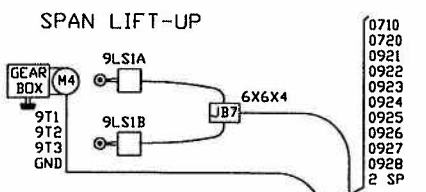
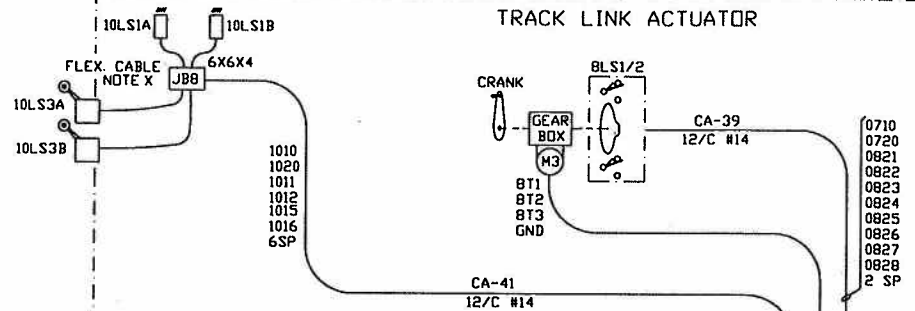


DCA-13-MR-002
Derailment/Hazardous Materials Release
Paulsboro, NJ
November 30, 2012

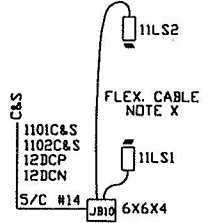
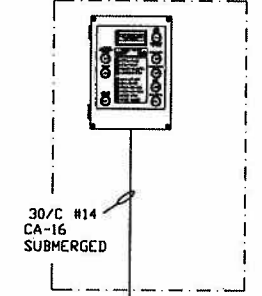
ATTACHMENT 21

Paulsboro Wiring Diagram for Limit Switches

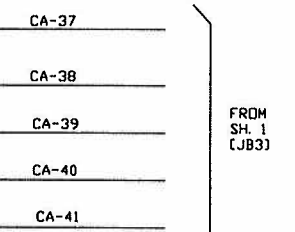
NORTH APPROACH



POLE-MOUNTED
REMOTE CONTROL BOX



NORTH END OF SPAN
(CONT'D FROM SH.1)



SPAN OPEN

REV. D1 / 06-06-03
GENERAL REVISION

NO.	REVISION	DATE	NAME

HEIDENREICH ASSOCIATES INC.
GREENWICH, CONNECTICUT

DATE APRIL 2003 DRWN HJH CKD

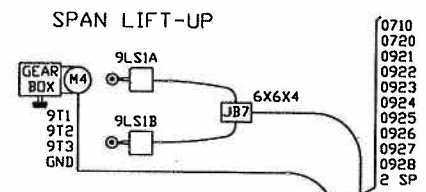
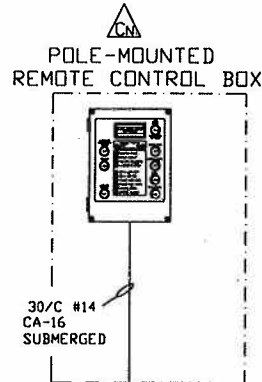
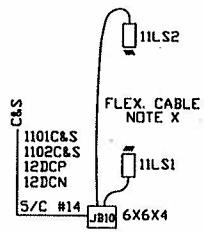
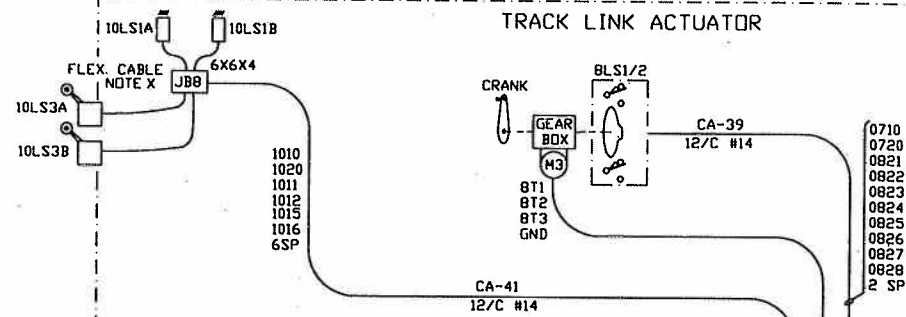
CABLE RUN DIAGRAM
SPAN AND
NORTH APPROACH

