

Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

June 5, 2009

SUBJECT: FAP Route 361
(McLean Boulevard and IL 31)
Project HPP-1527(009)
Section 06-00214-10-BR
Kane County
Contract No 63073
Item 183 A
June 12, 2009 Letting

TO PROSPECTIVE BIDDERS:

To clarify information it is necessary to revise the following:

Proposal-Revised pages 2-18 of the Schedule of Prices and revised pages 33, 38,103-105A, 126, 132-140 and two pages of the index of the Special Provisions.

Plans: Revised sheets 7-10, 19, 20, 24, 91,92, 93, and 110

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal. Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Since the proposal sheets are printed back to back, bidders are cautioned to exercise care when inserting revised and/or added special provisions into their proposals.

Please call 217-782-7806 if any of the above-described material is not included in this transmittal.

Very truly yours,

Charles J. Ingersoll
Engineer of Design and Environment

A handwritten signature in black ink, appearing to read 'Ted B. Walschleger', followed by the letters 'P.E.' in a smaller font.

By: Ted B. Walschleger, P. E.
Engineer of Project Management

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
XX008015	SITE ACCESS CONTROL	L SUM	1.000	X	=		
XX008016	SPHER BEAR BOOK-EXPAN	EACH	2.000	X	=		
XX008017	SPHER BEAR BOOK-FIXED	EACH	2.000	X	=		
XX008018	TEMP SOIL RET SYS	L SUM	1.000	X	=		
XX008019	UNINTER POW SUP SKDOT	EACH	1.000	X	=		
XX008083	ROADWAY SWEEPING SPL	EACH	450.000	X	=		
X0321809	PERMANENT GRND ANCHOR	EACH	95.000	X	=		
X0322671	STAB CONSTR ENTRANCE	SQ YD	150.000	X	=		
X0322925	ELCBL C TRACER 14 1C	FOOT	948.000	X	=		
X0323260	SEDIMENT BASIN	EACH	1.000	X	=		
X0323426	SED CONT DR ST INL CL	EACH	4.000	X	=		
X0323670	PREFORM DETECT LOOP	FOOT	245.000	X	=		
X0323973	SED CONT SILT FENCE	FOOT	7,595.000	X	=		
X0323974	SED CONT SILT FN MAIN	FOOT	7,595.000	X	=		
X0324007	OPTIM TRAF SIGNAL SYS	EACH	1.000	X	=		

Revised 6-5-09

FAP 361
 06-00214-10-BR
 KANE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 63073

ECMS002 DTGECM03 ECMR003 PAGE 3
 RUN DATE - 06/04/09
 RUN TIME - 193442

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X0324045	SED CON STAB CON EN R	EACH	1.000 X	=	=	=	=
X0324455	DRILL/SET SOLD P SOIL	CU FT	5,617.000 X	=	=	=	=
X0324456	DRILL/SET SOLD P ROCK	CU FT	70.000 X	=	=	=	=
X0324774	SED CON STAB CONST EN	SQ YD	150.000 X	=	=	=	=
X0324775	SED CON STAB CON EN M	SQ YD	150.000 X	=	=	=	=
X0325346	RAILROAD TRACK	TRK FT	1,082.000 X	=	=	=	=
X0325355	RAIL TRACK, REMOVE	TRK FT	2,397.000 X	=	=	=	=
X0325775	WET RF TEM TAPE T3 4	FOOT	7,333.000 X	=	=	=	=
X0325840	WET RF TEM TAPE T3 12	FOOT	476.000 X	=	=	=	=
X0712400	TEMP PAVEMENT	SQ YD	1,421.000 X	=	=	=	=
X2510635	HD EROS CONT BLANK SP	SQ YD	2,361.000 X	=	=	=	=
X4023000	TEMP ACCESS- ROAD	EACH	1.000 X	=	=	=	=
X7011005	TR CONT-PROT TEMP DET	L SUM	1.000 X	=	=	=	=
X8050015	SERV INSTALL POLE MT	EACH	2.000 X	=	=	=	=
X8620020	UNINTER POWER SUPPLY	EACH	1.000 X	=	=	=	=

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X8710020	FOCC62.5/125 MM12SM12	FOOT	974.000 X	=		=	
X8730027	ELCBL C GROUND 6 1C	FOOT	1,475.000 X	=		=	
X8730250	ELCBL C 20 3C TW SH	FOOT	2,159.000 X	=		=	
Z0001050	AGG SUBGRADE 12	SQ YD	20,835.000 X	=		=	
Z0002300	BALLAST	CU YD	1,776.000 X	=		=	
Z0007601	BLDG REMOV NO 1	L SUM	1.000 X	=		=	
Z0007602	BLDG REMOV NO 2	L SUM	1.000 X	=		=	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000 X	=		=	
Z0022800	FENCE REMOVAL	FOOT	1,024.000 X	=		=	
Z0030260	IMP ATTN TEMP FRN TL3	EACH	6.000 X	=		=	
Z0041700	PLUG EX STORM SEWERS	EACH	1.000 X	=		=	
Z0048665	RR PROT LIABILITY INS	L SUM	1.000 X	=		=	
Z0069700	SUB-BALLAST	CU YD	2,131.000 X	=		=	
Z0076600	TRAINEES	HOUR	5,000.000 X	=	0.80	=	4,000.00
20100110	TREE REMOV 6-15	UNIT	58.000 X	=		=	

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
20100210	TREE REMOV OVER 15	UNIT	18.000 X	=	=	=	=
20100500	TREE REMOV ACRES	ACRE	3.250 X	=	=	=	=
20101700	SUPPLE WATERING	UNIT	4.200 X	=	=	=	=
20200100	EARTH EXCAVATION	CU YD	96,749.000 X	=	=	=	=
20200200	ROCK EXCAVATION	CU YD	3,443.000 X	=	=	=	=
20201200	REM & DISP UNS MATL	CU YD	7,510.000 X	=	=	=	=
20300100	CHANNEL EXCAV	CU YD	2,566.000 X	=	=	=	=
20700220	POROUS GRAN EMBANK	CU YD	255.000 X	=	=	=	=
20800150	TRENCH BACKFILL	CU YD	2,870.000 X	=	=	=	=
21101615	TOPSOIL F & P 4	SQ YD	39,400.000 X	=	=	=	=
21101685	TOPSOIL F & P 24	SQ YD	835.000 X	=	=	=	=
25000210	SEEDING CL 2A	ACRE	2.510 X	=	=	=	=
25000400	NITROGEN FERT NUTR	POUND	11.000 X	=	=	=	=
25000500	PHOSPHORUS FERT NUTR	POUND	11.000 X	=	=	=	=
25000600	POTASSIUM FERT NUTR	POUND	11.000 X	=	=	=	=

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
25200110	SODDING SALT TOLERANT	SQ YD	835.000 X	=			
28000200	EARTH EXC - EROS CONT	CU YD	631.000 X	=			
28000255	TEMP EROS CONTR SEED	ACRE	7.000 X	=			
28000300	TEMP DITCH CHECKS	EACH	33.000 X	=			
28100105	STONE RIPRAP CL A3	SQ YD	483.000 X	=			
28100107	STONE RIPRAP CL A4	SQ YD	111.000 X	=			
28100109	STONE RIPRAP CL A5	SQ YD	669.000 X	=			
28101500	RIPRAP SPL	SQ YD	22.000 X	=			
28200200	FILTER FABRIC	SQ YD	1,285.000 X	=			
35101800	AGG BASE CSE B 6	SQ YD	2,421.000 X	=			
35600716	HMA BC WID 10	SQ YD	397.000 X	=			
40600200	BIT MATLS PR CT	TON	0.500 X	=			
40600825	P LEV BIND MM N50	TON	258.000 X	=			
40600895	CONSTRUC TEST STRIP	EACH	2.000 X	=			
40600982	HMA SURF REM BUTT JT	SQ YD	31.000 X	=			

