

**COPY
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JUN 11 2001

Form 3

STATE OF ILLINOIS

Illinois Commerce Commission
RAIL SAFETY SECTION

ILLINOIS COMMERCE COMMISSION

Petition for permission to make a major change in crossing
Protection, or to install new protection under 92 Illinois
Administrative Code 1535.400(d)

Date: June 7, 2001

X-11653

T01-0038

To the Illinois Commerce Commission:

The petitioner, Union Pacific Railroad Company shows

- (1) That it is a railroad company operating a line of railroad in the State of Illinois.
- (2) That petitioner proposes and hereby makes application for authority to make a major change in crossing protection, or to install new protection, under 92 Illinois Administrative Code 1535.400(d) adopted by this Commission.
- (3) That the location of the crossing, the nature of protection now established and proposed to be established, and other pertinent facts in connection therewith, are set forth in the statement attached to and forming part of this petition.
- (4) That petitioner's reasons and purpose, with reference to its said proposal are to install 4-quad Flashing Light Signals, Gates, and Constant Warning Time Circuitry.
- (5) That the facts set forth in this petition and in the statement and plans or plats attached thereto, are, all of them, true and correct to the best of petitioner's knowledge and belief. ...

WHEREFORE, the petitioner prays that the Commission will, if deemed desirable by the Commission, set the aforesaid matter for hearing, and that the Commission enter an order or adopt a resolution consenting to and granting authority for the making of the said proposed changes in or additions to crossing protection.

UNION PACIFIC RAILROAD COMPANY

By Andrew Murphy
Andrew Murphy
UPRR Industry & Public Projects

DOCKETED

Statement, attached to and part of an application for permission to make a major change in crossing protection or to install new protection, under 92 Ill. Adm. Code 1535.400(d).

1. Name of railroad company: **Union Pacific Railroad Company**
2. Crossing Number: **290 729C**
3. Village or City: **Dwight**
4. Name of Street or Highway: **TR 19B**
5. Public Agency Maintaining Highway: **Livingston County**
6. Protection now established: **Flashers**
7. Protection desired: **4-quad gates & constant warning circuits**
8. Number of main tracks: **1** Other tracks:
9. Number of passenger train movements: 6 am to 6 pm: **3**
6 pm to 6 am: **3**
10. Number of freight train movements: 6 am to 6 pm: **1**
6 pm to 6 am: **0**
11. Approximate Number of switch moves: 6 am to 6 pm: **0**
6 pm to 6 am: **0**
12. Maximum speed of trains at crossing on each track in each direction: **79 MPH**
13. Passenger platforms served by tracks within the limits of track circuits: **NONE**
14. Where automatic signals or gates are proposed, approximate number of train or engine movements daily which would cause false indications or operations: **NONE**

15. In addition to the information listed herein before in Form 3, attach a track plan or the plat of the proposed crossing. This plan should show:

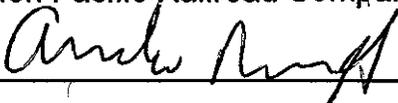
- (a) Width of surface or highway.
- (b) Highway intersections (including private driveways to be so indicated) and location of established highway signs or signals within 100 feet of crossing.
- (c) Location of tracks, switches, and other railroad facilities such as block signals, etc. within limits of track circuits, present and/or proposed.
- (d) Where automatic protection is proposed, show proposed location of signals (side lights, cantilevers, etc., if any).
- (e) Show the length of each operating track section within the control limits of the crossing protection and its function.

ADDITIONAL INFORMATION

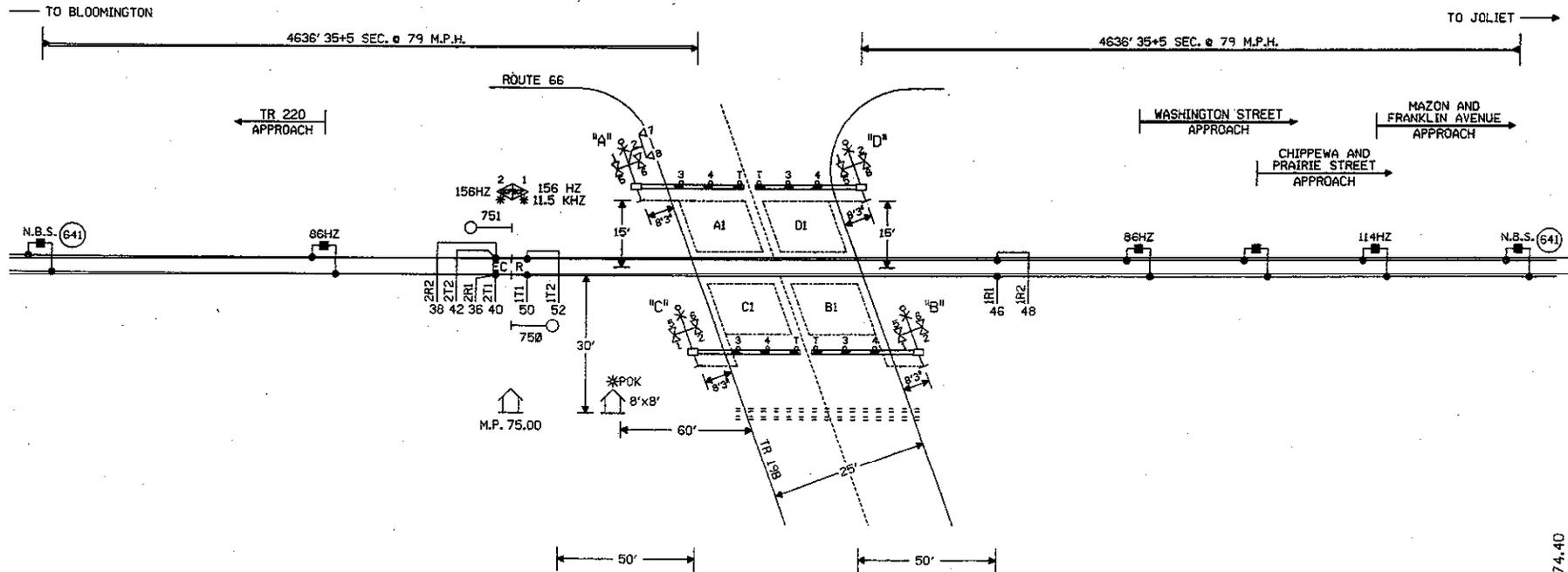
VERIFICATION

I, Andrew T. Murphy, first being duly sworn upon oath depose and say that I am **Engineering Inspector-Industry & Public Projects of Union Pacific Railroad Company**, a Delaware Corporation; that I have read the above and foregoing petition by me subscribed and know the contents thereof; that said comments are true in substance and in fact, except as to those matters stated upon information and belief, and as to those, I believe same to be true.

Union Pacific Railroad Company

By 

Andrew T. Murphy
UPRR Industry & Public Projects



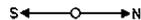
NOTES:

- ⊗ = TWISTED WIRES INSULATED 1 TWIST PER FT. ALL TRACK WIRES 2C, #6
- TRANSMITTER AND RECEIVER LEADS TO BE SEPARATED BY AT LEAST 12" IN TRENCH. LENGTHS SHOULD NOT EXCEED MANUFACTURERS' RECOMMENDATION.
- TOP OF FOUNDATION TO BE AT SAME ELEVATION AS THE SURFACE OF THE TRAVELED WAY & NO MORE THAN 4" ABOVE THE SURFACE OF THE GROUND.
- ALL BUNGALOW WIRING TO BE #16 AWG FLEX UNLESS OTHERWISE SPECIFIED EXCEPT ALL GROUND WIRE TO BE #6 AWG FLEX OR LARGER.
- ALL WIRING IN GATE MECHANISM TO BE #10 AWG FLEX*. REFER TO UP STANDARD DWG FOR BUNGALOW GROUNDING.
- DO NOT USE 7 CELLS OF B12 BATTERY UNLESS REQUIRED TO MAINTAIN MINIMUM LAMP VOLTAGE.
- ALL LIGHTS TO BE 12" ROUNDELS.
- ===== 4" X 4" ADY CONDUIT
- LIGHTS: LED LIGHTS
- GATE A,C: 22'
- GATE B,D: 22'
- CRTU MICROBURST
- * = WIRE GCP AS A SEMI-BIDIRECTIONAL UNIT

EXIT GATE MANAGEMENT SYSTEM (EGMS) LOOP LOCATION:

- 1.) 12" FROM CONCRETE CROSSING PANEL. MAY VARY FROM 6" TO 12" DEPENDING ON PAVEMENT QUALITY.
- 2.) 2' FROM CROSSING CENTERLINE.
- 3.) 3.5' FROM GATE ARM.
- 4.) 2' FROM THE EDGE OF THE TRAVELED WAY. MAY BE INCREASED UP TO A MAXIMUM OF 5' WHERE AN IMPROVED SHOULDER OR OTHER EXISTS.
- 5.) MAXIMUM LOOP WIDTH NOT TO EXCEED 12' AND MINIMUM WIDTH NOT TO BE LESS THAN 3'.