REV. D1
HH 0204 8
SHEET 2 OF 2

CONRAIL

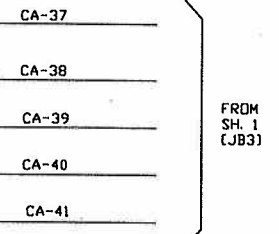
SWING BRIDGE No. 13.70 OVER MANTUA CREEK
PAULSBORO, NEW JERSEY
CONVERSION TO ELECTRICAL DRIVE SYSTEM

NORTH APPROACH



- 0710
- 0720
- 0921
- 0922
- 0923
- 0924
- 0925
- 0926
- 0927
- 0928
- 2 SP

NORTH END OF SPAN
(CONT'D FROM SH.1)



S1
SUBMERGED CABLE (TO SOUTH SHORE) (SEE SH.1)

SPAN OPEN

REV. D1 / 06-06-03
GENERAL REVISION

CONRAIL

SWING BRIDGE No. 1370 OVER MANTUA CREEK
PAULSBORO, NEW JERSEY
CONVERSION TO ELECTRICAL DRIVE SYSTEM

NO.	REVISION	DATE	NAME

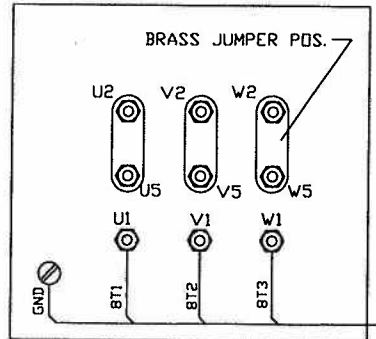
HEIDENREICH ASSOCIATES INC.
GREENWICH, CONNECTICUT