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
40603310	HMA SC "C" N50	TON	276.000 X	=			
40603335	HMA SC "D" N50	TON	387.000 X	=			
40701976	HMA PAVT FD 14 3/4	SQ YD	1,193.000 X	=			
42000501	PCC PVT 10 JOINTED	SQ YD	16,434.000 X	=			
42001300	PROTECTIVE COAT	SQ YD	19,430.000 X	=			
42400100	PC CONC SIDEWALK 4	SQ FT	205.000 X	=			
44000100	PAVEMENT REM	SQ YD	6,912.000 X	=			
44000200	DRIVE PAVEMENT REM	SQ YD	2,072.000 X	=			
44000500	COMB CURB GUTTER REM	FOOT	2,460.000 X	=			
44000600	SIDEWALK REM	SQ FT	126.000 X	=			
44001005	HMA SURFACE REMOVAL	SQ YD	4,260.000 X	=			
44002248	HMA RM OV PAT 12	SQ YD	330.000 X	=			
44004250	PAVED SHLD REMOVAL	SQ YD	1,080.000 X	=			
44004300	PAVT BREAKING	SQ YD	784.000 X	=			
44201785	CL D PATCH T1 12	SQ YD	213.000 X	=			

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
44201789	CL D PATCH T2 12	SQ YD	15.000 X				
44201794	CL D PATCH T3 12	SQ YD	20.000 X				
44201796	CL D PATCH T4 12	SQ YD	82.000 X				
48101500	AGGREGATE SHLDS B 6	SQ YD	1,518.000 X				
48203021	HMA SHOULDERS 6	SQ YD	1,528.000 X				
50100100	REM EXIST STRUCT	EACH	1.000 X				
50104400	CONC HDWL REM	EACH	4.000 X				
50105200	REM EXIST CULVERTS	EACH	3.000 X				
50200100	STRUCTURE EXCAVATION	CU YD	4,033.000 X				
50200400	ROCK EXC STRUCT	CU YD	2,241.000 X				
50300225	CONC STRUCT	CU YD	852.500 X				
50300285	FORM LINER TEX SURF	SQ FT	7,311.000 X				
50300500	DECK DRAINS	FOOT	240.000 X				
50500105	F & E STRUCT STEEL	L SUM	1.000 X				
50500505	STUD SHEAR CONNECTORS	EACH	1,962.000 X				

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
50700209	UNTREATED TIMBER LAG	SQ FT	6,843.000 X				
50800105	REINFORCEMENT BARS	POUND	69,532.000 X				
50800205	REINF BARS, EPOXY CTD	POUND	115,500.000 X				
50901105	STEEL RAILING	FOOT	610.000 X				
50901720	BICYCLE RAILING	FOOT	280.000 X				
50901760	PIPE HANDRAIL	FOOT	284.000 X				
51202100	FUR STL PILE HP14X117	FOOT	1,470.000 X				
51202210	FUR SOLDIER PILES HP	FOOT	170.000 X				
51202220	FUR SOLDIER PILES BU	FOOT	1,834.000 X				
51202305	DRIVING PILES	FOOT	1,470.000 X				
51203600	TEST PILE ST HP12X53	EACH	2.000 X				
51204650	PILE SHOES	EACH	70.000 X				
51500100	NAME PLATES	EACH	3.000 X				
51500110	NAME PLATES SPL	EACH	1.000 X				
54003000	CONC BOX CUL	CU YD	313.000 X				

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
542A2785	P CUL CL A 4 60	FOOT	22.000 X	=	=	=	=
54201525	P CUL 2 CS/A CP 60	FOOT	178.000 X	=	=	=	=
54213657	PRC FLAR END SEC 12	EACH	1.000 X	=	=	=	=
54213669	PRC FLAR END SEC 24	EACH	2.000 X	=	=	=	=
54213675	PRC FLAR END SEC 30	EACH	1.000 X	=	=	=	=
54213687	PRC FLAR END SEC 42	EACH	1.000 X	=	=	=	=
54213915	STEEL END SEC 60	EACH	8.000 X	=	=	=	=
54244805	INLET BOX 542501	EACH	1.000 X	=	=	=	=
54247130	GRATING-C FL END S 24	EACH	2.000 X	=	=	=	=
54247150	GRATING-C FL END S 30	EACH	1.000 X	=	=	=	=
54247180	GRATING-C FL END S 42	EACH	1.000 X	=	=	=	=
550A0050	STORM SEW CL A 1 12	FOOT	57.000 X	=	=	=	=
550A0120	STORM SEW CL A 1 24	FOOT	25.000 X	=	=	=	=
550A0340	STORM SEW CL A 2 12	FOOT	1,360.000 X	=	=	=	=
550A0360	STORM SEW CL A 2 15	FOOT	284.000 X	=	=	=	=

Revised 6-5-09

FAP 361
 06-00214-10-BR
 KANE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 63073

ECMS002 DTGECM03 ECMR003 PAGE 11
 RUN DATE - 06/04/09
 RUN TIME - 193442

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
550A0380	STORM SEW CL A 2 18	FOOT	220.000	X	=		
550A0410	STORM SEW CL A 2 24	FOOT	586.000	X	=		
550A0430	STORM SEW CL A 2 30	FOOT	120.000	X	=		
550A0470	STORM SEW CL A 2 42	FOOT	30.000	X	=		
550A0480	STORM SEW CL A 2 48	FOOT	285.000	X	=		
550A0750	STORM SEW CL A 3 36	FOOT	735.000	X	=		
550A0770	STORM SEW CL A 3 42	FOOT	1,160.000	X	=		
550A0940	STORM SEW CL A 4 12	FOOT	10.000	X	=		
550A1240	STORM SEW CL A 5 12	FOOT	21.000	X	=		
55101200	STORM SEWER REM 24	FOOT	74.000	X	=		
55101400	STORM SEWER REM 30	FOOT	120.000	X	=		
55101800	STORM SEWER REM 42	FOOT	30.000	X	=		
58000100	MEMBRANE WATERPROOF	SQ FT	2,350.000	X	=		
58700300	CONCRETE SEALER	SQ FT	3,030.000	X	=		
59100100	GEOCOMPOSITE WALL DR	SQ YD	2,856.000	X	=		

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CENTS
60100915	PIPE DRAINS 6	FOOT	40.000 X				
60100945	PIPE DRAINS 12	FOOT	150.000 X				
60107600	PIPE UNDERDRAINS 4	FOOT	76.000 X				
60107700	PIPE UNDERDRAINS 6	FOOT	575.000 X				
60109584	P UNDR FOR STRUCT 8	FOOT	713.000 X				
60202405	CB TA 4 DIA	EACH	25.000 X				
60205605	CB TA 5 DIA	EACH	2.000 X				
60220200	MAN TA 4 DIA	EACH	14.000 X				
60222900	MAN TA 5 DIA	EACH	11.000 X				
60224200	MAN TA SPL 6D T1F CL	EACH	1.000 X				
60240395	INLETS TB	EACH	3.000 X				
60248000	JUNCTION CHAMBER N1	EACH	1.000 X				
60255500	MAN ADJUST	EACH	1.000 X				
60402210	GRATES T8	EACH	5.000 X				
60404920	FR & GRATES T21	EACH	7.000 X				

