ORIGINAL

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION T03-0032

STIPULATED AGREEMENT **No. 1029**

This agreement made and entered into, by and between the State of Illinois acting by and through the Illinois Commerce Commission, hereinafter referred to as the "Commission", the Union pacific Railroad Company, hereinafter referred to as the "Company", the City of Waukegan, hereinafter referred to as the "City", and the State of Illinois, Department of Transportation, hereinafter referred to as the "Department".

WITNESSETH:

WHEREAS, it has come to the attention of the Commission through informal correspondence that inquiry should be made into the matter of improving public safety at the crossing of the Company's track with a public highway known as Pershing Road (Sand Street) located in the City of Waukegan, Lake County, Illinois, designated as crossing **AAR/DOT 176 627Y, milepost 37.31 CNWT**; and

WHEREAS, proper investigation has been made of the circumstances surrounding the aforesaid crossing by a representative of the Department and Commission; and

WHEREAS, the physical aspects, including geometrics of the intersection, train movements, vehicular traffic volume, and all other pertinent data relating to the crossing have been obtained and shown on Exhibit A, attached to the agreement; and

WHEREAS, the parties are mutually agreeable to accomplish the proposed improvements upon a determination of the Commission by Order.

NOW, THEREFORE in consideration of the premises and of the mutual covenants and agreements as hereinafter contained the parties pray that the Commission enter an Order according to the provisions of Section 18c-7401 of the Illinois Commercial Transportation Law requiring that certain improvements as hereinafter stated be made and that the cost for the proposed improvements be divided among the parties according to law and that in the interest of the statewide traveling public the Grade Crossing Protection Fund of the Motor Fuel Tax Law be required to bear a substantial portion of the cost; To Wit the parties agree as follows:

Section 1 All improvements encompassed by this agreement shall be made in accordance with all applicable State laws, rules, standards, regulations and Orders and procedures in general.

Section 2 The parties are of the opinion that the proper improvements in the interest of public safety at the aforesaid crossing should be:

DOCKETED

(a) the installation of cantilever mounted automatic flashing light signals controlled by type-C track circuits;

(b) the installation of an Advance Warning Sign on the north highway approach to the subject crossing.

Section 3 The Company has prepared a preliminary estimate of cost to accomplish the proposed warning device improvements which it may be required to perform, said estimate is attached as Exhibit B, and shall upon order according to the requirements contained therein prepare detailed drawings, detailed circuit plans, estimates of cost and any required specifications for the proposed improvements for the approval of the Commission and Department.

Section 4 The Company shall upon Order, according to the requirements contained therein, proceed toward the completion of the proposed improvements, accomplishing the work with its own forces or appropriate contracted services and agrees that an appropriate time for the submission of plans should be one hundred twenty (120) days, for the submission of progress reports should be six (6) months and for the completion of the proposed improvements should be twelve (12) months, from the date of Commission Order subsequent to this Agreement. The City, upon Order, shall complete the advance warning sign installation within thirty (30) days, from the date of Commission Order subsequent to this Agreement.

Section 5 The parties hereto agree that an equitable division of cost for the proposed improvements should be:

(a) the cost for the installation of the automatic warning devices as set forth in Section (2a), is estimated to be $188,263. The Department, utilizing federal funds, should pay 70% of the installation cost, not to exceed $131,784, and the Grade Crossing Protection Fund should pay 30% of the installation cost, not to exceed $56,479. The Company should pay any remaining installation costs along with all future operating and maintenance costs.

(b) the cost for work outlined in Section 2 (b) above, should be performed, paid, and maintained 100% by the City.

Section 6 Special Provisions. In view of the fact that federal funding may be utilized for the automatic warning device improvements, all work payable by federal funding shall be governed by applicable provisions of Title 23, Chapter I, Subchapter G, Part 646 of the Federal-Aid Policy Guide adopted December 9, 1991.

The Company shall file a written report with the Director of Processing and Information of the Commission, within fifteen (15) days of the conclusion of each calendar quarter, stating the status of expenditures of the project and the percentage of completion of the project; if the project is behind schedule, the report must include a brief explanation

of the reason(s) for the delay.

All bills for expenditures related to the installation of the automatic warning devices as set forth in Section (2a), authorized for reimbursement from the Grade Crossing Protection Fund, shall be submitted to the Fiscal Control Unit of the Illinois Department of Transportation's Bureau of Local Roads and Streets, 2300 South Dirksen Parkway, Springfield, Illinois 62764. The Department shall send a copy of all bills received to the Director of Processing and Information of the Commission. The final bill for expenditures from the Fund shall be clearly marked "Final Bill". All bills shall be submitted no later than twelve (12) months from the date of completion as set forth in the Commission Order subsequent to this Agreement. The Department shall, at the end of the 12th month from the Commission Order completion date, de-obligate all residual funds accountable for the cost of the warning device installation for this project.

