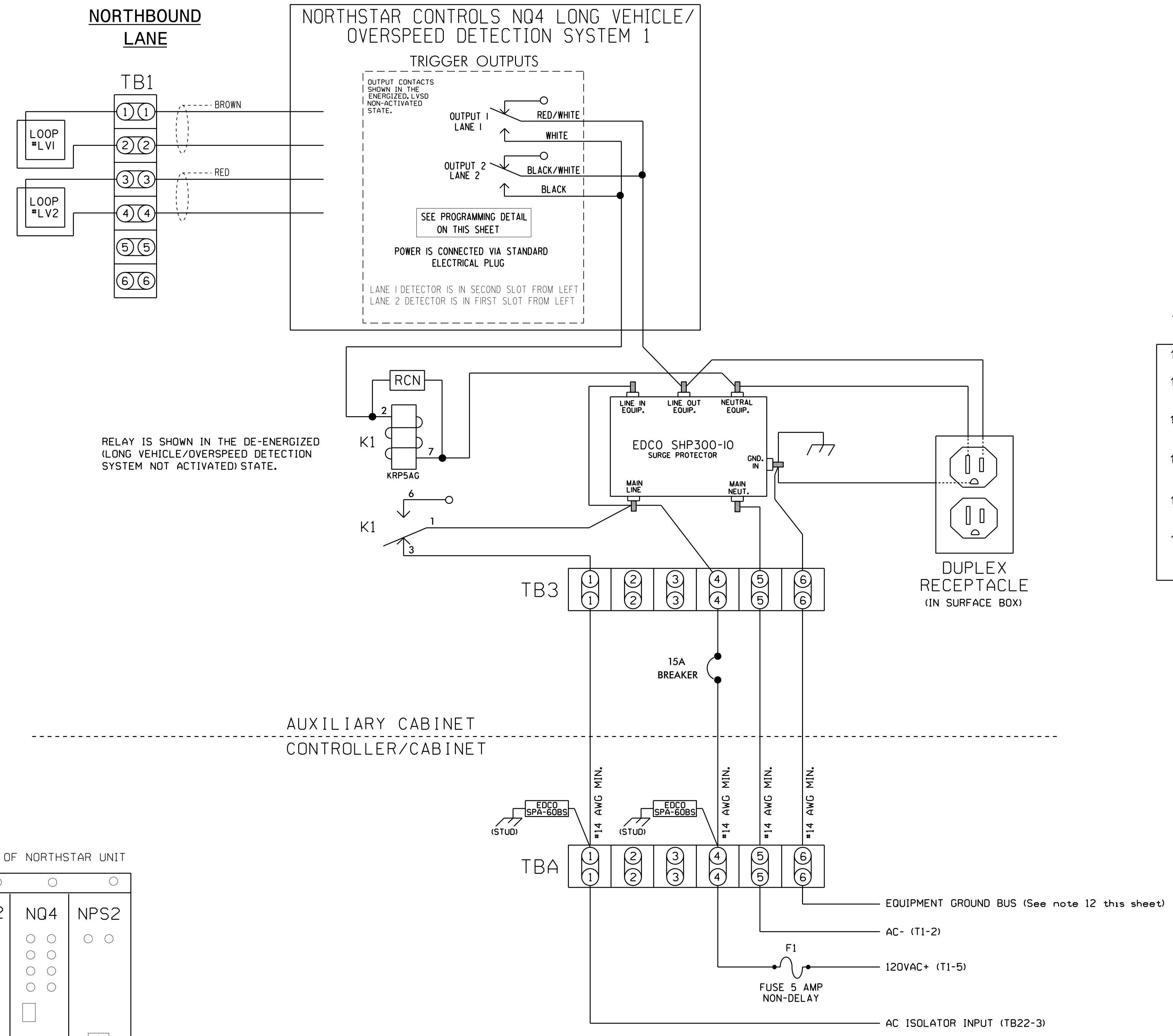


WIRING DETAIL FOR NORTHSTAR CONTROLS NQ4 LONG VEHICLE / OVERSPEED DETECTION SYSTEM NO. 1
(wire unit as shown below)



- NOTES**
- All loop lead-ins shall be twisted.
 - Loop spacing is critical to the proper operation of this Overspeed Detection System. Make sure loop spacing is correctly programmed in NQ4 Unit.
 - Insure that connectors on rear of NQ4 are seated securely.
 - NQ4 Unit shall be located in an auxiliary cabinet adjacent to Speed Warning System loops.
 - Unit power is connected by standard electrical plug.
 - Terminal strips TB1, TB2, TB3, & TBA to be added by installer.
 - Relay 'K1' is a SPDT with an 120VAC coil. Potter & Brumfield no. KRP5AGAG, Dot Material no. 625028600.
 - The RC Network across the coil of 'K1' is a .1 micro farad, 100 ohm. Dot Material no. 106018075, P&B no. 104M060C100
 - EDCO SPA-60BS is a surge protector for 120VAC interconnect circuits. Dot Material no. 625022076.
 - EDCO SHP300-10 is an AC service surge protector. Dot Material no. 625022075.
 - Do not install ground rods at auxiliary cabinet.
 - Install equipment ground from controller cabinet to auxiliary cabinet if not already present.
 - Install disconnect if there is no disconnect present at auxiliary cabinet.
 - IMPORTANT! A jumper must be installed between input file terminals I9-E and I9-K if not already present.
 - IMPORTANT! For proper operation of the Long Vehicle Detection Unit, tie TB24-4 to AC neutral.
 - IMPORTANT! Make sure both channels of AC Isolator card inserted at input file position I9 are set for inverted operation.

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

- SET SPEED=55
- SET LENGTH=22'
- SET ALARMTIME=12
- SET SEPARATION=27' (LEADING EDGE TO LEADING EDGE)
(THIS VALUE MAY VARY, PROGRAM ACTUAL MEASURED SEPARATION)
- SET LOOP LENGTH=6'
(THIS VALUE MAY VARY, PROGRAM ACTUAL MEASURED LOOP LENGTH)
- SAVE

NOTE
PROGRAMMING APPLIES TO LANE 1

27-Jan-2015 15:58
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 somstr.dgn

THIS ELECTRICAL PLAN SUPERSEDES THE PLAN ORIGINALLY SEALED ON 8/19/11.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 07-0282
 DESIGNED: January 2015
 SEALED: 1/27/2015
 REVISED: N/A

Electrical Detail - Temporary Signal (TMP Phase I) - Sheet 3 of 4

ELECTRICAL AND PROGRAMMING DETAILS FOR: Prepared in the Offices of: 750 N. Greenfield Pkwy, Garner, NC 27529	US 220 at NC 68		
	Division 7 PLAN DATE: January 2015 PREPARED BY: S. Armstrong	Rockingham County REVIEWED BY: JTR REVIEWED BY:	
REVISIONS			DATE
DocuSigned by: 			DATE: 1/28/2015
SIG. INVENTORY NO. 07-0282			DATE