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
60404950	FR & GRATES T24	EACH	25.000 X	=			
60406100	FR & LIDS T1 CL	EACH	18.000 X	=			
60406600	GRATING	SQ FT	830.000 X	=			
60500040	REMOV MANHOLES	EACH	1.000 X	=			
60500050	REMOV CATCH BAS	EACH	1.000 X	=			
60600095	CLASS SI CONC OUTLET	CU YD	4.000 X	=			
60602800	CONC GUTTER TB	FOOT	474.000 X	=			
60603800	COMB CC&G TB6.12	FOOT	45.000 X	=			
60605000	COMB CC&G TB6.24	FOOT	6,588.000 X	=			
60618310	CONC MEDIAN SURF 4 SP	SQ FT	5,181.000 X	=			
60619100	CONC MED TSB SPL	SQ FT	1,713.000 X	=			
63000001	SPBGR TY A 6FT POSTS	FOOT	450.000 X	=			
63100045	TRAF BAR TERM T2	EACH	2.000 X	=			
63200305	SPBGR REM	FOOT	629.000 X	=			
67100100	MOBILIZATION	L SUM	1.000 X	=			

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
70101800	TRAF CONT & PROT SPL	L SUM	1.000 X			=	
70106800	CHANGEABLE MESSAGE SN	CAL MO	18.000 X			=	
70300100	SHORT-TERM PAVT MKING	FOOT	400.000 X			=	
70300240	TEMP PVT MK LINE 6	FOOT	809.000 X			=	
70301000	WORK ZONE PAVT MK REM	SQ FT	3,173.000 X			=	
70400100	TEMP CONC BARRIER	FOOT	937.500 X			=	
70400200	REL TEMP CONC BARRIER	FOOT	1,950.500 X			=	
72000100	SIGN PANEL T1	SQ FT	96.250 X			=	
72900200	METAL POST TY B	FOOT	174.000 X			=	
78000100	THPL PVT MK LTR & SYM	SQ FT	110.000 X			=	
78000200	THPL PVT MK LINE 4	FOOT	7,772.000 X			=	
78000400	THPL PVT MK LINE 6	FOOT	694.000 X			=	
78000600	THPL PVT MK LINE 12	FOOT	551.000 X			=	
78000650	THPL PVT MK LINE 24	FOOT	77.000 X			=	
78008200	POLYUREA PM T1 LTR-SY	SQ FT	656.000 X			=	

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
78008210	POLYUREA PM T1 LN 4	FOOT	1,436.000 X	=			
78008230	POLYUREA PM T1 LN 6	FOOT	2,922.000 X	=			
78008240	POLYUREA PM T1 LN 8	FOOT	105.000 X	=			
78008250	POLYUREA PM T1 LN 12	FOOT	1,233.000 X	=			
78008270	POLYUREA PM T1 LN 24	FOOT	250.000 X	=			
78100100	RAISED REFL PAVT MKR	EACH	168.000 X	=			
78200405	GUARDRAIL MARKERS	EACH	6.000 X	=			
78201000	TERMINAL MARKER - DA	EACH	4.000 X	=			
81000600	CON T 2 GALVS	FOOT	1,936.000 X	=			
81000700	CON T 2 1/2 GALVS	FOOT	263.000 X	=			
81000800	CON T 3 GALVS	FOOT	109.000 X	=			
81000900	CON T 3 1/2 GALVS	FOOT	17.000 X	=			
81001000	CON T 4 GALVS	FOOT	742.000 X	=			
81001100	CON T 5 GALVS	FOOT	10.000 X	=			
81018500	CON P 2 GALVS	FOOT	77.000 X	=			

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
81018900	CON P 4 GALVS	FOOT	213.000 X	=			
81400100	HANDHOLE	EACH	8.000 X	=			
81400200	HD HANDHOLE	EACH	4.000 X	=			
81400300	DBL HANDHOLE	EACH	3.000 X	=			
81900200	TR & BKFIL F ELECT WK	FOOT	2,378.000 X	=			
85700200	FAC T4 CAB	EACH	2.000 X	=			
86000100	MASTER CONTROLLER	EACH	1.000 X	=			
86400100	TRANSCEIVER - FIB OPT	EACH	2.000 X	=			
87301215	ELCBL C SIGNAL 14 2C	FOOT	1,029.000 X	=			
87301225	ELCBL C SIGNAL 14 3C	FOOT	1,829.000 X	=			
87301245	ELCBL C SIGNAL 14 5C	FOOT	6,823.000 X	=			
87301255	ELCBL C SIGNAL 14 7C	FOOT	3,192.000 X	=			
87301305	ELCBL C LEAD 14 1PR	FOOT	3,412.000 X	=			
87301805	ELCBL C SERV 6 2C	FOOT	65.000 X	=			
87502480	TS POST GALVS 14	EACH	2.000 X	=			

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
87502500	TS POST GALVS 16	EACH	5.000 X				
87502520	TS POST GALVS 18	EACH	1.000 X				
87700170	S MAA & P 26	EACH	1.000 X				
87700240	S MAA & P 40	EACH	1.000 X				
87700310	S MAA & P 54	EACH	1.000 X				
87702985	STL COMB MAA&P 52	EACH	1.000 X				
87703020	STL COMB MAA&P 58	EACH	1.000 X				
87703030	STL COMB MAA&P 60	EACH	1.000 X				
87703090	STL COMB MAA&P 70	EACH	1.000 X				
87800100	CONC FDN TY A	FOOT	32.000 X				
87800150	CONC FDN TY C	FOOT	4.000 X				
87800200	CONC FDN TY D	FOOT	4.000 X				
87800400	CONC FDN TY E 30D	FOOT	15.000 X				
87800415	CONC FDN TY E 36D	FOOT	45.000 X				
87800420	CONC FDN TY E 42D	FOOT	75.000 X				

Revised 6-5-09

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
88030020	SH LED 1F 3S MAM	EACH	15.000	X	=	=	=
88030050	SH LED 1F 3S BM	EACH	2.000	X	=	=	=
88030100	SH LED 1F 5S BM	EACH	1.000	X	=	=	=
88030110	SH LED 1F 5S MAM	EACH	6.000	X	=	=	=
88030210	SH LED 2F 3S BM	EACH	2.000	X	=	=	=
88030220	SH LED 2F 5S BM	EACH	1.000	X	=	=	=
88030240	SH LED 2F 1-3 1-5 BM	EACH	3.000	X	=	=	=
88102717	PED SH LED 1F BM CDT	EACH	6.000	X	=	=	=
88200210	TS BACKPLATE LOU ALUM	EACH	21.000	X	=	=	=
88500100	INDUCTIVE LOOP DETECT	EACH	9.000	X	=	=	=
88600100	DET LOOP T1	FOOT	182.000	X	=	=	=
88700200	LIGHT DETECTOR	EACH	8.000	X	=	=	=
88700300	LIGHT DETECTOR AMP	EACH	2.000	X	=	=	=
88800100	PED PUSH-BUTTON	EACH	6.000	X	=	=	=