The Company shall at six (6) month intervals from the date of the Order subsequent to this Agreement until the project has been completed, submit written reports to the Director of Processing and Information of the Commission, stating the progress it has made toward completion of the its work herein required. Each progress report shall include the Commission Order number, the Order date, the project completion date as noted in the Order subsequent to this Agreement, crossing information (the name, title, mailing address, telephone number, and facsimile number of the Company employee responsible for management of the project).

Section 7 This agreement shall be binding upon the parties hereto, their successors or assigns. Upon execution of this agreement by all parties, the Commission shall enter an appropriate order, within 60 days accepting or rejecting such stipulation according to the provisions contained herein.

Executed by the Commission this 4th day of February, 2003.

Michael E. Stead
Railroad Safety Program Administrator

Attest:

Robert S. Berry
Rail Safety Specialist

Illinois Commerce Commission Stipulated Agreement No. 1029 concerning improvements at the crossing of the track of the Union Pacific Railroad Company with Pershing Road located in the City of Waukegan, Lake County, Illinois, designated as crossing AAR/DOT 176 627Y, milepost 37.31 CNWT.

Executed by the Company this 14 day of March 2003.

UNION PACIFIC RAILROAD COMPANY

By: Thomas J. Ogee

CHIEF ENGINEER

RECEIVED
MAR 17 2003
Illinois Commerce Commission
RAIL SAFETY SECTION

Attest:

Kathy Klockner

Illinois Commerce Commission Stipulated Agreement No. 1029 concerning improvements at the crossing of the track of the Union Pacific Railroad Company with Pershing Road located in the City of Waukegan, Lake County, Illinois, designated as crossing AAR/DOT 176 627Y, milepost 37.31 CNWT.

Executed by the Department this 19th day of March, 2003.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

By: James T. Easterly
Director of Highways

Illinois Commerce Commission Stipulated Agreement No. 1029 concerning improvements at the crossing of the track of the Union Pacific Railroad Company with Pershing Road located in the City of Waukegan, Lake County, Illinois, designated as crossing AAR/DOT 176 627Y, milepost 37.31 CNWT.

Executed by the City of Waukegan this 10TH day of April, 2003.

THE CITY OF WAUKEGAN

By: Richard H Hyde

Attest: Wayne Motley

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION
STIPULATED AGREEMENT SURVEY FORM

RR/Line Union Pacific Milepost 37.31 CNWT Inventory# 176 627Y

City In Waukegan Street Pershing Road County Lake

Jurisdiction City Urban X Rural ___ Commercial ___ Residential X

Street Surface Bituminous Width 21 feet Condition Good

Angle 45° Tracks Tangent ___ Degree of Curve ___ Superelevation ___

Depth of Cut ___ Height of Fill ___

Crossing Surface

Track Centers	Elevation	Track	Type	Width	Condition
		Industry	Asphalt	34 foot	Good

Intersecting Roads 100' No 200' No

Traffic Control Devices Present No

ADT 1209 Speed 45 mph Statewide Yes

Schoolbuses Yes Hazardous Materials Yes Other ___

Rail Traffic: Ft. ___ @ ___ mph Pass. ___ @ ___ mph Switch 4 @ 5 mph

Simultaneous Movements No Daylight and Dark No

Existing Warning Devices Crossbuck Signs

Advance Warning Signs South Highway Approach only Pavement Markings No

Visibility Study

Quad	Clearing Visibility	Obstruction	Stopping Visibility	Obstruction
NE	N/A		N/A	
NW	N/A		N/A	
SE	N/A		N/A	
SW	N/A		N/A	

Approach Grades

North___*_____' _____% _____' _____% _____' _____%
South___*_____' _____% _____' _____% _____' _____%