----- = EGMS LOOP

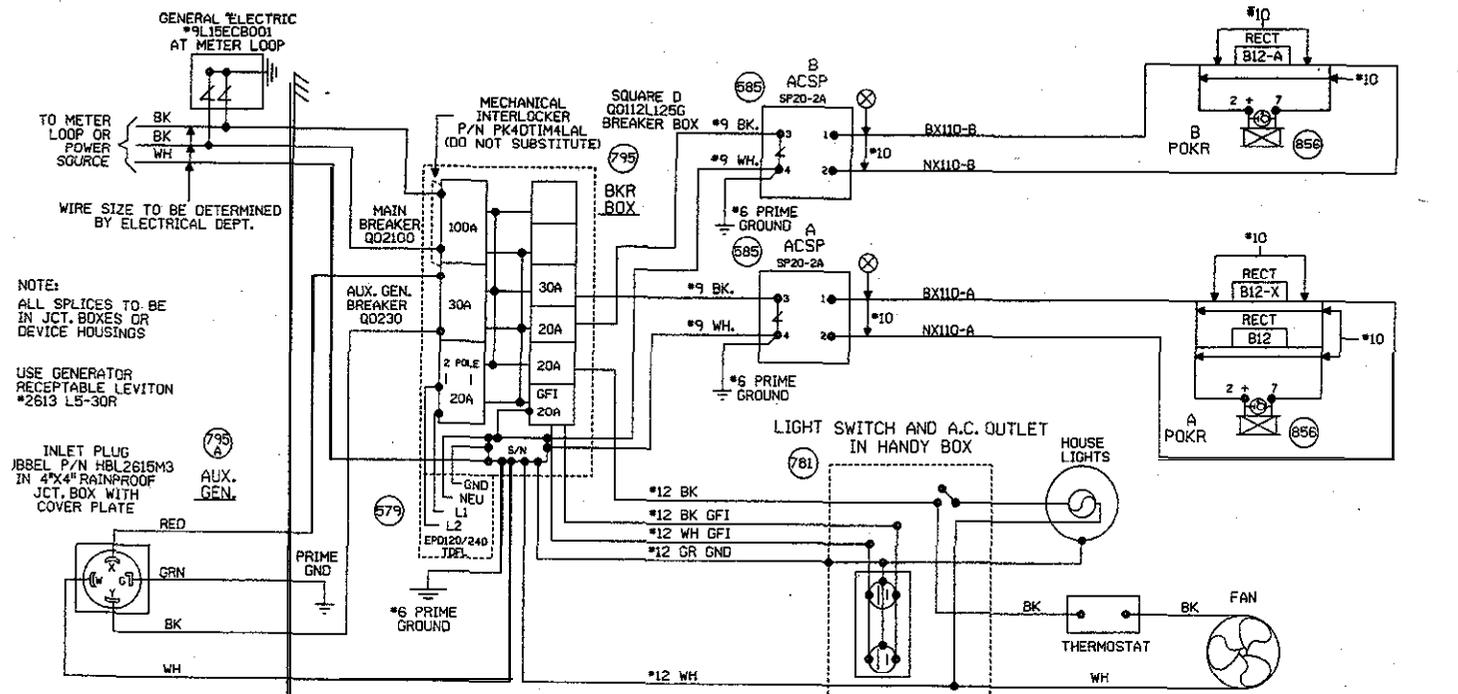


CONNECTS TO DRAWING 74.40

NEW SHEET

DWIGHT, ILLINOIS
TR 198
M.P. 74.93
JOLIET SUBDIVISION
D.O.T.#290 729C
PROJ.*

				5-1-01	MODIFICATION LEVEL	UNION PACIFIC SAFETY SIGNAL DESIGN	DES: WTT,IND.	UNION PACIFIC RAILROAD JOLIET, ILLINOIS TO BLOOMINGTON, ILLINOIS C.T.C. CIRCUITS	DATE 5-1-01
				UPGRADE CROSSING PROTECTION FOR THE HIGH SPEED RAIL PROJ. FROM MAZONIA TO SPRINGFIELD. JJJF AFE 0044386 WTT/JNM	DA		DIG: WTT,IND.		SHEET 1
				LAST LEVEL MOD. THIS TYP.	CZ		CHK: J.J.F.		DWG 74.93
				LAST LEVEL BY DESIGNER.	DD		A.F.E. 0044386		RTE-CSL
				CHANGED FROM TYP. Y/N	Y		IO: CSL7493.IX	OFFICE OF CHIEF ENGR	OMAHA NEBR.



NOTE:
ALL SPLICES TO BE
IN JCT. BOXES OR
DEVICE HOUSINGS

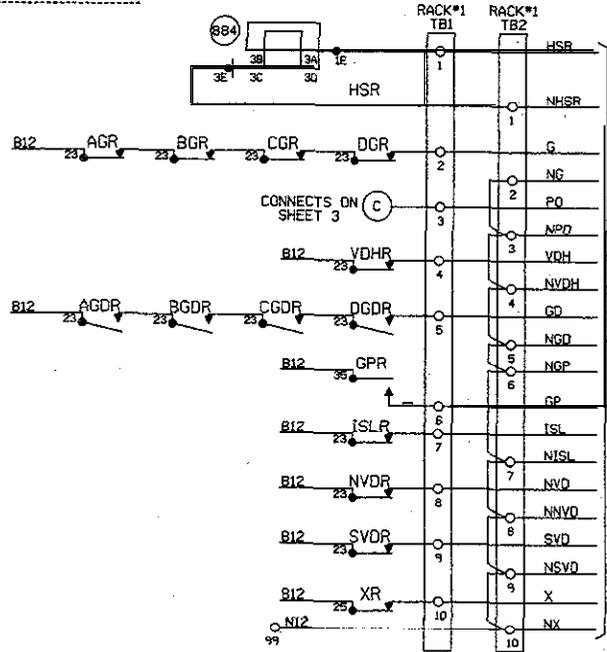
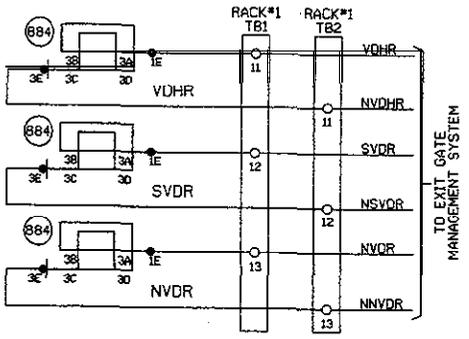
USE GENERATOR
RECEPTABLE LEVITON
#2613 L5-30R

INLET PLUG
JBBEL P/N HBL2615M3
IN 4"x4" RAINPROOF
JCT. BOX WITH
COVER PLATE

GENERAL ELECTRIC
#9L15ECB001
AT METER LOOP

TO METER
LOOP OR
POWER
SOURCE

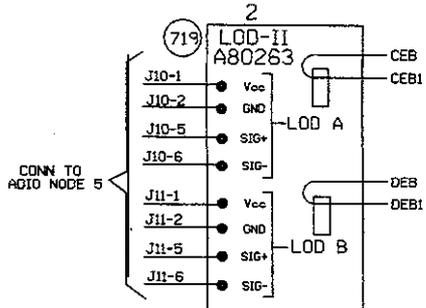
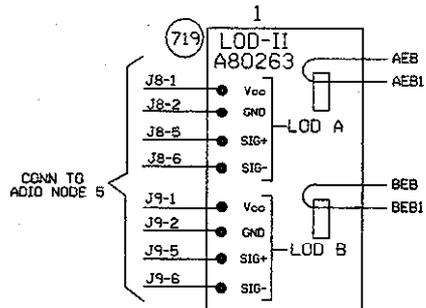
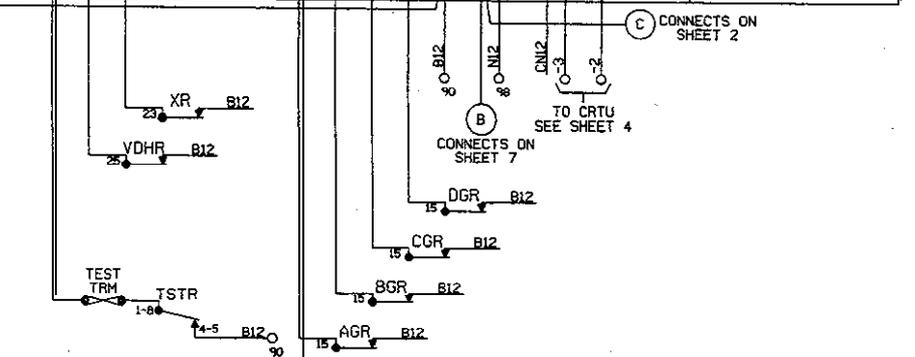
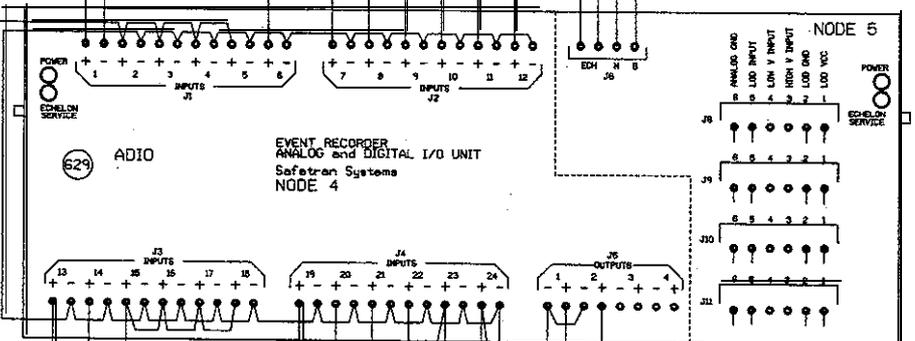
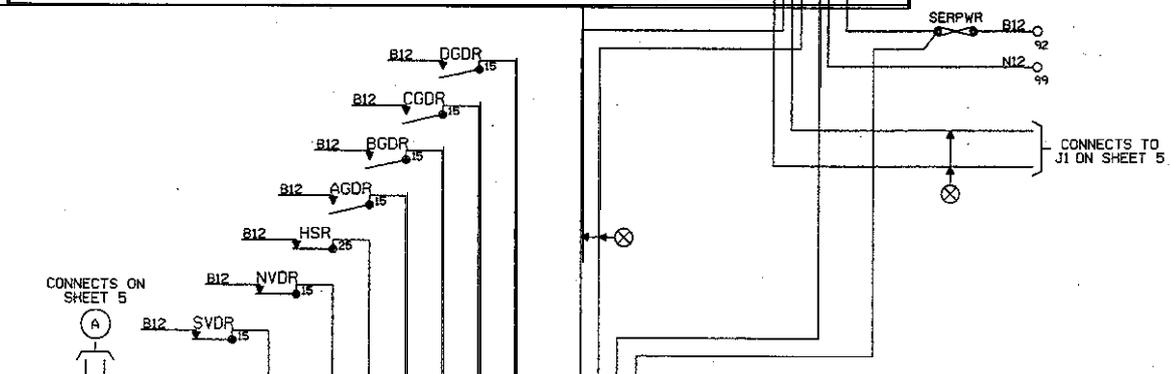
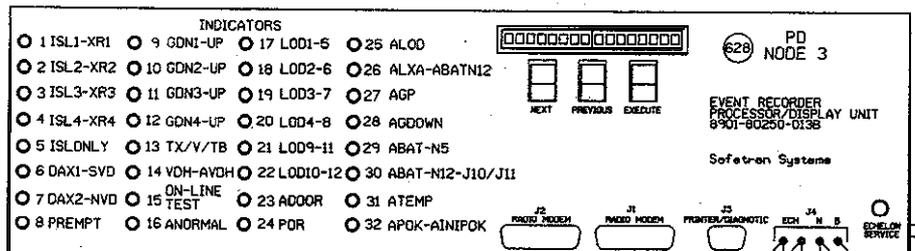
WIRE SIZE TO BE DETERMINED
BY ELECTRICAL DEPT.