TOTAL \$

NOTE: *** PLEASE TURN PAGE FOR IMPORTANT NOTES ***

Revised 6-5-09

SEEDING CLASS 5 (MODIFIED) WET TO MESIC PRARIE	67
PAVEMENT BREAKING	69
FLARED SECTION REMOVAL	69
MANHOLES TYPE A, SPECIAL, 6' DIAMETER, TYPE 1 FRAME, CLOSED LID	70
PLUG EXISTING STORM SEWERS	71
DROP INLET, SPECIAL	71
STONE RIP RAP, CLASS SPECIAL	71
EROSION CONTROL BLANKET – SPECIAL (S150BN)	72
HEAVY DUTY EROSION CONTROL BLANKET – SPECIAL (P550)	72
FILTER FABRIC – INLET PROTECTION	72
FILTER FABRIC	72
TEMPORARY DITCH CHECKS	73
TEMPORARY EROSION CONTROL SEEDING	73
TREE PROTECTION AND PRESERVATION	73
SEDIMENT BASIN	74
STONE DRIVEWAY REPLACEMENT	75
SEEPAGE COLLAR	75
DECK DRAINS	75
FORM LINER TEXURED SURFACE	76
PERMANENT GROUND ANCHOR	82
REMOVAL OF EXISTING STRUCTURE	95
SPHERICAL BEARINGS	95
REMOVE EXISTING CULVERTS	100
FURNISHING SOLDIER PILES (BUILT-UP SECTIONS)	101
JUNCTION CHAMBER NO. 1	102
NAME PLATES (SPECIAL)	102
SITE ACCESS CONTROL	103
CONSTRUCTION OF TRACK	103
ROADWAY SWEEPING (SPECIAL)	105A
CN STANDARD FOR RAIL	106
CN STANDARD FOR LAYING RAIL	108
CN STANDARD FOR CONTINUOUSLY WELDED RAIL (CWR)	110
CN STANDARD FOR FIELD WELDING	117
CN STANDARD FOR JOINTS	119
CN STANDARD FOR TIMBER TIE INSTALLATION AND MAINTENANCE	121
CN STANDARD FOR TIE PLATE	124
CN STANDARD FOR RAIL ANCHORS	125
CN STANDARD FOR RAIL FASTENING	128
CN STANDARD FOR BALLASTING, SURFACING AND LINING	130
CN STANDARD FOR TRACK INSPECTION GUIDELINES	132
CN STANDARD FOR TRACK GEOMETRY	141
CN STANDARD FOR MINIMUM TRACK CONSTRUCTION STANDARDS	149
TRAFFIC SIGNAL SPECIFICATIONS	TS-1 thru TS-48
UNINTERRUPTIBLE POWER SUPPLY (SPECIAL KDOT)	TS-49
VIDEO DETECTION SYSTEM	TS-54

File Name	#	Special Provision Title	Effective	Revised
80208	45	Nighttime Work Zone Lighting	Nov. 1, 2008	
80129	46	Notched Wedge Longitudinal Joint	July 1, 2004	Jan. 1, 2007
80182	47	✓ Notification of Reduced Width	April 1, 2007	
80069	48	Organic Zinc-Rich Paint System	Nov. 1, 2001	Jan. 1, 2008
80216	49	Partial Exit Ramp Closure for Freeway/Expressway	Jan. 1, 2009	
* 80231	50	Pavement Marking Removal	April 1, 2009	
80022	51	✓ Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
80209	52	✓ Personal Protective Equipment	Nov. 1, 2008	
* 80232	53	Pipe Culverts	April 1, 2009	
80134	54	✓ Plastic Blockouts for Guardrail	Nov. 1, 2004	Jan. 1, 2007
80119	55	✓ Polyurea Pavement Marking	April 1, 2004	Jan. 1, 2009
80210	56	Portland Cement Concrete Inlay or Overlay	Nov. 1, 2008	
80170	57	✓ Portland Cement Concrete Plants	Jan. 1, 2007	
80217	58	Post Clips for Extruded Aluminum Signs	Jan. 1, 2009	
80171	59	✓ Precast Handling Holes	Jan. 1, 2007	
* 80218	60	Preventive Maintenance – Bituminous Surface Treatment	Jan. 1, 2009	April 1, 2009
* 80219	61	Preventive Maintenance – Cape Seal	Jan. 1, 2009	April 1, 2009
80220	62	Preventive Maintenance – Micro-Surfacing	Jan. 1, 2009	
80221	63	Preventive Maintenance – Slurry Seal	Jan. 1, 2009	
80211	64	Prismatic Curb Reflectors	Nov. 1, 2008	
80015	65	Public Convenience and Safety	Jan. 1, 2000	
34261	66	✓ Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	67	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80223	68	Ramp Closure for Freeway/Expressway	Jan. 1, 2009	
* 80172	69	Reclaimed Asphalt Pavement (RAP) <i>N/A</i>	Jan. 1, 2007	April 1, 2009
80183	70	✓ Reflective Sheeting on Channelizing Devices	April 1, 2007	Nov. 1, 2008
* 80151	71	✓ Reinforcement Bars	Nov. 1, 2005	April 1, 2009
* 80206	72	✓ Reinforcement Bars – Storage and Protection	Aug. 1, 2008	April 1, 2009
80224	73	Restoring Bridge Approach Pavements Using High-Density Foam	Jan. 1, 2009	
80184	74	Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs	April 1, 2007	
* 80233	75	Right-of-Entry Permit	April 1, 2009	
80131	76	✓ Seeding	July 1, 2004	Jan. 1, 2009
80152	77	Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	Jan. 1, 2009
80132	78	✓ Self-Consolidating Concrete for Precast Products	July 1, 2004	Jan. 1, 2007
80212	79	✓ Sign Panels and Sign Panel Overlays	Nov. 1, 2008	
80197	80	✓ Silt Filter Fence	Jan. 1, 2008	
* 80127	81	Steel Cost Adjustment	April 2, 2004	April 1, 2009
80153	82	✓ Steel Plate Beam Guardrail	Nov. 1, 2005	Aug. 1, 2007
80191	83	✓ Stone Gradation Testing	Nov. 1, 2007	
* 80234	84	Storm Sewers	April 1, 2009	
80143	85	✓ Subcontractor Mobilization Payments	April 2, 2005	
80075	86	Surface Testing of Pavements	April 1, 2002	Jan. 1, 2007
80087	87	Temporary Erosion Control	Nov. 1, 2002	Jan. 1, 2008
80225	88	Temporary Raised Pavement Marker	Jan. 1, 2009	
80176	89	✓ Thermoplastic Pavement Markings	Jan. 1, 2007	
20338	90	✓ Training Special Provisions	Oct. 15, 1975	
80185	91	Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs	April 1, 2007	
80149	92	✓ Variable Spaced Tining	Aug. 1, 2005	Jan. 1, 2007
80071	93	Working Days	Jan. 1, 2002	
80204	94	Woven Wire Fence	April 1, 2008	

MAINTENANCE OF ROADWAYS

Effective: September 30, 1985 Revised: November 1, 1996

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

STATUS OF UTILITIES TO BE ADJUSTED

Effective: January 30, 1987

Revised: July 1, 1994

Utility companies involved in this project have provided the following estimated dates:

<u>Name of Utility</u>	<u>Type</u>	<u>Location</u>	<u>Estimated Dates for Start and Completion of Relocation or Adjustments</u>
Com Ed	Over Head	McLean/Route 31	Start 5/4/09
AT&T	2400' underground duct	West side McLain	During Construction
Nicor	2400' underground main	West side McLain	During Construction
Comcast	2400' underground cable	East side McLain	During Construction

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

AGGREGATE SUBGRADE, 12" (300 mm)

Effective: May 1, 1990

Revised: January 1, 2007

This work shall be done in accordance with the applicable portions of Section 207. The material shall conform to Article 1004.04 except as follows:

1. Crushed Stone, Crushed Blast Furnace Slag, and Crushed Concrete will be permitted. Steel slag and other expansive materials as determined through testing by the Department will not be permitted.