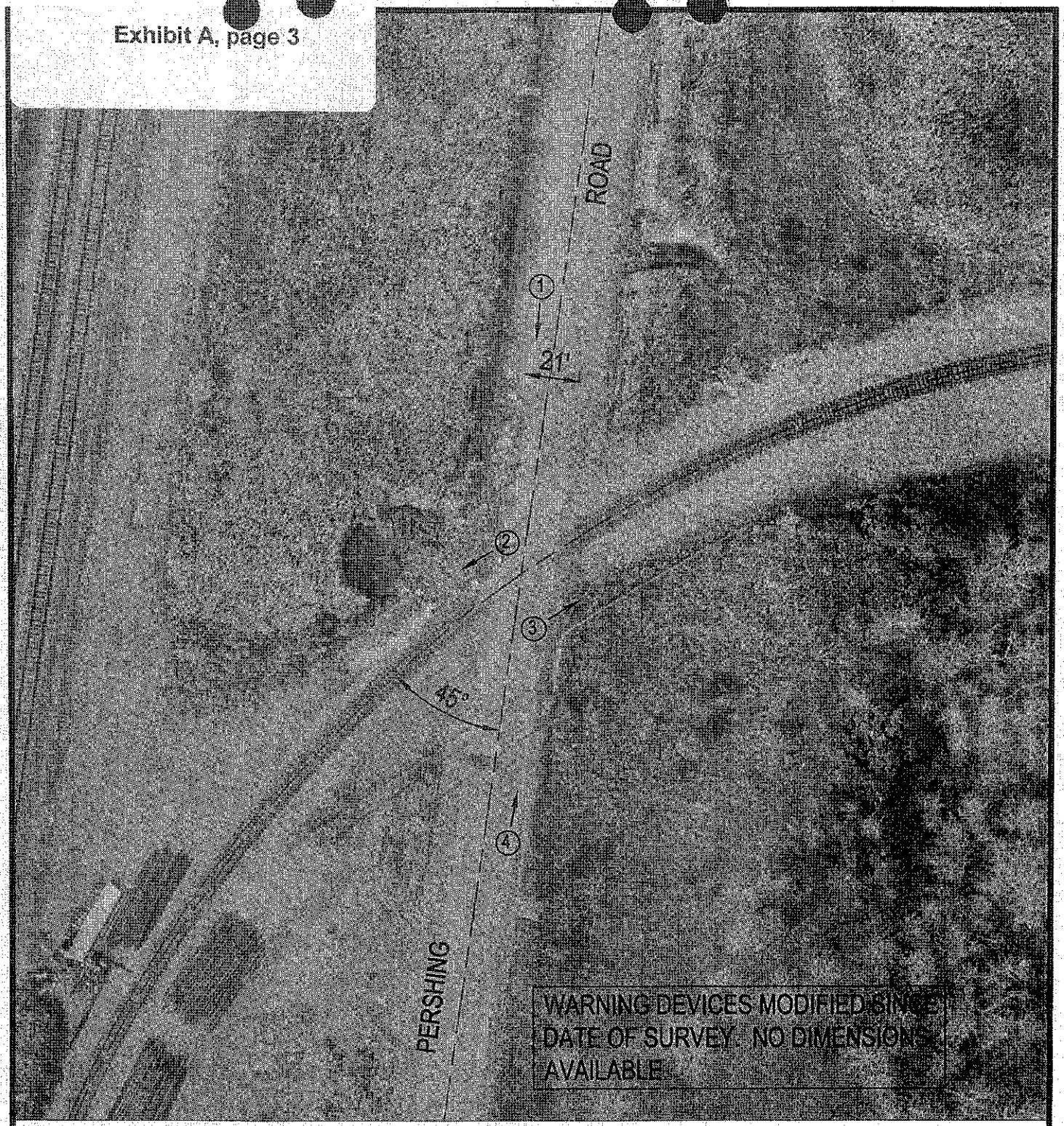
* Meets the requirements of 92 Ill. Adm. Code 1535.204.

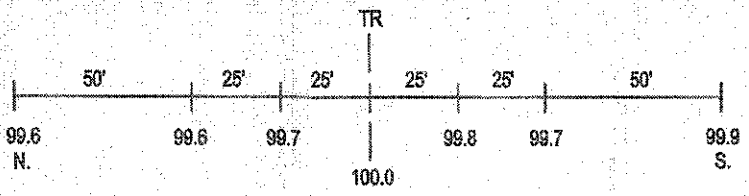
Comments: This crossing meets the Commission's minimum Stipulated Agreement criteria for the installation of cantilever-mounted automatic flashing light signals in that the product of the average daily train and vehicular traffic exceeds 3,000.

A study team comprised of a representative of the Department and the Commission's Rail Safety Section made an inspection of the crossing, and, after discussions with the Company, based upon the low train volume and speed, a recommendation was made for the installation of the warning devices as listed in Section (2a) of the Agreement.

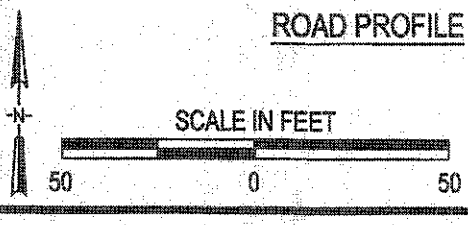
Due to the low speed of train traffic on this line, the parties agree that Type–C track circuits will be adequate to control the proposed automatic warning devices.