DATE APRIL 2003 DRWN HJH CKD

CABLE RUN DIAGRAM
SPAN AND
NORTH APPROACH

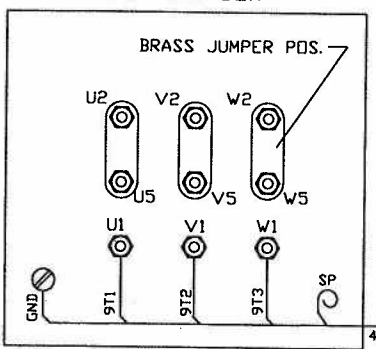
REV. D1
HH 0204 8
SHEET 2 OF 2

NORTH END OF SPAN
BRIDGE LINK ACTUATOR M3
JUNCTION BOX



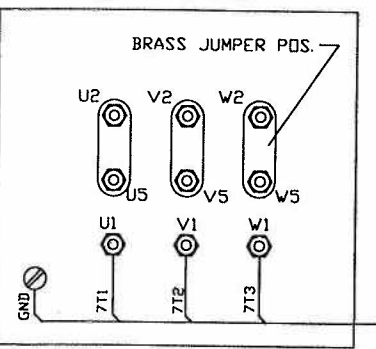
CA-40
5/C #14 TO JB3

SPAN LIFT-UP DRIVE M4
JUNCTION BOX



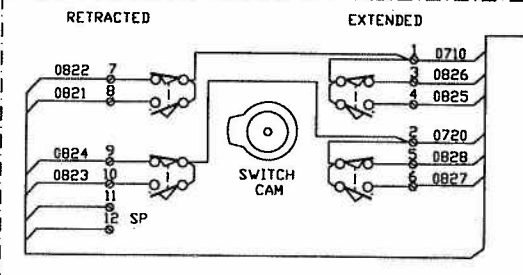
CA-38
4/C #12 TO JB3

SOUTH END OF SPAN
BRIDGE LINK ACTUATOR M2
JUNCTION BOX

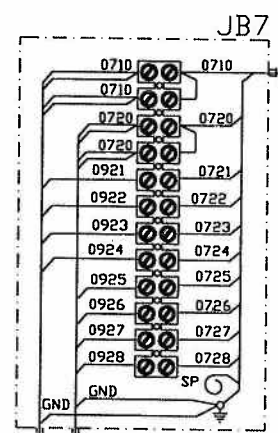


CA-36
4/C #12 TO JB3

BLS1/2

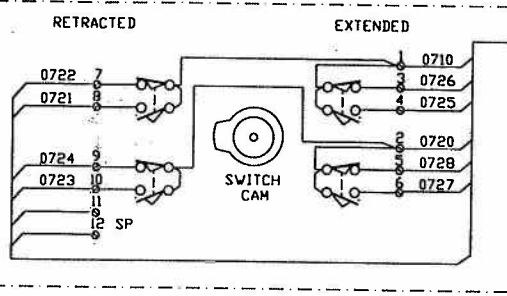


CA-39
12/C #14 TO JB3



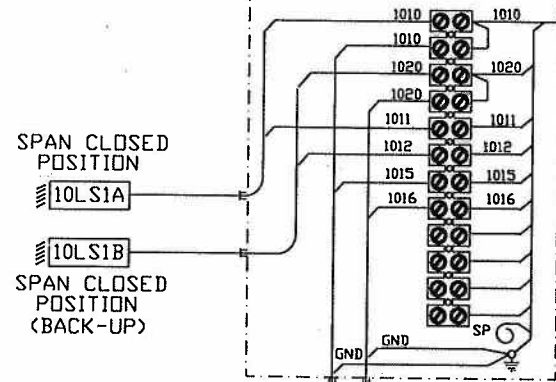
CA-37
12/C #14 TO JB3

7LS1/2



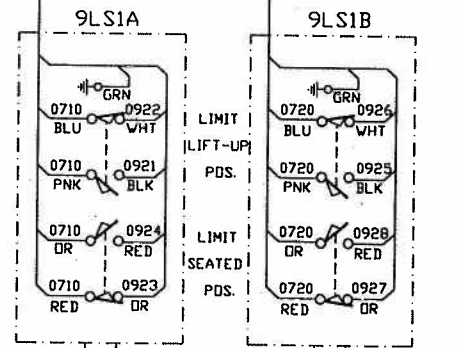