Sieve Size

Percent Passing

DETAILS:

Traffic Control Plans
 District One Typical Pavement Markings
 Typical Markings for Closing State Highways

Traffic Control Plans
 District One Typical Pavement Markings
 Typical Markings for Closing State Highways

SPECIAL PROVISIONS:

Maintenance of Roadways
 Temporary Information Signing
 Traffic Control Protection for Temporary Detour

TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR

Effective: September 1, 1995
 Revised: January 1, 2007

When traffic is to be directed over a detour route, the Contractor shall furnish, erect, maintain and remove all applicable traffic control devices along the detour route according to the details shown in the plans.

Basis of Payment. This work will be paid for at the contract unit price **LUMP SUM FOR TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR.**

COARSE AGGREGATE FOR HOT-MIX ASPHALT (HMA) (D-1)

Effective : March 16, 2009

Revise Article 1004.03 of the Standard Specifications to read:

1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA). The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Gravel Crushed Gravel Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete

SITE ACCESS CONTROL

Description

The Contractor shall provide access through their construction site for Contractors working on the two adjacent projects constructing New Stearns Road to the East and West. This access will be via the construction entrance at McLean Boulevard and Route 31. Contractor will coordinate with adjacent projects to maintain this access.

Basis of Payment.

Site Access Control will be paid for as lump sum for SITE ACCESS CONTROL.

CONSTRUCTION OF TRACK

The Contractor shall construct new track for the temporary runaround as shown on the plans. Such construction shall include supplying all materials required for the track construction, including sub-ballast, ballast, railroad embankment, crossties, and other track materials. The Contractor will install the rail but CC&P will supply the rail. The CC&P railroad will construct all runaround track within 15' of the mainline. All Permanent track will be constructed by the CC&P Railroad. All materials used in the construction shall conform to CN Railroad Standard Specifications including, but not limited to, CN Engineering Procedures for the Installation, Adjustment, Maintenance and Inspection of CWR as required by FRA 49 CFR 213.119, dated January 6, 2006; CN Engineering Maintenance of Way Standard Practice Circulars dated April 2005 and subsequent revisions to same; All track construction will be in accordance with the appropriate CN track construction specifications and standard details. Those standards and details are made a part of these Special Provisions. Aggregate Size No. CA 6 (IDOT) may be substituted for the sub-ballast. Dolomite limestone ballast may be used for the temporary runaround track, provided it is approved by CN. Slag will not be allowed.

No roadbed or track work shall be performed on frozen ground or when ballast is frozen. The Contractor shall only perform work during time periods approved by the CN.

After the new railroad bridge is constructed and in operation, the Contractor shall remove the runaround track and all materials used in the construction of the runaround including sub-ballast, ballast, railroad embankment, crossties, rail and other track materials.

Materials used in the construction of the track shall conform to the following specifications:

Rail: New 115# FHH, new per CN Specifications, (CWR: continuous welded rail, not jointed)

Welds: Orgo-Thermit Field Welds or Flash Butt Welds. Welds shall be installed and tested as per CN specifications.

Only welders qualified by CN will be allowed to perform any of the field welding that will be required. CN-qualified welders include the following:

Bankhead Railway Services, Inc.
1080 Donald L. Hollowell Pkwy.
Atlanta, GA 30318
Phone: 404-894-7924
Fax: 404-894-7937

Orgo-Thermit, Inc.
3500 Colonial Drive North
Manchester, NJ 08759
Phone: (732)657-5781, Ext. 26
Fax: (732)657-1047

Railtech Boutet, Inc.
25 Interstate Dr., P.O. Box 69
Napoleon, OH 43545
Phone: (419)592-5050
Fax: (419)599-3630

Crossties: Mainline, 7" X 9"x8'-6", New, AREMA grade

Ballast: Mainline, Dolomite, Limestone or Granite, MTL-2 (clean 3" stone) per CN specifications.

Temporary Railroad Embankment: Embankment will conform to Section 205 of the Standard Specifications.

Tie Plates AREMA 14" plan 8 for 5-1/2 inch rail base.

Anchors Unit 5 drive on or equivalent

The Contractor shall provide written notification to CN at least thirty (30) days in advance of when track work will be completed to enable the anticipated track shift to the new alignments. The Contractor shall provide written confirmation at least ten (10) days prior to the actual date the new alignments will be ready for the track shift. All work on the new alignment track must be completed, including tamping and regulating, prior to initiating the shift of each track onto the new alignment track. The specific day of the track shift shall be established by the CN.

Payment:

SUB-BALLAST shall include all labor, material and transportation to install this pay item. Subballast shall be paid for per cubic yard.

BALLAST shall include all labor, material and transportation to install this pay item. Ballast shall be paid for per cubic yard.

The pay item TEMPORARY RAILROAD EMBANKMENT shall include all labor, material and transportation to install this item. This item shall also include removal of the ballast, sub-ballast and temporary railroad embankment of the runaround. Temporary Railroad Embankment will be paid for per cubic yard.

The pay item RAILROAD TRACK shall include all labor, equipment, lining, surfacing and material, required to install the Runaround track and any new track associated with the new bridge to the line and grade shown on the plans. This pay item shall include all materials including rail, ties, OTM (tie plates, spikes, anchors, joint bars and bolts with washers, etc.), equipment and labor, except for materials provided by CN, required to install the new track. Installation of the railroad track shall be measured per lineal foot of track installed.

The pay item RAILROAD TRACK, REMOVE shall include all labor, equipment and material required to remove the railroad runaround track and railroad track removal for the construction of the new bridge. This pay item will include the removal, transportation and storage of wood ties, rail and OTM at a location designated by CN. Rails and other track materials shall become the property of CN unless otherwise directed by these specifications or the Railroad Engineer. This item shall also include removal of the ballast, sub-ballast and temporary railroad embankment of the runaround.

ROADWAY SWEEPING (SPECIAL)

Description: This work shall consist of the pickup, removal, and satisfactory disposal of all sand, stones, debris, sediment trackout, dirt, refuse, and other similar rubbish, which has accumulated on the highway areas hereinafter described as the areas to be swept. After each sweeping cycle, all areas must present an appearance which is completely satisfactory to the Engineer. Adequate equipment and hand labor is to be provided to accomplish the sweeping cycles.

Limits of Sweeping for One Cycle: The Contractor shall sweep all hard surfaces and will include shoulders, turn lanes, and traveled lanes on the following:

Illinois Route 31 – ½ mile east of McLean Boulevard to ½ mile west of McLean Boulevard.

Sweeping Cycle: The initial sweeping cycle of the roadway shall commence upon award of the contract. Subsequent sweeping cycles shall be performed twice a day, with a minimum of 4 hours but no more than 5 hours between cycles. Sweeping shall be completed 6 days a week unless the Contractor or adjacent contracts are not working as determined by the Engineer. The sweeping shall end once all exposed earth has been covered by the Contractor or adjacent contracts with stabilized subbase, pavement, or germinated seeding as determined by the Engineer.

General Requirements: The Contractor is hereby informed and shall understand that sufficient equipment shall be provided and maintained so that the sweeping cycles are satisfactorily completed within the allotted time.

Personnel shall be made available with hand tools to sweep areas not accessible to sweeping units, or to loosen tightly compacted dirt on the roadway and shoulders. This work shall only be conducted during the contract specified times that allow lane closures and all traffic control will be in accordance with Standard 701311.

Method of Measurement: The satisfactory completion of all sweeping within the entire limits will be the standard measurement of payment for each cycle during the day.