NEW SHEET

DWIGHT, ILLINOIS
TR 198
M.P. 74.93
JOLIET SUBDIVISION
D.O.T.#290 729C
PROJ.#

5-1-01 UPGRADE CROSSING PROTECTION FOR THE HIGH SPEED RAIL PROJ. FROM MAZONTA TO SPRINGFIELD, ILL. AFE 0044386, J.J.F. WITZ/T.M.M.	MODIFICATION LEVEL D.A. LAST LEVEL CH'G. Da	UNION PACIFIC SIGNAL DESIGN	DESG. WITZ/T.M.M. DIG. WITZ/T.M.M.	UNION PACIFIC RAILROAD JOLIET, ILLINOIS TO BLOOMINGTON, ILLINOIS C.T.C. CIRCUITS	DATE 5-1-01
	LAST LEVEL MOD. THIS TYP. CZ		CHK. J.J.F.		SHEET 2
	LAST LEVEL BY DESIGNER. DD		A.F.E. 0044386		DWG 74.93
	CHANGED FROM TYP. 2 Y/N Y		10-0017490-2X		RTE-CSL



- NODE #4**
DIGITAL INPUTS:
1.ISL1
2.ISL2
3.ISL3
4.ISL4
5.ISONLY
6.DAX1-SVD
7.DAX2-NVD
8.PREMPT
9.GDN1
10.GDN2
11.GDN3
12.GDN4
13.TX/V/TB
14.VDH
15.XR1
16.XR2
17.XR3
18.XR4
19.GP1
20.GP2
21.GP3
22.GP4
23.POK/DO
24.POR
- NODE #4**
DIGITAL OUTPUTS:
J5-1 ALARM
J5-2 ALARM2
J5-3 HEALTH
J5-4 DOORBZ
- NODE #5**
ANALOG INPUTS:
J8-LOD1
J9-LOD2
J10-LOD3
J11-LOD4
NE-BAITS
- GCP NODES:**
6 GCP NORMAL
16 GCP STANDBY

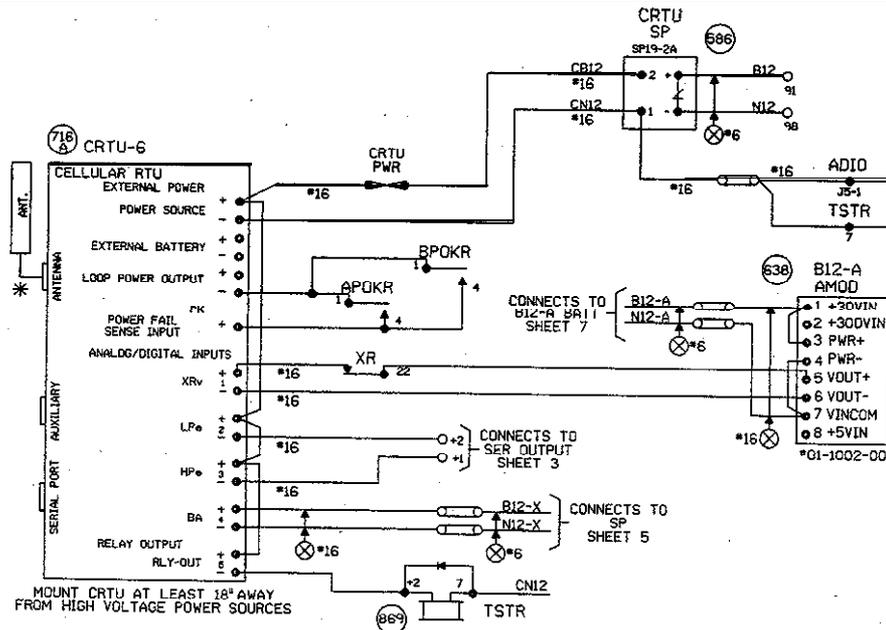
- SER NOTES:
1. JUMPER ALL UNUSED DIGITAL "*" INPUTS TO THE B TERMINAL
 2. JUMPER ALL UNUSED DIGITAL "*" INPUTS TO THE N TERMINAL
 3. DO NOT JUMPER INPUTS WITH DIFFERENT VOLTAGE REFERENCES TOGETHER.
 4. WHEN L.E.D. #15 IS LIT THE SER IS IN TEST MODE.

⊗ = TWISTED WIRES.

NEW SHEET

DWIGHT, ILLINOIS
TR 19B
M.P. 74.93
JOLIET SUBDIVISION
D.O.T.#298 729C
PROJ.#

5-1-01 UPGRADE CROSSING PROTECTION FOR THE HIGH SPEED RAIL PROJ. FROM MAZONIA TO SPRINGFIELD. J.F.F. APE 0044386 J.J.F. WIT/JNM	MODIFICATION LEVEL	UNION PACIFIC	DES. - WTT/ND	UNION PACIFIC RAILROAD JOLIET, ILLINOIS TO BLOOMINGTON, ILLINOIS C.T.C. CIRCUITS	DATE 5-1-01
	1.0A LAST LEVEL CH'G.	DD	SIG. - WTT/ND		SHEET 3
	LAST LEVEL - HGD, TRIC TYP.	62	SMG - J.F.F.		DWG 74.93
	LAST LEVEL BY DESIGNER.	DD	A.F.E. 0044386		RTE-CSL
CHANGED FROM TYP. Y/N	Y	SAFETY SIGNAL DESIGN	ID= CSL7493.3X	OFFICE OF CHIEF ENGR	OMAHA NEBR.



NOTES:

- ALL DIODES 1N5060 OR 1N4004 UNLESS OTHERWISE NOTED.
- *MOUNT ANTENNA ON TOP OF HOUSE.
- ALL WIRES #18 UNLESS OTHERWISE NOTED.
- ALL UNUSED 'NC' INPUTS MUST BE TIED HIGH TO BATTERY
- ALL UNUSED ANALOG INPUTS MUST BE TIED HIGH TO BATTERY
- ALL UNUSED 'NO' INPUTS MUST BE DISCONNECTED

CRTU FRONT PANEL DISPLAYCHART INDICATES NORMAL STATE

- DIGITAL INPUT HIGH, OR POWER FAIL INPUT CLOSED
- DIGITAL INPUT LOW, OR POWER FAIL INPUT OPEN

NORMAL STATE FOR ANALOG CHANNELS IS EQUAL TO THE STORED NOMINAL VOLTAGE +120% OR -81% LATCH IS SET BECAUSE CRTU DETECTED AN ALARM CONDITION

'RUN MODE' 'RUN MODE-SILENT'
 CRTU RADIO IS DISABLED.
 REPROGRAM CRTU WITH LAPTOP.

