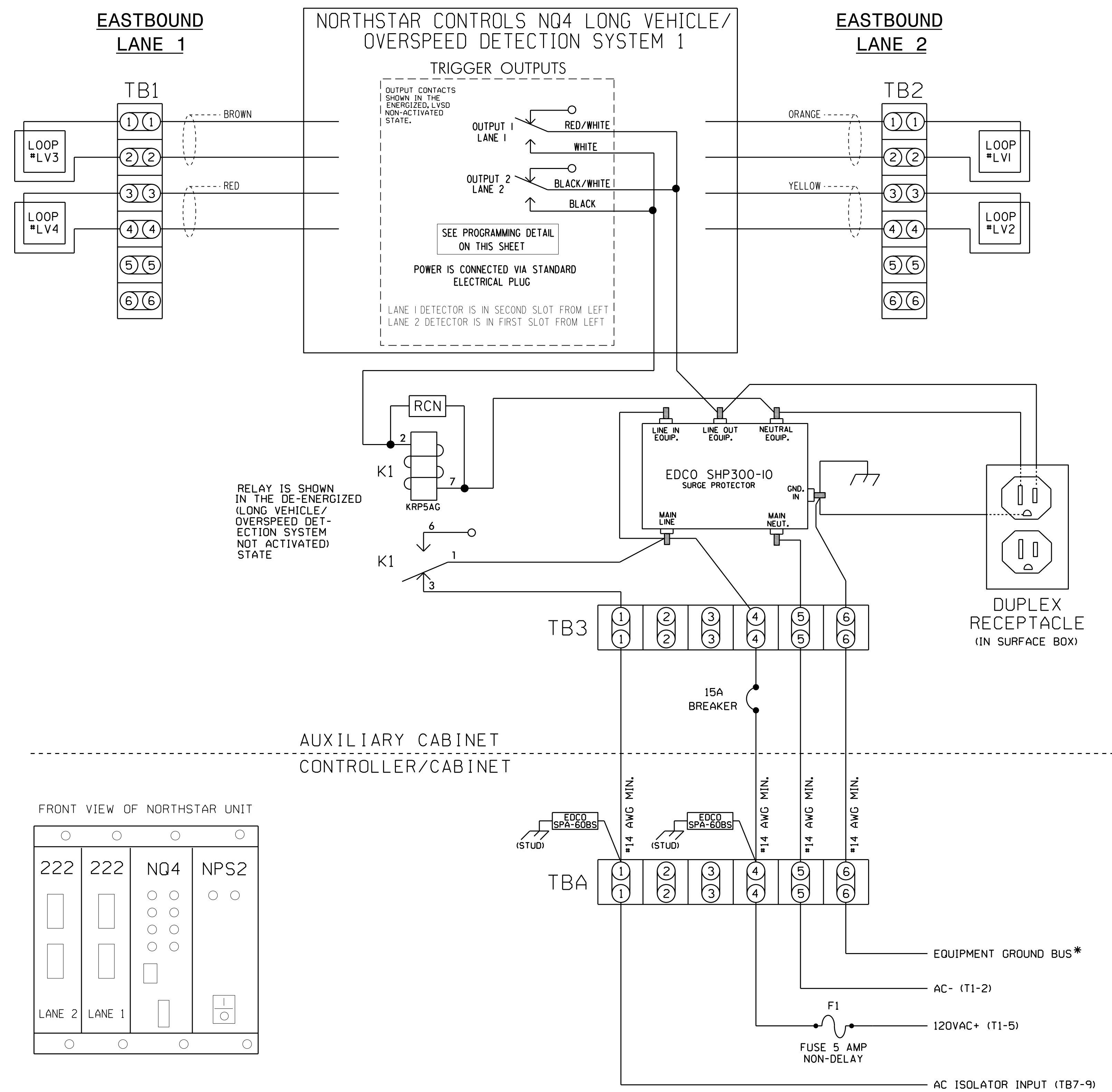


NOTES

1. All loop lead-ins shall be twisted.
 2. Loop spacing is critical to the proper operation of this Overspeed Detection System. Make sure loop spacing is correctly programmed in NQ4 Unit.
 3. Insure that connectors on rear of NQ4 are seated securely.
 4. NQ4 Unit shall be located in an auxiliary cabinet adjacent to Speed Warning System loops.
 5. Unit power is connected by standard electrical plug.
 6. Terminal strips TB1, TB2, TB3, & TBA to be added by installer.
 7. Relay 'K1' is a SPDT with an 120VAC coil. Potter & Brumfield no. KRP5AGAG, Dot Material no. 625028600.
 8. RC network across the coil of K1 is Dot no. 106018075.
 9. EDCO SPA-60BS is a surge protector for 120VAC interconnect circuits. Dot Material no. 625022076.
 10. EDCO SHP300-10 is an AC service surge protector. Dot Material no. 625022075.
11. IMPORTANT! A jumper must be installed between input file terminals J9-E and J9-K if not already present.
 12. IMPORTANT! For proper operation of the Long Vehicle Detection Unit, remove surge protection from terminals TB7-9, TB7-10, TB7-11 and TB7-12. Tie TB7-12 to AC neutral.
 13. IMPORTANT! Make sure both channels of AC isolator card inserted at input file position J9 are set for inverted operation.
 14. Do not install ground rods at auxiliary cabinet.
 15. Install disconnect if there is no disconnect present at auxiliary cabinet.
 - *16. Install equipment ground from controller cabinet to auxiliary cabinet if not already present.

WIRING DETAIL FOR NORTHSTAR CONTROLS NQ4 LONG VEHICLE / OVERSPEED DETECTION SYSTEM NO. 1

(wire unit as shown below)