CA-35 TO JB3

JB8

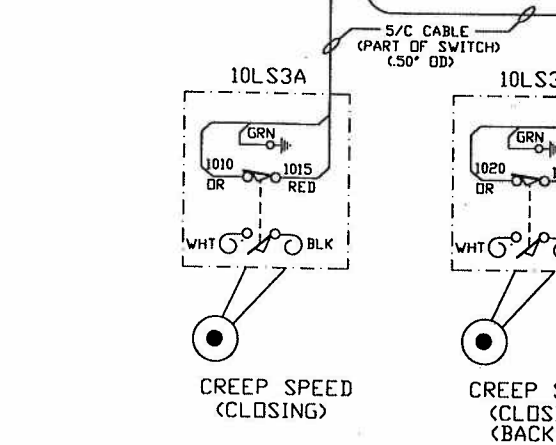


CA-41
12/C #14 TO JB3

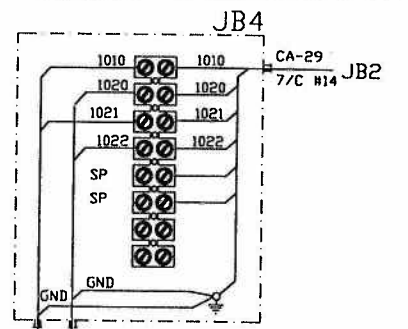
SPAN CLOSED POSITION
10LS1A
SPAN CLOSED POSITION (BACK-UP)
10LS1B



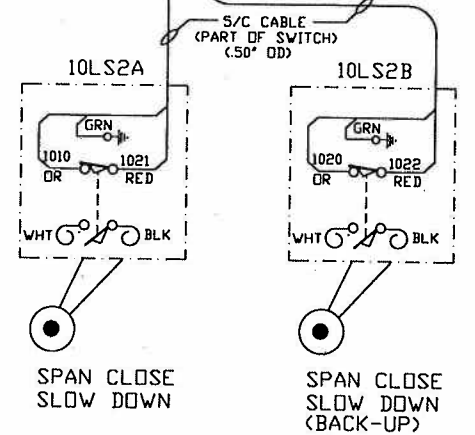
LIFT-UP SEATED LIFT-UP SEATED
SPAN LIFT-UP LIMITS
VERIFY CONTACT ACTION (AND LEAD COLOR CODE) BEFORE HOOK-UP.



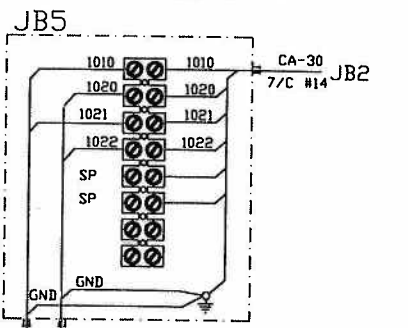
10LS3A
10LS3B
CREEP SPEED (CLOSING)
CREEP SPEED (BACK-UP)



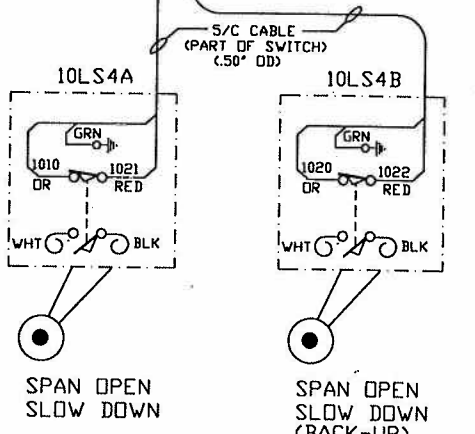
CA-29
7/C #14 JB2



SPAN CLOSE SLOW DOWN
SPAN CLOSE SLOW DOWN (BACK-UP)



CA-30
7/C #14 JB2



SPAN OPEN SLOW DOWN
SPAN OPEN SLOW DOWN (BACK-UP)