Exhibit A, page 3





ROAD PROFILE



③ Photo Location

Crossing #: 176627Y

Location: Lake Co., City of Waukegan (I)

Lat/Long: 42°22'52" / 87°49'26"

Railroad: UP

Street: Pershing Road

Railroad Milepost: 37.31

Crossing Protection: None

DATE: 2\ 01-14

ESTIMATE OF MATERIAL AND FORCE ACCOUNT WORK
BY THE
UNION PACIFIC RAILROAD

DESCRIPTION OF WORK:
INSTALL LED FL SIGNALS W/CANTILEVERS, AC/DC TRACK CIRCUITS, AND NEW CABIN AT SAND STREET IN WAUKEGAN, IL. M.P. 37.31 ON THE KENOSHA SUB.
SIGNAL PROJECT MANAGER: DAN CORCORAN 631-7992
RAILROAD TO PERFORM ALL WORK / COST DISTRIBUTED AS FOLLOWS:
SIGNAL - ILLINOIS COMMERCE COMMISSION 100% RECOLLECTIBLE

PID: 44596 AWO: 09061 MP,SUBDIV: 37.31, KENOSHA
SERVICE UNIT: 23 CITY: WAUKEGAN STATE: IL

DESCRIPTION	QTY	UNIT	LABOR	MATERIAL	RECOLL	UPRR	TOTAL
ENGINEERING WORK							
ENGINEERING			1210		1210		1210
LABOR ADDITIVE 138%			7486		7486		7486
RECOLL-INSPE			2737		2737		2737
SIG-HWY XNG			1478		1478		1478
TOTAL ENGINEERING			12911		12911		12911
SIGNAL WORK							
BILL PREP			900		900		900
CONTRACT				3795	3795		3795
EARTH FILL/ROCK				1500	1500		1500
EQUIPMENT RENTAL				5834	5834		5834
FOREIGN LINE FREIGHT				759	759		759
LABOR ADDITIVE 138%			42083		42083		42083
MATL STORE EXPENSE				1897	1897		1897
PERSONAL EXPENSES				25500	25500		25500
SALES TAX				2372	2372		2372
SIGNAL			30494	37956	68450		68450
TRANSPORTATION CHARGES				3000	3000		3000
USAGE EQUIPMENT				8752	8752		8752
TOTAL SIGNAL			73477	91365	164842		164842
TRACK & SURFACE WORK							
FIELD WELD			63		63		63
LABOR ADDITIVE 138%			1452		1452		1452
MATL STORE EXPENSE				359	359		359
OTM			989	6157	7146		7146
SALES TAX				449	449		449
WELD				1041	1041		1041
TOTAL TRACK & SURFACE			2504	8006	10510		10510
LABOR/MATERIAL EXPENSE			88892	99371			
RECOLLECTIBLE/UPRR EXPENSE					188263	0	
ESTIMATED PROJECT COST							188263
EXISTING REUSEABLE MATERIAL CREDIT					0		
SALVAGE NONUSEABLE MATERIAL CREDIT					0		
RECOLLECTIBLE LESS CREDITS							

THE ABOVE FIGURES ARE ESTIMATES ONLY AND SUBJECT TO FLUCTUATION. IN THE EVENT OF AN INCREASE OR DECREASE IN THE COST OR QUANTITY OF MATERIAL OR LABOR REQUIRED, UPRR WILL BILL FOR ACTUAL CONSTRUCTION COSTS AT THE CURRENT EFFECTIVE RATE.

FORM 30-1 PAGE 01 MORE

WORK ORDER AUTHORIZATION-DETAIL OF ESTIMATED EXPENDITURES

EST START: 01-14-03
EST COMP: 12-31-03

PROJ NO: 44596
A.W.O. NO: 09061
W.O. NO:
B.I. NO: 02EN01
STATE: IL
VAL SEC: 1114

RAILROAD: UPRR CO.
LOCATION: WAUKEGAN,IL,SAND STREET,KENOSHA SUB
DEPARTMENT: ENGINEERING SERVICES SERVICE UNIT: 23

INSTALL LED FL SIGNALS W/CANTILEVERS, AC/DC TRACK CIRCUITS, AND NEW
CABIN AT SAND STREET IN WAUKEGAN, IL. M.P. 37.31 ON THE KENOSHA SUB.
SIGNAL PROJECT MANAGER: DAN CORCORAN 631-7992
RAILROAD TO PERFORM ALL WORK / COST DISTRIBUTED AS FOLLOWS:
SIGNAL - ILLINOIS COMMERCE COMMISSION 100% RECOLLECTIBLE