MEASURE NOMINAL VOLTAGE ON ANALOG INPUT MODULE BETWEEN 1+30VIN AND 7 VINCOM
 ANALOG AND AC INPUT MODULES MUST BE MOUNTED LESS THAN 12" FROM THE CRTU

ANALOG MODULES CONVERT DC VOLTAGE TO A SQUARE WAVE. A WORKING ANALOG MODULE WILL HAVE 4.5VDC TO 8.0VDC BETWEEN 5VOUT+ AND 6VOUT-. WHERE, 0VOUTS = OHZ OUT, 30VOUTS = 10KHZ OUT, AND 15VOUTS = 5KHZ OUT
 MAKE SURE CRTU IS PROGRAMMED WITH CALIBRATION SETTINGS

UNIT INSTALLATION AND SETUP

R.R. SITE ID WHERE; SSSS = 4 CHARACTER SUBDIVISION ID. FILL WITH PRECEDING ZEROS AS REQUIRED. THE MAIN TRACK SUBDIVISION ID* IS IN THE CURRENT TIMETABLE. INDUSTRIAL LEADS, LEASED, AND LEAD TRACKS LISTED WITHIN THE SUBDIVISION MAY HAVE THEIR OWN UNIQUE SUBDIVISION ID*. DO NOT AUTOMATICALLY USE THE MAIN TRACK SUBDIVISION ID* FOR THESE OTHER TRACKS. ALWAYS DOUBLE CHECK WITH THE MOST CURRENT PRINTED COPY OF THE TIMETABLE. LLLLLLLL = 8 CHARACTERS USE DOT* AT CROSSINGS, AND USE HP* AT WAYSIDE AND HBD SITES.
 FILL WITH PRECEDING DASHES AS REQUIRED.
 AA = 2 CHARACTER STATE NAME FOR CROSSINGS.
 AA = 'WD' FOR WAYSIDE LOCATIONS, AA = 'HS' FOR HBD SITES. MUST BE 14 CHARACTERS LONG, NO SPACES ALLOWED.

SITE IDENTIFIER: 0025-290729CIL

SIGNAL STRENGTH	
CARRIER ID	
FIRMWARE VERSION	2.3.06
SERIAL NUMBER	
CONFIGURATION NET	MICROBURST
SIGNAL STATUS	
SCADNET STATUS	
SILENCE INTERVAL	50 MINUTES
HEALTHCHECK INTERVAL	EVERY 2 DAYS
ALARM DEFER DELAY	240 MINUTES (4 HOURS)
OPERATION TO RESUME: RUN	
CALIBRATION CONSTANT	
CH1	
CH2	
CH3	
CH4	
POWER SOURCE	

FIELD PROVIDES: SAMPLED NOMINAL VOLTAGES, SCADNET STATUS CALIBRATION CONSTANTS, SERIAL NUMBER, AND SIGNAL STATUS.

CHANNEL SETUP - STANDARD CONFIGURATION 3:XRv,LPe,HPe,BA

CHANNEL	SENSE (NO/NC)	NAME FUNCTION	RECOGNITION DELAY SECONDS		RETURN TO NORMAL	REPORTING MODE	ALARM LINKED CHANNEL	ALARM LINKED CRITERIA	EVENT LOGGING ENABLED OPTIONS
			ACTIVE	NORMAL					
POWER FAIL (CH5)	POWER FAIL DETECT NO	PF-IN-PK AC POWER FAIL	7:200 ALARM	300 NORMAL	ENABLED	ALERT	DISABLED	N/A	
CH1 STORED NOMINAL VOLTAGE	ANALOG INPUT N/A	CH1-XR/V XR DOWN TO LONG BATTERY LOW	1800 ALARM	300 NORMAL	ENABLED	ALERT W/UPDATE	DISABLED	N/A	ANALOG VALUE SENT
CH2	DIGITAL INPUT NO	CH2-LPe LIGHT OUT GATE NOT UP/DOWN	120 ALARM	10 NORMAL	ENABLED	ALERT	DISABLED	N/A	
CH3	DIGITAL INPUT NO	CH3-HPe VEHICLE DETECTOR HEALTH FAILURE	120 ALARM	10 NORMAL	ENABLED	ALERT	DISABLED	N/A	
CH4 STORED NOMINAL VOLTAGE	ANALOG INPUT N/A	CH4-BA/V BATTERY MONITOR BATTERY LOW	300 ALARM	300 NORMAL	DISABLED	ALERT W/UPDATE	DISABLED	N/A	DIGITAL EVENTS
POWER SOURCE (CH6)	ANALOG INPUT N/A	PS-BA/V BATTERY MONITOR BATTERY LOW	300 ALARM	300 NORMAL	DISABLED	ALERT W/UPDATE	DISABLED	N/A	PF-IN-PK CH2-LPe CH3-HPe

ANALOG CHANNEL	USEFUL RANGE VOLTS	DISPLAYED RANGE VOLTS		RELATIVE ALARM POINT		ABSOLUTE ALARM POINT		AUTOMATIC UPDATE INTERVAL	STORED NOMINAL VOLTAGE	SAMPLED NOMINAL VOLTAGE
		LOW	HIGH	LOW	HIGH	LOW	HIGH			
CH1	0.0	30.00	0.0	30.00	81%	120%	10.0	28.0	10 DAYS	12.69
CH2										
CH3										
CH4	0.0	30.00	0.0	30.00	81%	120%	10.0	28.0	10 DAYS	12.69
POWER SOURCE	0.0	30.00	0.0	30.00	81%	120%	10.0	28.0	10 DAYS	12.69