Basis of Payment: This work will be paid for at the contract unit price per each for ROADWAY SWEEPING (SPECIAL) which price includes all labor, equipment, and supplies necessary to perform the above

ENGINEERING TRACK STANDARDS

15. When CWR is installed on a bridge with an open deck span, the following, when practicable, will be used:

OTHER TRACK MATERIALS

Length of continuous Open Deck Portion (ft)	Individual Span Length (ft)	Rail Anchor Requirements	Sliding Joint Requirements
100 ft. or Less	All Spans	No anchors	None required
Greater than 100 ft.	100 ft or Less	Box anchor every second tie*	None required
		Or	
	No anchors	Sliding joint(s) required	
	Greater than 100 ft.	Box anchor every second tie for 100' from fixed end of span*	None required
Or			
		No anchors	Sliding joint(s) required

* Box anchors are to be applied only to ties that are hook bolted to the span (generally every second tie). Box anchor spacing may be extended to every third tie if required to match the hook bolt spacing.

ENGINEERING TRACK STANDARDS

- a. Manager B & S to identify fixed ends of spans prior to installing CWR.
 - b. Prior to anchoring CWR on open deck steel TPG, TT, and DT spans, the Manager B & S will confirm the requirements for bridge traction bracing.
 - c. Anchor requirements and pattern should be confirmed with the Manager B & S.
 - d. Box anchor every tie for a minimum of 200' off each end of open deck portion.
 - e. On timber span bridges, only box anchor the ties that are attached to the span with boat spikes, usually every other tie or as directed by the Regional Chief Engineer.
 - f. Movable spans will be anchored as directed by the Chief Engineer.
 - g. Where elastic fasteners provide longitudinal restraint they will be considered equivalent to anchoring.
16. CWR installed on a ballast deck bridge or span will be box anchored a minimum of every second tie.

3.1 Rail Anchors

ENGINEERING TRACK STANDARDS

TS 7.0 - Track Inspection Guidelines

1. The allowable train speed on a subdivision, or portion thereof, shall be used to determine the class of track as follows:

Table 1

Track Class	Maximum Allowable Speed, mph			
	Canadian Lines		US Lines	
	Passenger	Freight	Passenger	Freight
1	15	10	15	10
2	30	25	30	25
3	60	40	60	40
4	80	60	80	60
5	95*	80	90	80

*For LRC Trains, 100 mph

- a. Minimum track inspection frequencies in Canada shall be as outlined in the Transport Canada Track Safety Rules. Minimum track inspection frequencies in the US shall be as outlined in the FRA Track Safety Standards.
 - b. All persons engaged in making inspections will prepare and sign a record of each inspection on the day the inspection is made in accordance with applicable Transport Canada or Federal Railroad Administration Rules. The report shall be retained for at least one year after the date of the inspection.
 - c. The Track Supervisor must know that any person designated to do track inspections is qualified and must ensure the quality of inspection.
2. Walking inspections on class 3, 4, and 5 main track and sidings, and on class 1 and 2 main tracks that carry more than 25 million gross tons of traffic per year should be carried out in such a manner that priority locations and areas of known problems, such as those outlined in Table 2, are monitored.

TRACK INSPECTION GUIDELINES

7.0 Track Inspection

ENGINEERING TRACK STANDARDS

TABLE 2 - PRIORITY LOCATIONS FOR WALKING INSPECTIONS

- Rail**
- a. areas with high numbers of fatigue related rail defects (based on rail flaw detection reports and CWR Failure Reports) and in service rail failures
 - b. rail defects protected by joint bars
 - c. rail damage which has been alleviated by grinding
 - d. areas approaching condemning limits for wear (based on wear limits in Track Standards 1.0)
 - e. locations prone to overstressed rail, such as;
 - i. areas where rail repairs have been made (too little or too much rail installed)
 - ii. curves
 - iii. areas of severe rail corrugation
 - iv. areas of heavy brake application
 - v. areas of buffer rails or any joints adjoining CWR
 - vi. areas of steep grades
 - vii. areas of insufficient or damaged rail anchors, or significant rail movement.
 - viii. derailment sites or derailment damaged rail
- Joints**
- a. Cracked
 - b. Broken
 - c. pumping
- Wood Ties**
- a. clusters of defective ties
 - b. gauge problem areas (13mm (1/2") or greater dynamic wide gauge using data from T.E.ST. Car)
 - c. excessive loss of cant as detected by T.E.ST. Car
 - d. areas prone to hanging ties, such as insulated joints, road crossings and bridge approaches
 - e. areas of high or broken spikes or timber tie screws
 - f. areas with high dynamic braking such as home signals, PSOs

ENGINEERING TRACK STANDARDS

- Concrete Ties
- a. loose or missing clips or insulators
 - b. signs of rail movement
 - c. loose or damaged shoulder castings
 - d. signs of rail seat abrasion
 - e. areas repaired by the use of Laird Clips
 - f. areas with historical clip failure.

- Ballast
- a. sink holes
 - b. mud pumping locations
 - c. frost heave locations
 - d. areas of weak ballast shoulders
 - e. areas where recent program work has left ballast disturbed

- Roadbed / Slope Stability
- a. areas historically prone to track geometry problems (surface, line, cross level)
 - b. slope stability problems (slip, rock falls or mud slides)

- Drainage
- a. areas prone to ponding water (beaver dams, drainage ditches, blocked culverts, etc.)
 - b. areas of high or increased surface run-off (near forestry operations, industrial development, high water tables, etc.)
 - c. areas prone to ice build-up under the plate
 - d. culverts

- Transition Areas
- a. bridge approaches
 - b. concrete tie to wood tie transition areas

- Deraillment Areas
- a. substandard conditions or temporary repairs
 - b. monitor until permanent repairs have been completed

TRACK INSPECTION GUIDELINES

7.0 Track Inspection

ENGINEERING TRACK STANDARDS

- 3. Walking inspections on class 1 and 2 main track and sidings that carry less than 25 million gross tons of traffic will be performed as directed by the Regional Chief Engineer.
- 4. Each turnout, railway crossing at grade, moveable bridge lift rail, derail, sliding joint, or other transition device must be inspected on foot at least monthly.
 - a. In the case of track that is used less than monthly, each turnout, railway crossing at grade, moveable bridge lift rail, derail, sliding joint, or other transition device must be inspected on foot before it is used.
- 5. Walking inspections of public crossings shall be undertaken at least annually, with no more than 12 calendar months between inspections.

- Joint Bar Inspections
- 6. Joints in CWR require on foot inspection in the following classes of track:
 - Class 2 – only if passenger trains operate
 - Class 3 and above – required
 - 7. Joints requiring on foot inspection are any joints located in a CWR string, or any joint in a segment of rail between CWR strings that is less than 200 ft apart.
 - a. Each joint in CWR track shall be inspected on foot each calendar year at the frequency indicated by class of track and annual tonnage in the table 3:
 - b. Where both passenger and freight trains operate over a portion of CWR track, the greater frequency in the table must be used.

ENGINEERING TRACK STANDARDS

Table 3 Periodic on Foot Joint Bar Inspection Frequencies

Minimum Number of Inspections Per Calendar Year ¹					
Class of Track	Freight Trains operating over track with an annual tonnage of:			Passenger Trains operating over track with an annual tonnage of:	
	less than 40 MGT	40 to 60 MGT	greater than 60 MGT	less than 20 MGT	greater than 20 MGT
Class 5 & above	2x	3x ²	4x ²	3x ²	3x ²
Class 4	2x	3x ²	4x ²	2x	3x ²
Class 3	1x	2x	2x	2x	2x
Class 2	0	0	0	1x	1x
Class 1	0	0	0	0	0
Excepted Track	0	0	0	n/a	n/a

4x = Four times per calendar year, with one inspection in each of the following periods: January to March, April to June, July to September, and October to December; and with consecutive inspections separated by at least 60 calendar days.