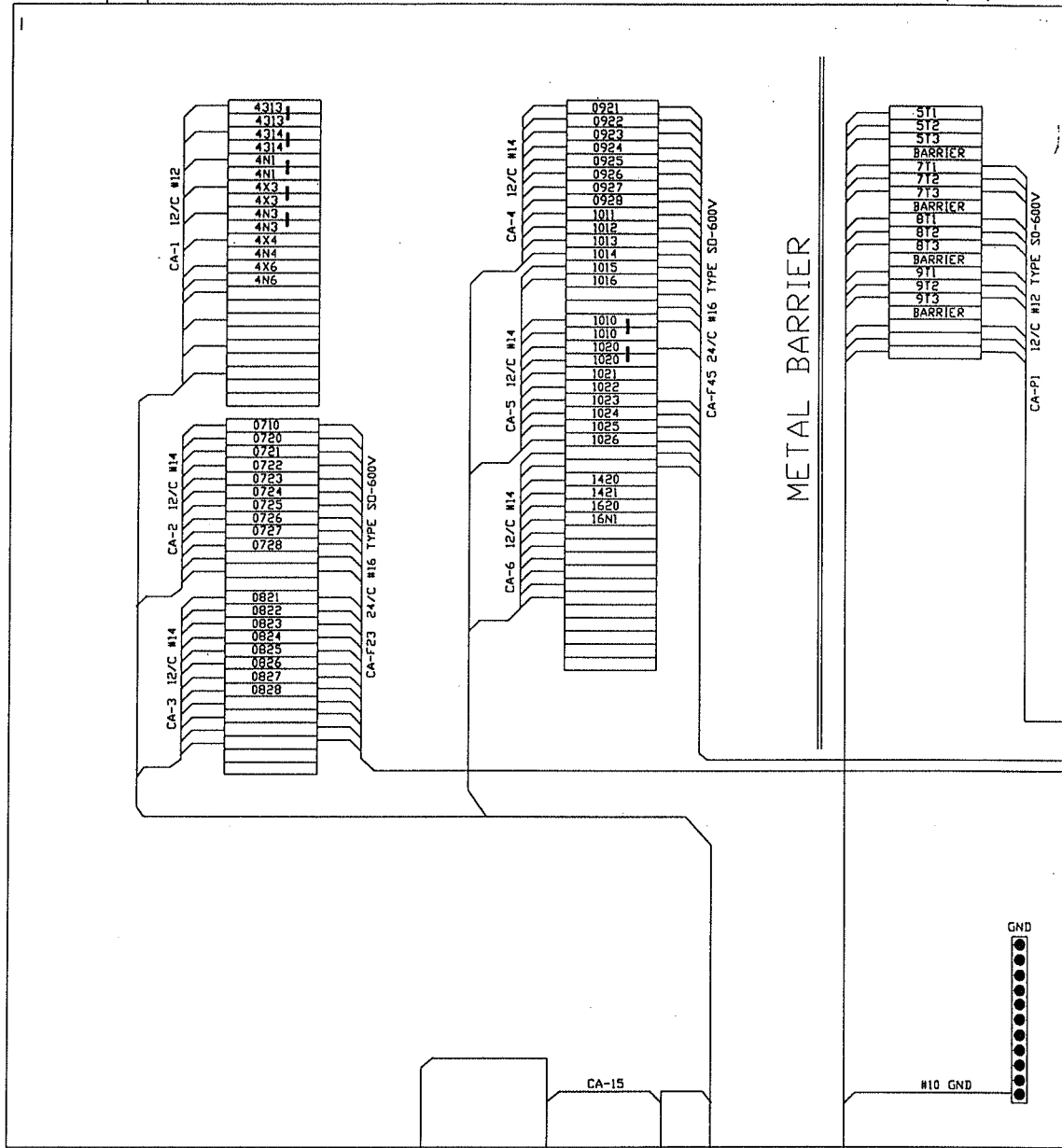
ON SPAN ← → ON SOUTH APPROACH

NOTES:
1. FOR TERMINAL DETAILS AND SPECS SEE DWG HH-F1001

CONRAIL			
SWING BRIDGE No.13.79 OVER MANTUA CREEK PAULSBORO, NEW JERSEY CONVERSION TO ELECTRICAL DRIVE SYSTEM			
NO.	REVISION	DATE	NAME
HEIDENREICH ASSOCIATES INC. GREENWICH, CONNECTICUT			REV.
DATE APRIL 2003 DRWN HJH/CKD			
WIRING DIAGRAM SOUTH END OF SPAN & SOUTH APPROACH			HH 0904 9 SHEET 3 OF 4

COVER
HINGE

JB2 24X20X6"



NOTE:
ONLY INCOMING CABLES (WIRES) FROM BI ARE SHOWN
AND PASS-TROUGH CABLES (NOT TERMINATED IN JB2).