RELAY OUTPUT	NAME RLY-OUT	ACTIVE SET-UP-OPEN	NORMAL CLR-ON-CLOSE	PULSE DURATION	15 SECONDS	CHARTS REV'D 3-2-01

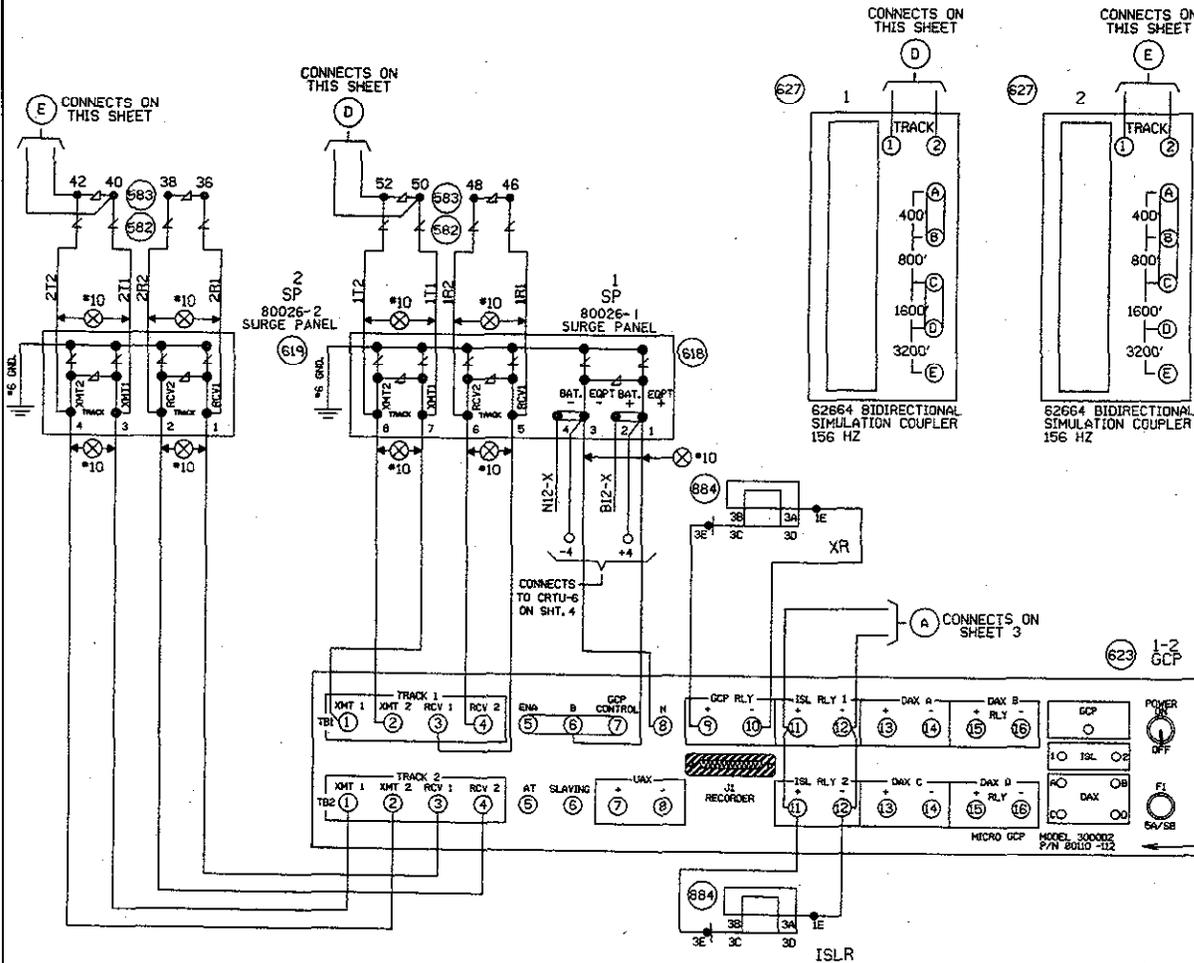
MAINTENANCE OPERATIONS

- TO START OR ABORT ANY PROCEDURE
 1. PRESS THE 'CANCEL' BUTTON FIRST
- WHEN RESPONDING TO A CALL, PUT THE CRTU IN THE 'SILENCE ALARMS' MODE
- PRESS 'SELECT' AND THEN '+ ARROW' BUTTON UNTIL DISPLAY: ACTION?
 - PRESS THE 'SELECT' BUTTON TWICE
 - CORRECT PROBLEM AND SIMULATE NORMAL TRAIN MOVEMENT THROUGH THE LOCATION
 - EXAMINE EACH CHANNEL ON THE CRTU
 - PRESS THE '+ ARROW' BUTTON
 - VERIFY ALL CHANNELS INDICATE A NORMAL STATE
- NORMAL STATES ARE ON THE CHANNEL SETUP CHART
- CLEAR TIMERS, LATCHES AND SEND ALL NORMAL
- DO STEPS #1 - #5 ABOVE, AND PRESS 'CANCEL'
 - PRESS 'SELECT' AND THEN '- ARROW' BUTTON UNTIL DISPLAY: ACTION?
 - PRESS 'SELECT' AGAIN TO RESET TIMERS, AND IF DISPLAY: SERVICE MODE ALL NORMAL
 - PRESS 'SELECT' AGAIN TO CLEAR LATCHES, AND SEND ALL NORMAL, SKIP STEPS #5-#6.
 - HOWEVER, IF ALARMS ARE NOT CLEARED, DISPLAY: SERVICE MODE ALARMS PENDING/PRESENT
 - PRESS 'CANCEL', CORRECT PROBLEM AND REPEAT STEPS #2 THRU #5 UNTIL ALL NORMAL SENT.
- TO CANCEL THE 'SILENCE ALARMS' MODE
- PRESS 'SELECT' AND THEN '+ ARROW' BUTTON UNTIL DISPLAY: ACTION?
 - PRESS THE 'SELECT' BUTTON AGAIN
 - EXAMINE & SET BATTERY VOLTAGE NOMINAL VALUE
- PRESS THE '+ ARROW' OR '- ARROW' BUTTON UNTIL THE DESIRED CHANNEL IS DISPLAYED. DISPLAY: PS-Ba
 - VERIFY THE DISPLAYED READING WITH A DIGITAL VOLTMETER
 - PRESS THE 'SELECT' BUTTON, AND THE CRTU DISPLAY WILL SWITCH BETWEEN CURRENT/SAVED NOMINAL VOLTAGE VALUE
 - DISPLAY: NOMINAL ON *6* (CURRENT) 13.83 SAVED NOMINAL 6 (STORED) 12.69
 - PRESS THE 'SELECT' BUTTON AND THE CURRENT OR NOMINAL ON VALUE WILL BE SAMPLED AND STORED AS THE 'SAVED NOMINAL' VALUE
 - VERIFY THE 'NOMINAL ON' AND 'SAVED NOMINAL' VALUES ARE EQUIVALENT, REPEAT STEPS #1 THRU #3 & PRESS THE 'CANCEL' BUTTON

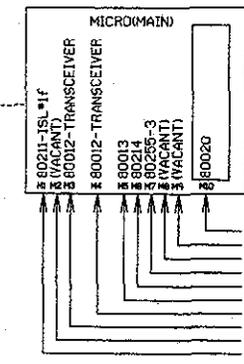
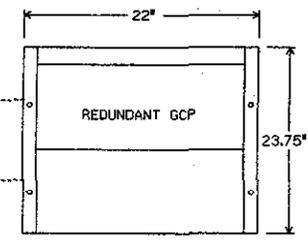
NEW SHEET

DWIGHT, ILLINOIS TR 198 M.P. 74.93 JOLIET SUBDIVISION D.O.T.#290 729C PROJ.*

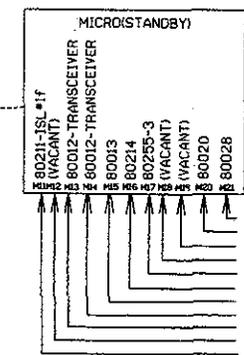
5-1-01 UPGRADE CROSSING PROTECTION FOR THE HIGH SPEED RAIL PROJ. FROM MAZONIA TO SPRINGFIELD. AFE 0044386 J.J.F WITT/J.N.M.	MODIFICATION LEVEL D.A. LAST LEVEL CHK'D. DA LAST LEVEL MOD. THIS TYP. CZ LAST LEVEL BY DESIGNER. DD CHANGED FROM TYP.? Y/N Y	UNION PACIFIC SIGNAL DESIGN	DES: WITT, J.N.D. DGH: WITT, J.N.D. CHK: J.J.F. A.F.E. 0044386	UNION PACIFIC RAILROAD JOLIET, ILLINOIS TO BLOOMINGTON, ILLINOIS C.T.C. CIRCUITS	DATE 5-1-01 SHEET 4 DWG 74-93 RTE-CSL
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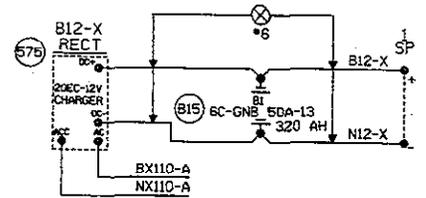
NOTE:
THIS DRAWING WAS DESIGNED FOR A SPECIFIC APPLICATION. IF A MODIFICATION OR REDESIGN OF THIS DRAWING CAUSES ANY MODULES TO CHANGE, THE UNIT'S PART NUMBER MUST BE CHANGED TO CORRESPOND ACCORDINGLY.



- CONTROL INTERFACE ASSEMBLY
- DAX #2 MODULE
- DAX #1 MODULE
- DATA RECORDER MODULE
- PROCESSOR MODULE
- RELAY DRIVE MODULE
- TRANSCIVER #2 MODULE
- TRANSCIVER #1 MODULE
- ISLAND #2 MODULE
- ISLAND #1 MODULE



- TRANSFER MODULE
- CONTROL INTERFACE
- DAX #2 MODULE
- DAX #1 MODULE
- DATA RECORDER MODULE
- PROCESSOR MODULE
- RELAY DRIVE MODULE
- TRANSCIVER #2 MODULE
- TRANSCIVER #1 MODULE
- ISLAND #2 MODULE
- ISLAND #1 MODULE



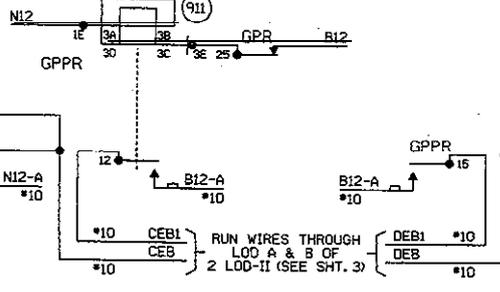
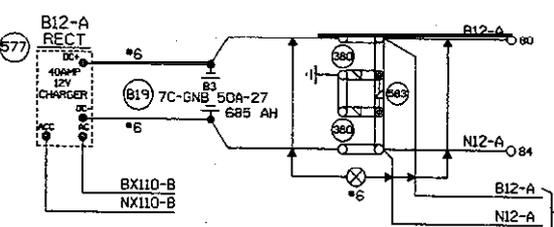
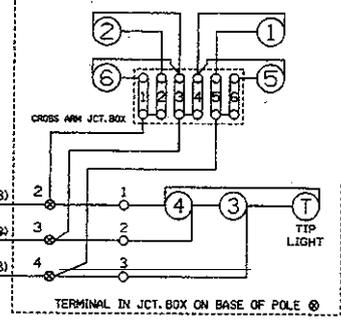
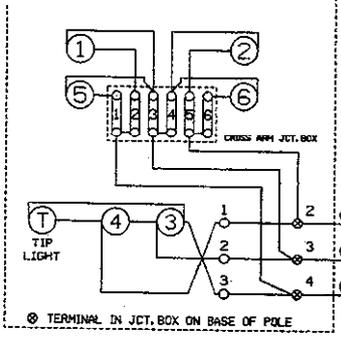
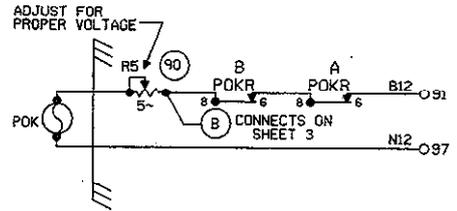
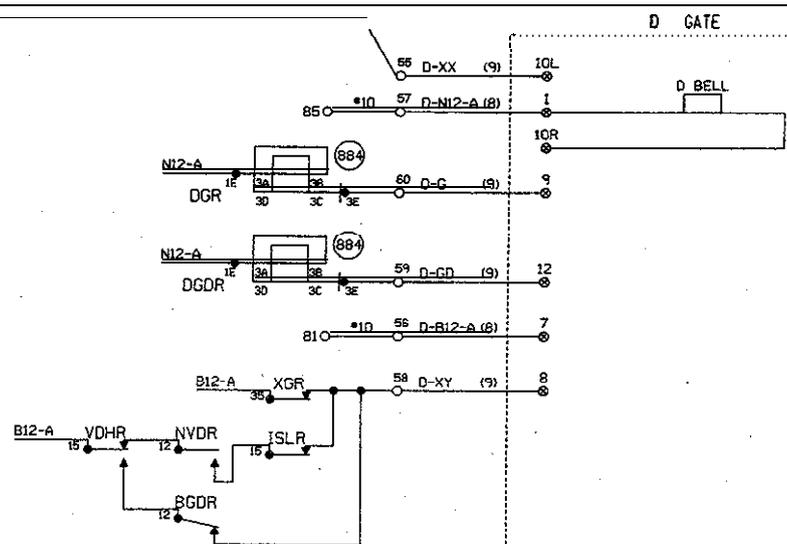
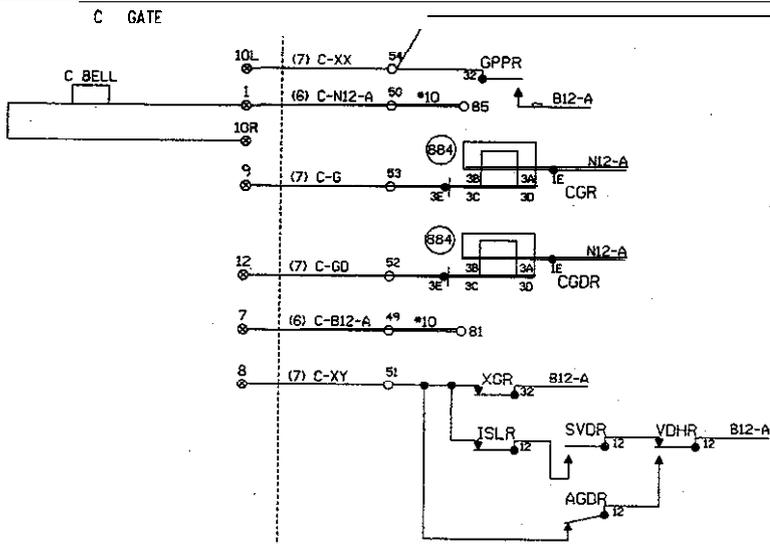
NOTE:
EACH TRANSMITTER TO RAIL WIRE FROM TBI-1 AND TBI-2 MUST NOT EXCEED THE MAXIMUM LENGTH SPECIFIED IN THE TABLE SHOWN BELOW. THE RECEIVER WIRE LENGTH IS NOT CRITICAL. DOES NOT APPLY TO 6 TRACK WIRE APPLICATION.