3x = Three times per calendar year, with one inspection in each of the following periods: January to April, May to August, and September to December; and with consecutive inspections separated by at least 90 calendar days.

2x = Twice per calendar year, with one inspection in each of the following periods: January to June and July to December; and with consecutive inspections separated by at least 120 calendar days.

1x = Once per calendar year, with consecutive inspections separated by at least 180 calendar days.

TRACK INSPECTION GUIDELINES

7.0 Track Inspection

ENGINEERING TRACK STANDARDS

Table 3 footnotes

¹Where a track owner operates both freight and passenger trains over a given segment of track, and there are two different possible inspection interval requirements, the more frequent inspection interval applies.

²When extreme weather conditions prevent a track owner from conducting an inspection of a particular territory within the required interval, the track owner may extend the interval by up to 30 calendar days from the last day that the extreme weather condition prevented the required inspection.

- If any of the following conditions contained in Table 2 are found at a joint in CWR and are not a regulatory defect and cannot be corrected immediately, on foot follow up inspections will be required until such time as the condition is corrected.

ENGINEERING TRACK STANDARDS

Table 4 Rail Joint Conditions and Remedial or Corrective Actions

Rail Joint Condition	Action
Visible cracks in joint bar	Replace bar
Loose bolts	Tighten bolts
Bent bolts	Replace bolts or re-inspect as per 7.0, Table 2
Missing bolts ²	Replace bolts
Tie(s) not effectively supporting joint	Tamp tie(s) Replace or repair tie(s)*
Broken or missing tie plate(s)	Replace tie plate(s)*
Deteriorated insulated joint	Replace/repair joint*
Rail end batter (More than 3/8" in depth and more than 6" in length measured with a 24" straight-edge)	Repair by welding joint or removing rail*
Rail end mismatch reaches limits specified by 49 CFA 213.115 (US) or TC Track Safety Rules, Part II, Subpart D, IV (Canada)	Add or adjust rail anchors, tighten bolts, add or remove rail at appropriate time*
Longitudinal rail movement greater than 2"	Surface joint immediately
Wide rail gap greater than 1.5"	Adjust rail gap and secure joint*
Joint vertical movement (profile) that exceeds 75% of the allowable threshold for the designated class of track ³	Surface joint*
Fouled ⁴ ballast present in conjunction with joint vertical movement (profile) that exceeds 75% of the allowable threshold for the designated class of track	Surface joint and provide drainage*
Joint lateral movement (in a curve or spiral) that reaches 3/4" ³	Correct lateral movement*

TRACK INSPECTION GUIDELINES

7.0 Track Inspection

¹ Action may also consist of placing a speed restriction or removing the track from service.
² A minimum of 2 bolts per rail must be in place at each joint.
³ Joint lateral and vertical movement is the apparent visible movement measured at the joint.
⁴ Fouled ballast is defined as ballast that is so contaminated with fines that it contains standing water within the track structure at joints
 * Or conduct follow-up inspections every other week until the defect is repaired or removed

ENGINEERING TRACK STANDARDS

9. In the US, if a cracked or broken joint bar is found by an inspector during a regular track inspection, monthly turnout and track railway crossing at grade, lift rail assembly or transition device inspection, or periodic, follow up, or special inspection, a fracture Report must be completed and sent to the FRA.
 - a. The Fracture Report must be completed at the time the cracked or broken bar is found. The Fracture Report must contain the following required information:
 - Railroad name
 - Date of inspection
 - Milepost
 - Subdivision
 - Class of track
 - Annual MGT for the previous year
 - Rail section
 - Type of bar (standard, insulated or compromise)
 - Number of holes in the bar (4 hole or 6 hole bar etc.)
 - Location of crack or break
 - Length of crack (in inches)
 - Gap between rail ends
 - Amount and length of rail batter
 - Tread and gauge mismatch
 - Estimated vertical and lateral movement of the joint

ENGINEERING TRACK STANDARDS

- b. In the US, Fracture Reports must be sent to the FRA by July 31 for the preceding six-month period (January 1 to June 30) and by January 31 for the preceding six-month period (July 1 to December 31).
10. Jointed and CWR main line track requires on foot inspection of all joints in bridges be undertaken at the following frequencies:
- track with less than 10 MGT annually - once per year.
 - track with 10 MGT or great annually - twice per year.
11. When performing inspections, be aware of line or surface deviations possibly due to insufficient ballast.

Insufficient ballast is defined as either end of the tie fully exposed or 1/2 empty cribs of 6 or more consecutive ties coupled with track surface or alignment deviations that exceed 75% of allowable threshold for designated class of track. This requirement applies when the ambient temperature exceeds 85° F or is expected to exceed 85° F within the next 24 hours. When this combination exists, reduce the speed to the next lower class of track and continue to monitor until repaired

TRACK INSPECTION GUIDELINES

7.0 Track Inspection

ENGINEERING TRACK STANDARDS

12. Turnouts must be inspected by a qualified track inspector at the following minimum frequencies:

Type of Inspection	Description
Routine Inspection	Each time the turnout is crossed it shall be visually inspected for defects and noted on the track inspection report.
Walking Inspection	Each turnout shall be inspected on foot at least monthly and observing overall condition, except that in the case that track is used less than monthly each turnout will be inspected on foot before the track is used. Inspections will be noted on the switch inspection report.
Detailed Inspection	A thorough detailed observation of the condition of all components in each turnout shall be performed annually. Inspections will be noted on the switch inspection report.

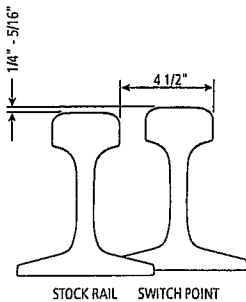
13. In addition, all main track switches in class 3 through 6 track shall be operated in all its positions during one inspection in every 3 month period.
14. A report of each Walking Inspection and Detailed Inspection must be prepared on a prescribed turnout inspection form on the same day that the inspection is performed. The inspection report must be signed by the person making the inspection, and retained at the designated location for at least one year.

ENGINEERING TRACK STANDARDS

15. Description of items to check and acceptable conditions are listed in RM 3500.
16. There must be no broken or bent clips or stop blocks. Switch rods or connecting rods must not be excessively bent, broken or corroded to a depth exceeding 1/8 inch (3 mm).
17. Welding on connecting rods is not allowed.
18. The top surface of switch points shall be inspected to ensure that the outer edge of the wheel tread cannot contact the gauge side of the stock rail.
19. Switch points are manufactured such that the running surface is 1/4" to 5/16" (6 to 8 mm) higher than the stock rail, as measured at the location where the distance between gauge face of stock rail and gauge face of switch point when tight against the stock rail is 4-1/2" (115 mm). When this vertical dimension is reduced by wear to 3/16" (5 mm), the location must be monitored for signs of wheel contact on the stock rail. Where contact is evident, the switch point must be renewed or the stock rail ground to restore the 1/4" to 5/16" (6 to 8 mm) dimension.