WORK ORDER AUTHORIZATION-DETAIL OF ESTIMATED EXPENDITURES

EST START: 01-14-03
EST COMP: 12-31-03

RAILROAD: UPRR CO.
LOCATION: WAUKEGAN,IL,SAND STREET,KENOSHA SUB
DEPARTMENT: ENGINEERING SERVICES

PROJ NO: 44596
A.W.O. NO: 09061
W.O. NO:
B.I. NO: 02EN01
STATE: IL
VAL SEC: 1114

SCOPE OF WORK

PROJECT NUMBER	VAL SEC	STATE	M.P. FROM	M.P. TO	SEGMENT	JOINT FACILITY
44596	1114	IL	37.31	37.31	8904	

FORM 30-1

WORK ORDER AUTHORIZATION-DETAIL OF ESTIMATED EXPENDITURES

EST START: 01-14-03
EST COMP: 12-31-03

RAILROAD: UPRR CO.
LOCATION: WAUKEGAN,IL,SAND STREET,KENOSHA SUB
DEPARTMENT: ENGINEERING SERVICES

PROJ NO: 44596
A.W.O. NO: 09061
W.O. NO:
B.I. NO: 02EN01
STATE: IL
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LABOR PLAN

GANG TYPE	GANG TYPE DESCRIPTION	GANG NBR	NUMBER IN GANG	WORK CODE	WORK CODE DESCRIPTION	GANG DAYS ALLOWED	DIRECT LABOR $
SIGCU5	SIGNAL 5 MAN G	0	5	34004	SIG GENERAL	20.00	17034.00
SIG005	5 PERSON FOR S	0	5	34004	SIG GENERAL	14.00	11491.20
SIG005	5 PERSON FOR S	0	5	34014	SIGNAL-GEN	2.40	1969.92
					SUB-TOTAL	16.40	13461.12
WLD002	2 PERSON WELDI	0	2	13004	FIELD WELD	0.12	63.17
WLD002	2 PERSON WELDI	0	2	14005	OTM UNLD/DI	0.27	142.15
WLD002	2 PERSON WELDI	0	2	14005	OTM RELAY/R	1.61	847.63
					SUB-TOTAL	2.00	1052.95
					TOTAL		31,548.07

WORK ORDER AUTHORIZATION-DETAIL OF ESTIMATED EXPENDITURES

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EST COMP: 12-31-03

RAILROAD: UPRR CO.
LOCATION: WAUKEGAN,IL,SAND STREET,KENOSHA SUB
DEPARTMENT: ENGINEERING SERVICES

PROJ NO: 44596
A.W.O. NO: 09061
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STOCK MATERIAL PLAN