MF FREQUENCY (HZ)	MAXIMUM TRANSMIT WIRE LENGTH (FEET)
86	100
114	125
156	150
211	200
285-370	250

NEW SHEET

DWIGHT, ILLINOIS
TR 19B
M.P. 74.93
JOLIET SUBDIVISION
D.O.T. #290 729C
PROJ. #

5-1-01 IMPROVE CROSSING PROTECTION FOR THE HIGH SPEED RAIL PROJ. FROM MAZONIA TO SPRINGFIELD. J.J.F. WFE 0044386 J.J.F. WTT/JNH	MODIFICATION LEVEL		DES: WTT,IND.	UNION PACIFIC RAILROAD JOLIET, ILLINOIS TO BLOOMINGTON, ILLINOIS C.T.C. CIRCUITS	DATE 5-1-01	
	LAST LEVEL CHK'D.		DR		DWG: WTT,IND.	SHEET 5
	FIRST LEVEL MOD. THIS TYP.		CZ		CHK: J.J.F.	DWG 74.93
	FIRST LEVEL BY DESIGNER.		DU		P.F.E. 0044386	RTE CSL
CHANGED FROM TYP. 1 1/2"	Y	SIGNAL DESIGN	ID: CSL7493.5X	OFFICE OF CHIEF ENGR.	OMAHA NEBR.	



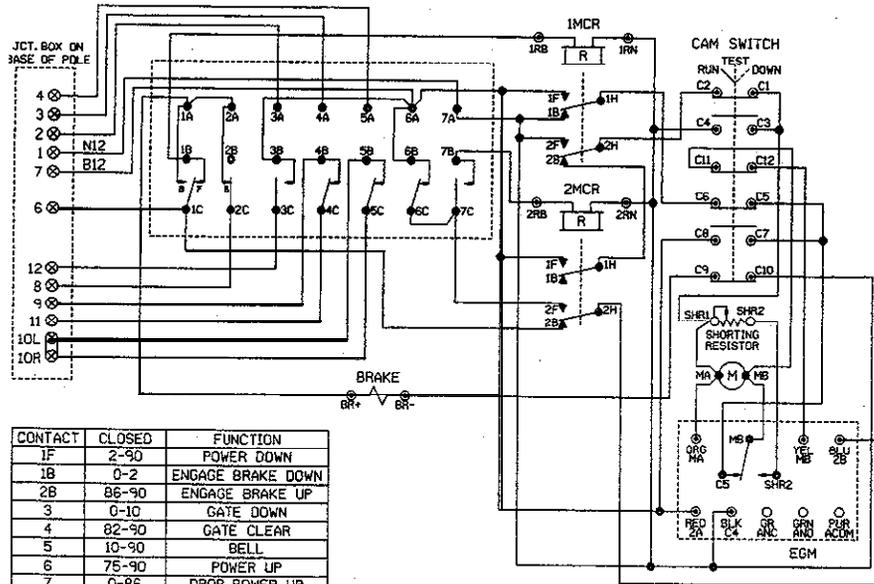
NEW SHEET

DWIGHT, ILLINOIS
 TR 198
 M.P. 74.93
 JOLIET SUBDIVISION
 D.O.T. #290 729C
 PROJ.*

CABLE NO. 6 5C, NO. 6 B.T.
 CABLE NO. 7 7C, NO. 14 B.T.
 CABLE NO. 8 5C, NO. 6 B.T.
 CABLE NO. 9 7C, NO. 14 B.T.

5-1-01 UPGRADE CROSSING PROTECTION FOR THE HIGH SPEED RAIL PROJ. FROM YAZONIA TO SPRINGFIELD. J.J.F. AFE 0044385 WJT-F/JMM	MODIFICATION LEVEL	UNION PACIFIC	DES. WFT:INE	UNION PACIFIC RAILROAD JOLIET, ILLINOIS TO BLOOMINGTON, ILLINOIS C.T.C. CIRCUITS	DATE 5-1-01
	BY LAST LEVEL CHK'D	SA	CHK. WFT:INE		SHEET 7
	LAST LEVEL MOD THIS TYP	CZ	ENGR. J.J.F.		DWG 74.93
	LAST LEVEL BY DESIGNER	DD	N.C.S. 0044386		OFFICE OF CHIEF ENGR.
	CHANGED FROM TYP. 2 Y/N	Y	SIGNAL DESIGN		OMAHA NEBR.

WCH 3597 EXIT GATE

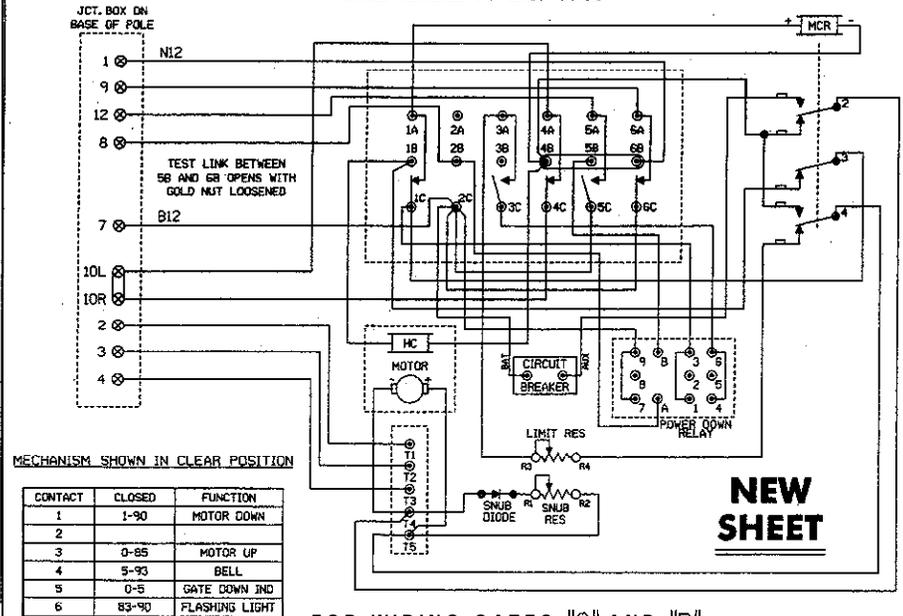


CONTACT	CLOSED	FUNCTION
1F	2-90	POWER DOWN
1B	0-2	ENGAGE BRAKE DOWN
2B	86-90	ENGAGE BRAKE UP
3	0-10	GATE DOWN
4	82-90	GATE CLEAR
5	10-90	BELL
6	75-90	POWER UP
7	0-86	DROP POWER UP

MECHANISM SHOWN IN CLEAR POSITION

FOR WIRING GATES "C" AND "D"

US&S MODEL 95 EXIT GATE



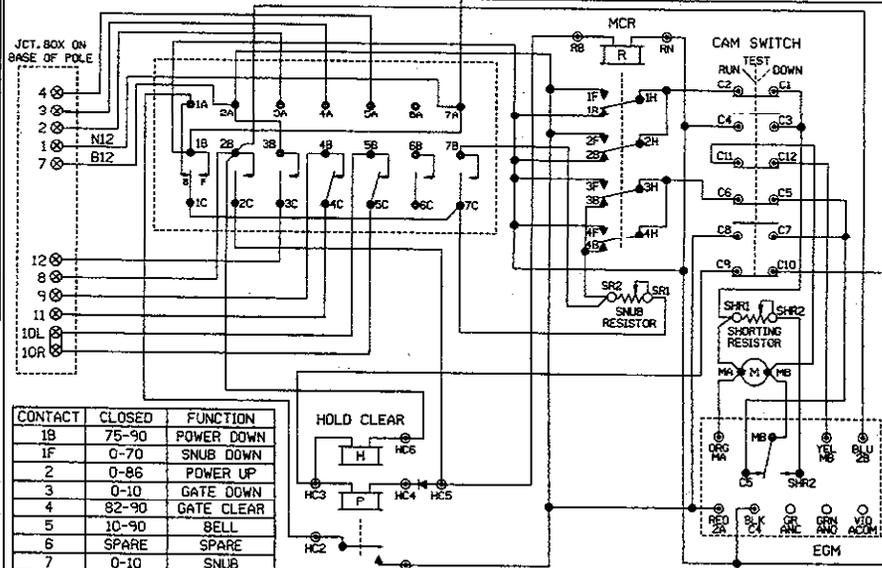
CONTACT	CLOSED	FUNCTION
1	1-90	MOTOR DOWN
2		
3	0-86	MOTOR UP
4	5-93	BELL
5	0-5	GATE DOWN IND
6	83-90	FLASHING LIGHT