TO 31SPRI
CA-20

FROM BI
SIGNAL
& 24VDC

TO SJB1
HYDR. UNIT

FROM BI

120V C2 - 4"
CONT'L

460V C1 1-1/4"
POWER

H10 GND

REV. D1 / 06-06-03

FLEX. CABLES SHOWN



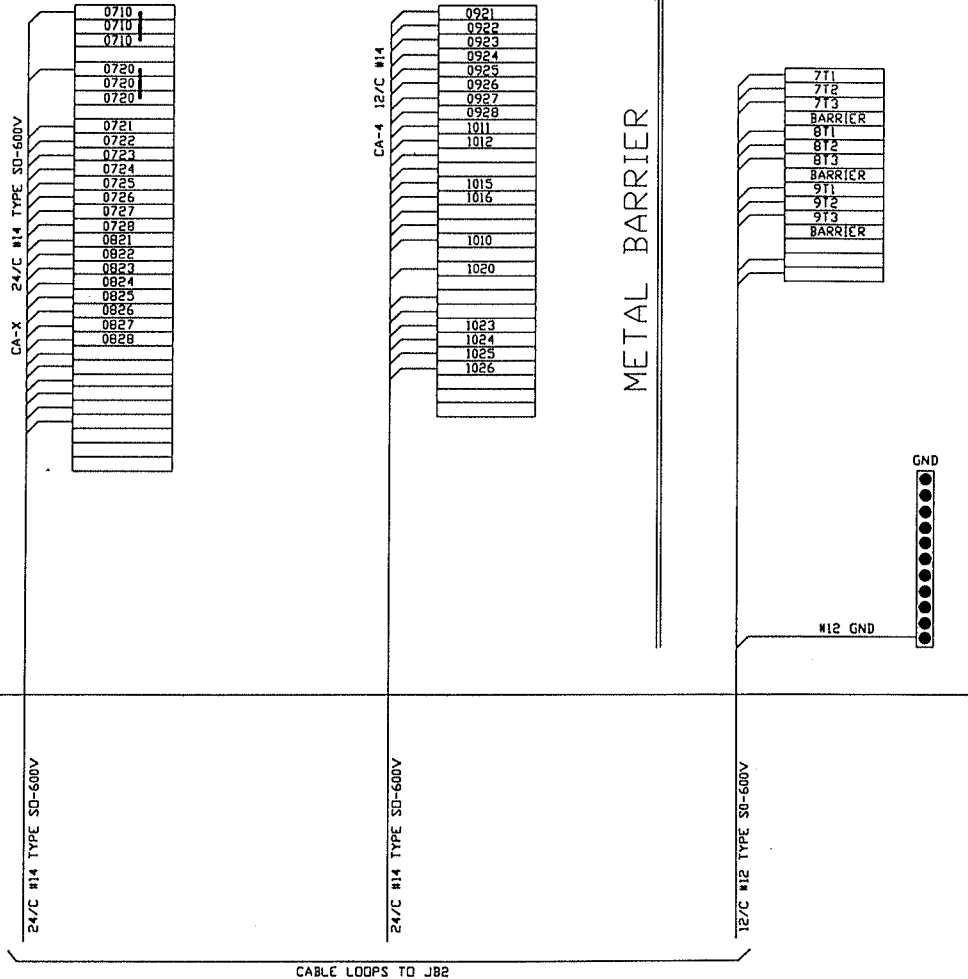
SWING BRIDGE 13.70, PAULSBORO, NEW JERSEY
CONVERSION TO ELECTRICAL DRIVE SYSTEM

REV.
D1

REV. 1.	4.	APRIL 2003		HEIDENREICH ASSOC. INC. CONTROL SYSTEM DESIGN GRENWICH, CONNECTICUT	JB2 TERMINALS HH 0204 9	SHEET 1 OF 4
2.	5.	DRWN HJH	CHKD			
3.	6.					

JB3 20X16X6

COVER
HINGE



NOTE:
ONLY INCOMING CABLES (WIRES) FROM B1 ARE SHOWN



SWING BRIDGE 13.70, PAULSBORO, NEW JERSEY
CONVERSION TO ELECTRICAL DRIVE SYSTEM

REV.

REV.

1.

2.

3.

4.

5.

6.

APRIL 2003

DRWN

CHCKD

HJH

HEIDENREICH ASSOC. INC.
CONTROL SYSTEM DESIGN
GREENWICH, CONNECTICUT

JB3 TERMINALS

HH 0204 9

SHEET 2
OF 4