ITEM NUMBER	ITEM DESCRIPTION	UNIT COST	QTY	UM	DIRECT MATL $
02040420	BATTERY,GNB,75A9 OR 50A13	175.37	6	EA	1052
02040660	BATTERY,GNB, 75A23 OR 50A27	308.12	7	EA	2157
09011240	CABLE TIE, NYLON 1 1/8" MAX. DIA	0.02	200	EA	4
09011980	CABLE TIE, NYLON 3 1/2" MAX. DIA	0.14	20	EA	3
09014950	CIRCUIT BRKR,120/240V 20A 2 POLE	15.61	1	EA	16
09015690	CIRCUIT BREAKER, 120/240V 30A AC	6.36	1	EA	6
09054300	RELAY,TAB 869 KRP11DN12V. SW.HTR.	8.47	1	EA	8
09054360	RELAY, GEN.PURPOSE 120V. TAB 856	8.35	1	EA	8
09057650	SOCKET,P-B 27E122 TAB 836A & 856	2.09	2	EA	4
09065700	TAPE, ELECTRICAL PLASTIC	0.69	2	RL	1
09066900	TERMINAL,SPADE,10-12 WIRE,#8 STUD	0.14	10	EA	1
09137100	TERM.LUG 3/16 CABLE-1/4 POST 2412	0.66	30	EA	20
09215100	33466 TERMINAL, RING TONGUE AMP	0.20	24	EA	5
09260350	TERMINAL,#16-14 #8 SPADE	0.06	35	EA	2
09261570	321527-1 TERMINAL, TEST	1.33	10	EA	13
09401140	ADAPTER, 4 INCH CARLON PLASTIC	2.12	2	EA	4
09409820	BUSHING, 4" PLASTIC,INSULATING	0.75	2	EA	2
09412460	CONDUIT,3/8 INCH FLEX STEEL SEALT	0.38	1	LF	0
09424920	CONDUIT, 4", PVC, TYPE 40	1.32	60	LF	79
09433970	CONNECTOR,3/8 INCH STRAIGHT BOX S	0.90	2	EA	2
09467930	LOCKNUT, 4 INCH, GALVANIZED	3.64	2	EA	7
09602970	LAMP, HALOGEN, 10V, 25W	3.80	1	EA	4
09844170	GROUND ROD, 5/8 INCH X 8 FEET	4.43	7	EA	31
09846750	GRND.ROD CONN. 4WAY ONESHOT.	4.68	7	EA	33
09908640	WIRE,#6 AWG.1 COND.COPPER,SOLID	0.11	175	LF	19
09912200	WIRE #6 AWG 2 CND 500'ROLL SHIELD	1.14	500	LF	570
09913200	WIRE,#6, 5 COND 500'ROLL SHIELDED	1.87	500	LF	935
09915610	WIRE #6 AWG 1 COND COPPER, STRAN	0.35	175	LF	61
09930550	WIRE #10 AWG 1 COND COPPER, STRAN	0.14	2400	LF	336
09932310	WIRE #10 AWG 1 COND COPPER, TWIST	0.31	170	LF	53
09960090	WIRE #16 AWG 1 COND COPPER, STRAN	0.08	500	LF	40
13060230	TOGGLE,SPRING WING 3/8	0.43	3	EA	1
13547870	SHEET METAL SCREW, #10 X 1 INCH	0.50	1	BX	1
13552450	SHEET METAL SCREW,#12 X 3/4"	1.98	2	BX	4
13553150	SHEET METAL SCREW #12 X 1"	2.97	1	BX	3
17061400	PADLOCK,SIGNAL,WITHOUT KEY,AMERIC	12.14	4	EA	49
28033210	CARTON, 39 1/8"L X 23 1/4"W X 17	2.89	1	EA	3
28033230	CARTON, 47 3/8"L X 39 1/2"W X 18"	7.85	1	EA	8
28041880	PALLET, 48 X 40 INCH 2/WAY	7.98	2	EA	16
35040010	PLASTER OF PARIS, DENTAL GRADE	0.86	25	LB	22