MECHANISM SHOWN IN CLEAR POSITION

FOR WIRING GATES "C" AND "D"

NEW SHEET

WCH 3597 ENTRANCE GATE

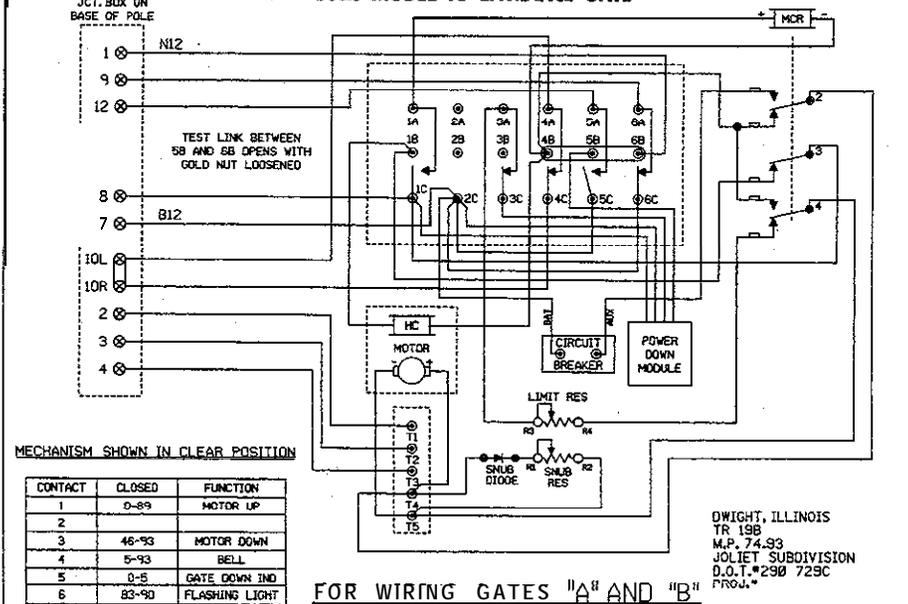


CONTACT	CLOSED	FUNCTION
1B	75-90	POWER DOWN
1F	0-70	SNUB DOWN
2	0-86	POWER UP
3	0-10	GATE DOWN
4	82-90	GATE CLEAR
5	10-90	BELL
6	SPARE	
7	0-10	SNUB

MECHANISM SHOWN IN CLEAR POSITION

FOR WIRING GATES "A" AND "B"

US&S MODEL 95 ENTRANCE GATE



CONTACT	CLOSED	FUNCTION
1	0-89	MOTOR UP
2		
3	46-93	MOTOR DOWN
4	5-93	BELL
5	0-5	GATE DOWN IND
6	83-90	FLASHING LIGHT

MECHANISM SHOWN IN CLEAR POSITION

FOR WIRING GATES "A" AND "B"

DWIGHT, ILLINOIS
TR 19B
M.P. 74.93
JOLIET SUBDIVISION
D.O.T.#290 729C
PROJ.#

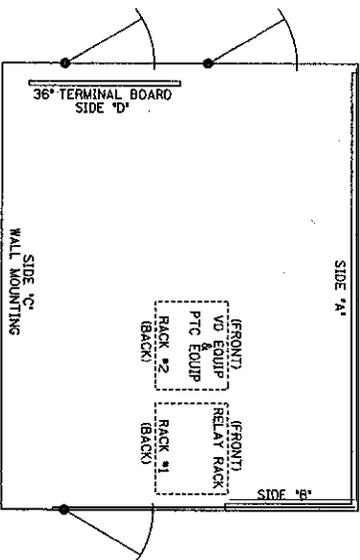
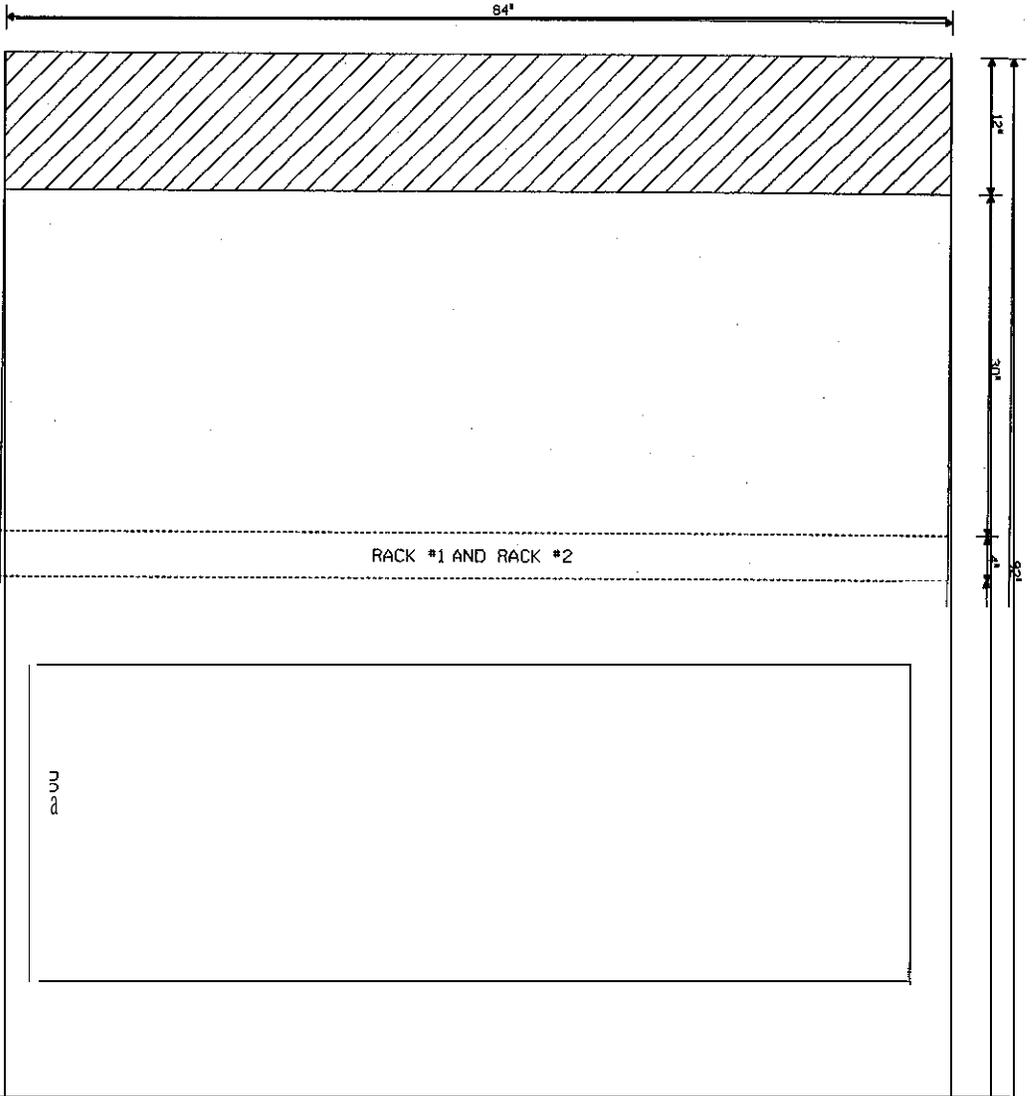
5-1-01
UPGRADE CROSSING
PROTECTION FOR THE
HIGH SPEED RAIL
PROJ. FROM MAZONIA
TO SPRINGFIELD J.F.
AFE 0044386 J.J.F.
WITT/JNM

MODIFICATION LEVEL		UNION PACIFIC
Q.A. LAST LEVEL CHK'D.	DA	
LAST LEVEL MOD. THIS TYP.	C2	
LAST LEVEL BY DESIGNER.	DD	
CHANGED FROM TYP.? Y/N	Y	