TRACK INSPECTION GUIDELINES

FIGURE 1: Switchpoint/Stock Rail Minimum Clearance



7.0 Track Inspection

CN
NC 7881E

TRACK STANDARD
March 2007

Page 125

ENGINEERING TRACK STANDARDS

20. On point ends which are chipped or broken the thickness must not exceed 3/16" (5 mm).
21. Guard rail bolts and fasteners must be intact and tight. Guard rail wear surfaces must not be worn more than 5/8".
22. Guard Check Gauge and the Guard Face Gauge shall be within the limits shown in Table 5:

TABLE 5. Guard Check Gauge and Guard Face Gauge

Gauge of track	MINIMUM Guard Check Gauge	MAXIMUM Guard Face Gauge ^b
1	54 1/8"	53 1/4"
2	54 1/4"	53 1/8"
3,4	54 3/8"	53 1/8"
5,6	54 1/2" ^c	53"

^a the distance from the gauge line of a frog to the guard line of its guard rail or guarding face, as measured across the track at right angles to the gauge line. See Figure 2.

^b the distance between guard lines as measured across the track at right angles to the gauge line. See Figure 2.

^c at points of heavy point frogs equipped with through gauge plates, 54 3/8" (1381 mm)

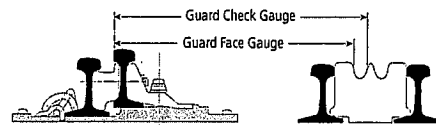


Figure 2. Guard Check Gauge and Guard Face Gauge Measurement Locations.

CN
NC 7881E

TRACK STANDARD
March 2007

Page 126

ENGINEERING TRACK STANDARDS

23. Frogs will be inspected to determine bolts are of the correct size, length and grade. Loose, missing or broken bolts must be replaced.
24. Inspect frog plates for fit and firm attachment to ties or gauge plates. Lateral wear should not exceed 1/8".
25. The flangeway depth measured from a plane across the wheel bearing area of a frog on Class 1 track may not be less than 1 3/8" or less than 1 1/2" on class two through 6 track.
26. If a frog point is chipped, broken or worn more than 5/8" down and 6" back, operating speed over that frog may not be more than 10 m.p.h.
27. If the tread portion of a frog casting is worn down more than 3/8" (10 mm) below the original contour, operating speed over that frog may not be more than 10 m.p.h.
28. Clearance between the horn and hold-down housing on spring frogs must not exceed 1/4" (6 mm), and the horn must not bind on the hold down housing.
29. Each spring must have a compressive force sufficient to hold the wing rail against the point rail. Note, the wing on 115 lb., 132 lb., and 136 lb. spring frogs is designed to be open 3/8" (10 mm) at the half inch point. The maximum opening is 1/2".
30. The retarder, on frogs so equipped, must close completely with a cycle time from 1 minute to 3 minutes after opening.

TRACK INSPECTION
GUIDELINES

7.0 Track Inspection

CN
NC 7881E

TRACK STANDARD
March 2007

Page 127

ENGINEERING TRACK STANDARDS

31. Inspections of all railway crossings at grade shall be conducted as follows:
 - a. Every time the crossing is traveled over by hi-rail it shall be visually inspected for defects.
 - b. Crossings shall be inspected at least monthly on foot measuring gauge and looking closely at the condition of all components.
32. Unsafe conditions on either railway which cannot be corrected immediately will be reported to the Rail Traffic Controller or Train Dispatcher and proper action taken to protect traffic on all routes.

CULVERT INSPECTION

33. General inspections of all culverts and surface drainage conditions will be conducted by track Inspectors in conjunction with track inspections.

GAS WELDED RAIL INSPECTION POLICY

34. Main track on the core route that contains gas welded continuous welded rail, the minimum inspection frequency is amended as follows:
 - a. Three times weekly with at least 1 calendar day between inspections.
 - b. The Track Supervisor must make every effort to personally perform at least one inspection per week.
 - c. Additional inspections on secondary main tracks and other tracks shall be as directed by the Regional Chief Engineer.

This policy shall be in effect from October 1 to March 1 and other times when the ambient temperature is expected to fall below +25° Fahrenheit.

CN
NC 7881E

TRACK STANDARD
March 2007

Page 128

ENGINEERING TRACK STANDARDS

EXTREME COLD WEATHER INSPECTION POLICY

35. Daily cold weather track inspections will be under taken on core lines under the following conditions:

Territory	Track conditions	Either Condition Met	
		Extreme Low Temperature	Rapid Drop in Temperature
Canadian Lines	* Susceptible to Cold	less than -25°C	Greater than 25° Celsius within a 24-hour period.
	All Track	less than -35°C	
U.S. Lines North of Chicago	* Susceptible to Cold	less than -25°F	
	All Track	less than -30°F	
Between Chicago and Centralia	All Track	less than -10°F	
South of Centralia	All Track	less than -5°F	

TRACK INSPECTION GUIDELINES

36. Lines shall be considered susceptible to cold weather related rail failure if any one of the following conditions applies:

- a. Non-signalled territory.
- b. Jointed and/or gas welded rail.
- c. Rail of 115 lb. weight or lighter subject to 286K lb. loading.
- d. Rail with a history of frequent defects.

37. Additional track inspections should also be considered during the first "cold snap" of the season.

7.0 Track Inspection

ENGINEERING TRACK STANDARDS

COLD WEATHER TEMPORARY SPEED RESTRICTIONS

38. In areas identified as having rail with a history of frequent defects (a list of such areas will be generated by headquarters engineering each year) the following cold weather temporary speed restrictions will be put in place:

When temperature is below -25°C in Canada or -10°F in the U.S. all freight trains shall be restricted to a speed of 35 mph or track speed whichever is more restrictive and all passenger trains shall be restricted to a speed of 60 mph or track speed, whichever is more restrictive.

EXTREME HOT WEATHER POLICY FOR CWR TERRITORY

39. Whenever ambient (air) temperature exceeds those shown in the table below or during periods of significant seasonal increase in temperature (i.e. Spring), hot weather track patrols must be undertaken between the hours of 11:00 and 20:00.

Territory	Ambient Temperature
Canadian Lines	More than 30°C
U.S. Lines North of Centralia	More than 95°F
Lines South of Centralia	More than 100°F

40. Hot weather patrols may be suspended if temperatures have stabilized and previous inspections have shown that the track structure is stable and complies with standards.

HOT WEATHER TEMPORARY SPEED RESTRICTIONS

41. Hot weather TSOs must be applied on portions of Subdivisions where the above temperature thresholds are met and any one of the following track conditions are known to exist:

ENGINEERING TRACK STANDARDS

- a. lateral or vertical movement of rail (i.e. "wavy" or improperly seated rail);
 - b. deviations in alignment;
 - c. movement of ties (i.e. gaps or voids in ballast at tie ends or in cribs);
 - d. insufficient ballast section (i.e. weak shoulders, empty cribs);
 - e. rail running through anchors;
 - f. "tight steel" (i.e. areas of frequent dynamic brake application, approaches to PSO's, bottoms of grades, etc.);
 - g. recently completed track work;
 - h. grade instability; or
 - i. any other areas having a history of lateral instability or where Track Supervisors have a concern.
42. The magnitude and duration of speed restrictions applied during hot weather under this policy must be commensurate with track and weather conditions. As a guide, speeds ordered for freight trains will be 10 mph less than that normally authorized or 30 mph whichever is greater. Unless otherwise restricted, passenger trains will be limited to 65 mph. Except in extraordinary circumstances, hot weather TSO's are to be in effect between the hours of 1200 noon and 20:00.

TRACK INSPECTION
GUIDELINES

NOTE: This policy does not supersede timetable instructions governing either the operation of unit trains over specified branch lines or the movement of trains on subdivisions equipped with HBD talkers broadcasting ambient temperature.

7.0 Track Inspection