WORK ORDER AUTHORIZATION-DETAIL OF ESTIMATED EXPENDITURES

EST START: 01-14-03
EST COMP: 12-31-03

RAILROAD: UPRR CO.
LOCATION: WAUKEGAN,IL,SAND STREET,KENOSHA SUB
DEPARTMENT: ENGINEERING SERVICES

PROJ NO: 44596
A.W.O. NO: 09061
W.O. NO:
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39340220	SIGN, HIGHWAY CROSSING	50.00	2	EA	100
52000450	SURGE PROTECTOR SP18-2A	108.24	2	EA	216
52001370	SURGE PROTECTOR SP20-2A TAB 585	68.51	1	EA	69
52003190	BOND WIRE, 7 INCH LONG, 5/16 DIA.	3.74	100	EA	374
52003630	EXTENSION CORD - 12'	66.85	1	EA	67
52005690	BOND WIRE, 7 STRANDS	0.42	150	LF	63
52016830	WIRE DUCT, 2X3	8.07	15	EA	121
52016940	WIRE DUCT, 3X3	9.60	3	EA	29
52017510	WIRE DUCT COVER 2"X6"	1.76	15	EA	26
52017620	WIRE DUCT COVER 3"X6'	2.68	3	EA	8
52019560	EQUALIZER, H.D. TAB 583	9.00	4	EA	36
52019710	FOUNDATION, CANTILEVER LEAVE-IN-	748.82	2	EA	1498
52025240	HOUSE, 6X6, SIGNAL XING	4259.50	1	EA	4260
52027350	CLIP BOARD - FOR SIGNAL PRINTS	6.45	1	EA	6
52027430	STEP BOX	12.72	1	EA	13
52028420	LIGHTNING ARRESTOR,CLR-COMM TAB 3	6.85	4	EA	27
52029780	LIGHTNING ARR,HD TAB 582 W/O BASE	9.67	6	EA	58
52030010	LIGHTNING ARRESTOR CONN.STRIP	4.08	2	EA	8
52039210	RECTIFIER,20EC,12V.TAB575	326.90	1	EA	327
52039390	RECTIFIER, 40EC, 12V. TAB577	454.12	1	EA	454
52040400	RESISTOR, ADJ.0.63 OHM TAB91	24.19	4	EA	97
52040460	RESISTER, ADJ. 5 OHM, TAB 90	12.75	10	EA	128
52068650	TERMINAL, #6 - 5 WIRE - RING TYPE	0.14	20	EA	3
52070010	TERMINAL,#12-10 WIRE,RING TONGUE	0.08	300	EA	24
52071600	TERMINAL,#20-16 WIRE,RING TONGUE	0.06	150	EA	9
52072280	TERMINAL BLOCK, SIGNAL 2 POST BAK	2.43	22	EA	53
52072510	TERMINAL BLOCK,SIGNAL 3 POST TEST	6.16	3	EA	18
52072740	TERMINAL BLOCK, SIGNAL 12 POST 6	8.82	4	EA	35
52074550	TEST LINK, INSULATED ASSEMBLY TAB	0.67	24	EA	16
52077400	ZENER DIODE, 3.9 VOLT, 1.3 WATT	0.05	1	EA	0
52079550	WIRE TAG, PLASTIC - WHITE	0.12	100	EA	12
52079560	MARKING PEN(FOR WHITE TAG)	1.95	1	EA	2
52092250	CRTU. W/MICROBURST TRANSCEIVER.	1702.89	1	EA	1703
52169800	SIG GENERATOR,ACG-2T,TAB 636 STYL	130.57	1	EA	131
52170650	SIGNAL TRACK DRIVER TAB 637	215.17	3	EA	646
52171500	RECTIFIER. RING 10, TAB 634 STYLE	41.18	3	EA	124
52203400	DETECTOR, LIGHT OUT, LOD-1	453.13	1	EA	453
52246000	RESISTOR,47,000 (47K) OHM .5 WATT	0.20	4	EA	1
52263600	SURGE ARRESTOR,METER LOOP.	27.83	1	EA	28
52264040	SURGE PANEL - TAB 618	198.91	1	EA	199
52276050	CROSSING ANALYZER, HCA-1	1652.68	1	EA	1653
52707280	RELAY,B1BN,TK.TAB 882 A62-120	525.61	3	EA	1577
52726820	RELAY, FLASHER TAB 887	353.89	1	EA	354
52728800	RELAY, B1LC. TAB 911 A62-310	281.65	1	EA	282
52752370	RELAY, B1SR, 1 SEC. TAB 889	483.15	2	EA	966
52768190	*****KIND 2 ONLY OR USE 527-6837-	1337.00	1	EA	1337