DES: WITT,IND.
DIG: WITT,IND.
CHK: J.J.F.
A.F.E. 0044386
ID: CSL7493.8X

UNION PACIFIC RAILROAD
JOLIET, ILLINOIS TO
BLOOMINGTON, ILLINOIS
C.T.C. CIRCUITS

DATE 5-1-01
SHEET 8
DWG 74.93
OFFICE OF CHIEF ENGR
OMAHA NEBR. RTE-CSL

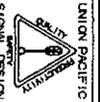


PLAN VIEW
8'x8' HOUSE
-NO SCALE-



SCALE: 1/8" INCHES = 1 FOOT

5-1-01	MODIFICATION LEVEL
DESIGN CROSSING	DA
HIGH SPEED RAIL	CZ
PROD. FROM WAZDUNA	DD
REVISIONS	Y
WITTMANN	



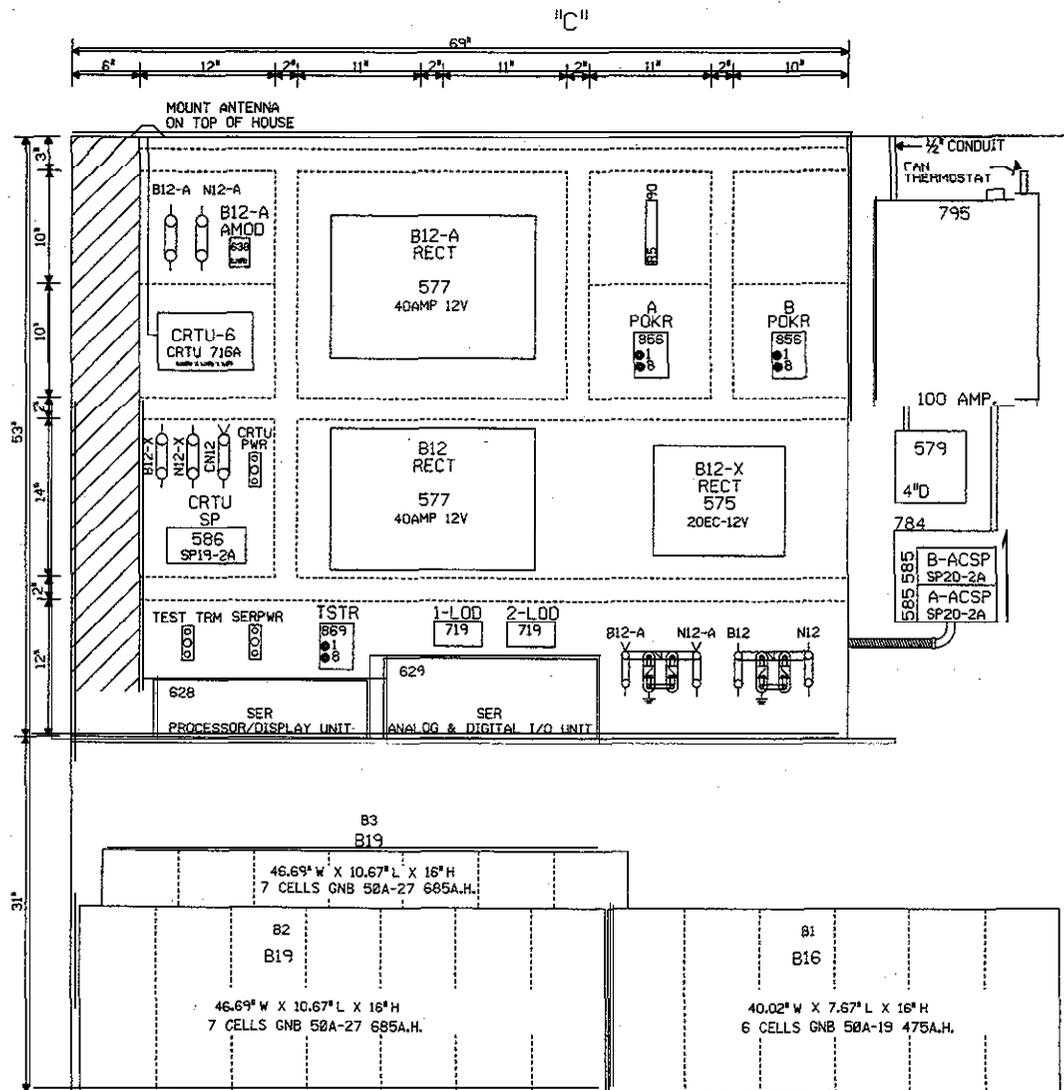
DES. WITTMANN	DES. WITTMANN
CHK. JJJF	CHK. JJJF
DATE: 004/18/00	DATE: 004/18/00
ID: CSJ749310X	ID: CSJ749310X

UNION PACIFIC RAILROAD
JOLIET, ILLINOIS TO
BLOOMINGTON, ILLINOIS
C.T.C. CIRCUITS

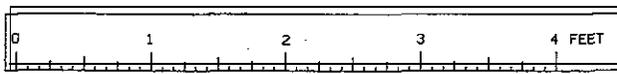
DATE: 5-1-01	DATE: 5-1-01
SHEET: 10	SHEET: 10
DWG: 74.93	DWG: 74.93
RTE-CSL	RTE-CSL

DWIGHT, ILLINOIS
TR 138'
M.P. 74.93
JOLIET SUBDIVISION
D.R.T. 290 729C
PROD. *

NEW SHEET



NEW SHEET

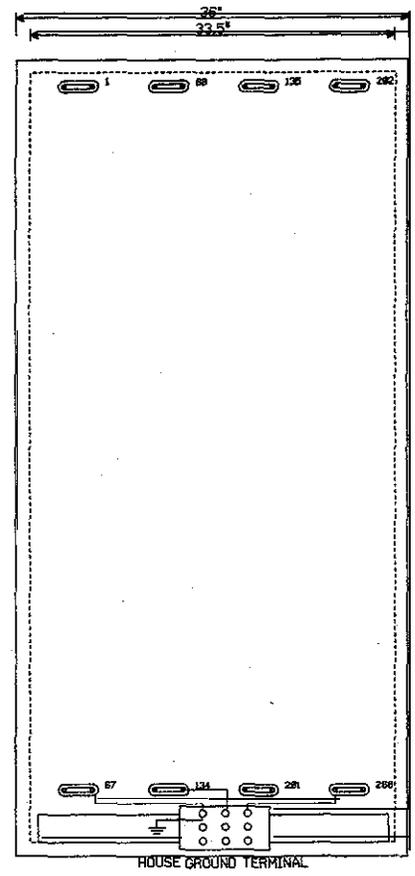


SCALE: 1.5 INCHES = 1 FOOT

DWIGHT, ILLINOIS
TR 198
M.P. 74.93
JOLIET SUBDIVISION
D.O.T. #290 729C
PROJ. #

5-1-01 UPGRADE CROSSING PROTECTION FOR THE HIGH SPEED RAIL PROJ. FROM MAZONIA TO SPRINGFIELD. J.J.F. AFE 0044386 WTT/JJM	MODIFICATION LEVEL DA LAST LEVEL CK'D DA LAST LEVEL MOD. THIS TYP. C2 LAST LEVEL BY DESIGNER. DD CHANGED FROM TYP.? Y/N Y	UNION PACIFIC SIGNAL DESIGN	DES. WTT/JND DIB. WTT/JND CHK. J.J.F. A.F.E. 0044386 IO: CSL7493.IIX	UNION PACIFIC RAILROAD JOLIET, ILLINOIS TO BLOOMINGTON, ILLINOIS C.T.C. CIRCUITS OFFICE OF CHIEF ENGR.	DATE 5-1-01 SHEET # DWG 74.93 RTE-CSL
	DES. WTT/JND DIB. WTT/JND CHK. J.J.F. A.F.E. 0044386		DATE 5-1-01 SHEET # DWG 74.93 RTE-CSL		
	DES. WTT/JND DIB. WTT/JND CHK. J.J.F. A.F.E. 0044386		DATE 5-1-01 SHEET # DWG 74.93 RTE-CSL		
	DES. WTT/JND DIB. WTT/JND CHK. J.J.F. A.F.E. 0044386		DATE 5-1-01 SHEET # DWG 74.93 RTE-CSL		

(REV. 7-9-00) (HOUSE.TYP)



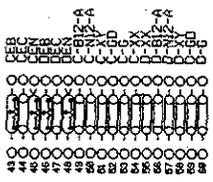
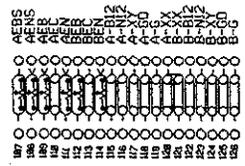
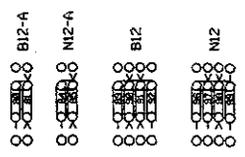
HOUSE GROUND TERMINAL

0 0 0 0 0

0 0 0 0 0

0 0 0 0 0

0 0 0 0 0

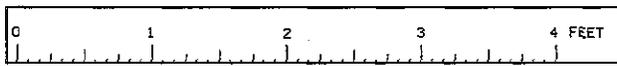


0 0 0 0 0

0 0 0 0 0

0 0 0 0 0

0 0 0 0 0



SCALE: 1.5 INCHES = 1 FOOT

NEW SHEET

DWIGHT, ILLINOIS
TR 193
M.P. 74.93
JOLIET SUBDIVISION
D.O.T. #290 729C
PROJ.*

5-1-01 UPGRADE CROSSING PROTECTION FOR THE HIGH SPEED RAIL PROJ. FROM MAZONIA TO SPRINGFIELD. AFE 0044386 J.J.F. WIT/TTM	MODIFICATION LEVEL		UNION PACIFIC SAFETY DESIGN	DES: WIT/IND.	UNION PACIFIC RAILROAD JOLIET, ILLINOIS TO BLOOMINGTON, ILLINOIS C.T.C. CIRCUITS	DATE 5-1-01
	QA LAST LEVEL CHK'D.	DA		ID: WIT/IND.		SHEET 13
	LAST LEVEL MOD. THIS TYP.	CZ		CHK: J.J.F.		DWG 74.93
	LAST LEVEL BY DESIGNER.	DO		A.F.E. 0044386		RTE-CSL
CHANGED FROM TYP. Y/N	Y		ID: CS.249JDX	OFFICE OF CHIEF ENGR.	FINISH NBR.	