NORTHSTAR CONTROLS MODEL NQ4
PROGRAMMING DETAIL
(program unit as shown)

NOTE: UNIT MUST BE PROGRAMMED USING PC AND HYPERTERMINAL PROGRAM. FOR CONNECTION TO HYPERTERMINAL REFER TO NQ4 OPERATION MANUAL.

PROGRAM NQ4 BY TYPING THE FOLLOWING COMMANDS

1. SET SPEED=55
2. SET LENGTH=22'
3. SET ALARMTIME=12
4. SET SEPARATION=16' (LEADING EDGE TO LEADING EDGE) (THIS VALUE MAY VARY, PROGRAM ACTUAL MEASURED SEPARATION)
5. SET LOOP LENGTH=6' (THIS VALUE MAY VARY, PROGRAM ACTUAL MEASURED LOOP LENGTH)
6. SAVE

NOTE
PROGRAMMING APPLIES TO BOTH LANE 1 AND LANE 2

Electrical Detail - Sheet 3 of 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISION SEAL

Prepared In the Offices of:

KEITH M. MIMS

Professional Engineer

3/2/2016

ELECTRICAL AND PROGRAMMING DETAILS FOR:

US 74-76 (Andrew Jackson Hwy.)

at

NC 87 (Maco Road) / SR 1419 (Northwest Road)

Division 3 Brunswick County Maco

PLAN DATE: April 2007 REVIEWED BY: T. Joyce

PREPARED BY: C. Strickland REVIEWED BY:

REVISIONS

Changed head 32 from 5-section to 3-section, deleted loop 3C, revised stretch times and monitor jumpers, added a note. (NSA) (D14)

DATE: 3/2/2016

750 N. Greenfield Pkwy, Garner, NC 27529

SEAL

Not a certified document as to the Original Document but only as to the Revisions - This document originally issued and sealed by George C. Brown, #022013, on 4/19/07. This document is only certified as to the revisions.

SIGNATURE DATE

SIG. INVENTORY NO. 03-0170

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0170

DESIGNED: January 2016

SEALED: 2/9/2016

REVISED: N/A

03-0170-016.dgn
 S:\MITSUBISHI\SIGNAL\work\hgr\030170_sml.elec\xxx.dgn
 s01mstr03