WORK ORDER AUTHORIZATION-DETAIL OF ESTIMATED EXPENDITURES

EST START: 01-14-03
EST COMP: 12-31-03

RAILROAD: UPRR CO.
LOCATION: WAUKEGAN,IL,SAND STREET,KENOSHA SUB
DEPARTMENT: ENGINEERING SERVICES

PROJ NO: 44596
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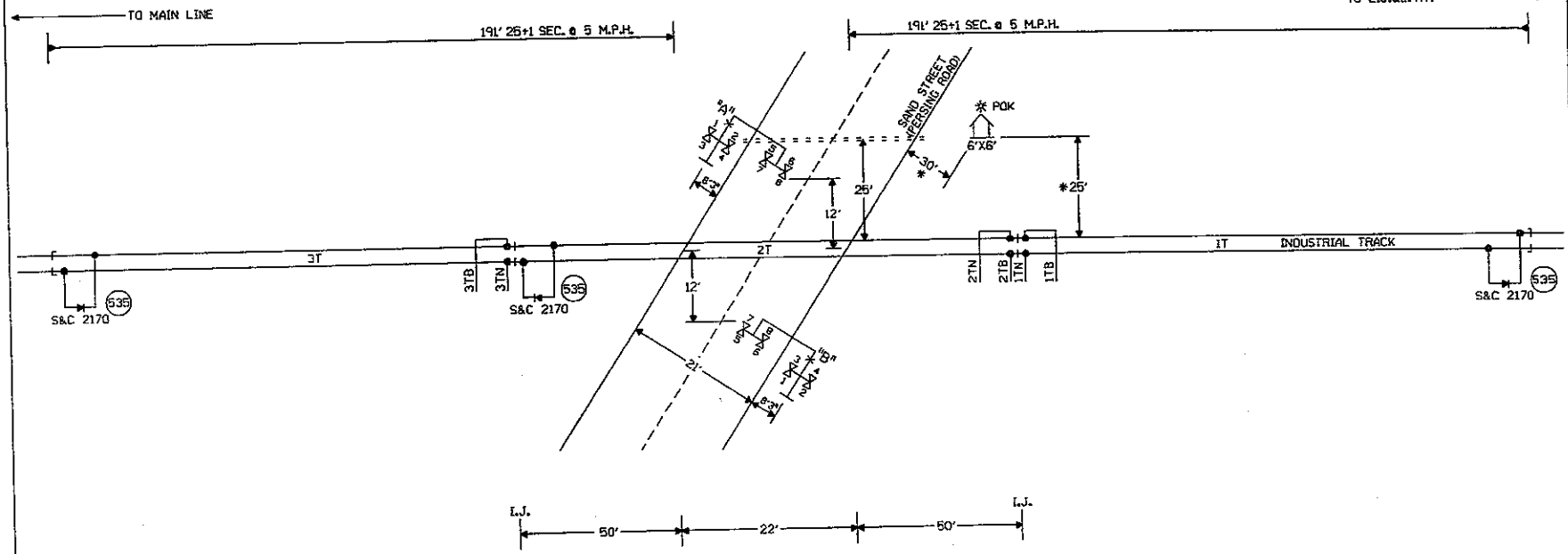
52773760	RELAY BRACKET, HOLDS 14 B1 RELAYS	203.99	1	EA	204
52776370	RELAY PLUGBOARD,GRS B1,TAB 900	32.39	7	EA	227
52777970	FLAG TERMINAL, FOR GRS, 14-10	0.87	100	EA	87
52778110	FLAG TERMINAL, FOR GRS, 20-16	1.01	100	EA	101
52779280	RELAY TEST TERM,GRS B1	6.75	7	EA	47
52842220	DIODE JEDEC NUMBER 1N4004	0.02	1	EA	0
52907680	CANTILEVER - 12'-14' XING SIGNAL	4200.00	2	EA	8400
52959000	POWER TAP MATERIAL	1000.00	1	EA	1000
52959000	12" LED SIGNAL HEADS	1000.00	4	EA	4000
52973600	12" LED SIGNAL HEADS	100.00	2	EA	200
53311490	EXTRACTOR FOR "B"TERMINALS P3-308	9.67	1	EA	10
53311510	TEST NUT WRENCH. GRS #P3-320	33.39	1	EA	33
53648010	INSULATING CAP & SHIELD ASSY.	2.04	10	EA	20
53903460	EPD 120/240TDFL SURGE PROTECTOR	263.18	1	EA	263
53954500	180429-000 BOOTLEG KIT	57.10	3	EA	171
55014130	RAIL ANCHOR 5-1/2 BASE HD CHANNEL	0.83	1920	EA	1594
55255160	FIELD WELD KIT, 112#/115# ONE SH	60.13	16	EA	962
55264570	PACKING SAND, PRE-MIXED (PER SACK	22.53	3	CA	72
55264930	REFRACTORY PASTE	1.83	4	EA	7
55310320	115# INS JT PLUG HH LH ANGCUT 15-	570.46	4	EA	2282
55310330	115# INS JT PLUG HH RH ANGCUT 15-	570.58	4	EA	2282
	TOTAL				45,156



* = FIELD VERIFY LOCATION OF HOUSE

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 MANUFACTURES 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.

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 40' CONDUIT

LIGHTS: LED LIGHTS

CANT "A": 13'
CANT "B": 13'

CRTU MICROBURST

CONSTRUCTION NOTES:

1. HOUSE, FLS/CANTS AND AC/DC CIRCUITS ARE NEW.
2. INSTALL (8)-115 LB I-BONDS AS SHOWN.
3. BOND 764 LINEAR FEET OF 115 LB RAILS WITH CADWELD BONDS.
4. BRUSH AND TREES WILL NEED TO BE REMOVED EAST OF CROSSING FOR SIGHT VISIBILITY FOR NORTH BOUND TRAFFIC.
5. ALL TRACK DRIVER EQUIPMENT ARE TO BE SUPPLIED BY S&C DISTRIBUTION COMPANY.

W ← O → E

WAUKEGAN, ILLINOIS
SAND STREET (PERSHING ROAD)
M.P. 37.31
KENOSHA SUBDIVISION
(INDUSTRIAL LEAD)
(OFF MAIN LINE)
D.O.T.#176 627Y

MODIFICATION LEVEL	
O.A. LAST LEVEL CHK'D.	00
LAST LEVEL MOD. THIS TYP.	08
LAST LEVEL BY DESIGNER.	0F
CHANGED FROM TYP.? Y/N	Y

UNION PACIFIC SAFETY SIGNAL DESIGN

DES: CTC
DIG: CTC
CHK: RLT
A.F.E. 09061
ID: KEN373LLX

UNION PACIFIC RAILROAD
WAUKEGAN, ILLINOIS
HIGHWAY CROSSING SIGNALS
CONTROL CIRCUITS
OFFICE OF CHIEF ENG'R OMAHA NEBR.

DATE 10-18-02
SHEET 1
DWG 37.31
KEN

(REV. 01.02.21) (TKACDCF.1)