

Bridge Inspection										
Bridge File Number	75193 E-1 Bridge				Form Type	PSR				
Year Built/Year Supstr	1961/1961				Lot No.	4				
Bridge or Town Name	SPRUCE GROVE				Inspector Name	Eric Carcoux				
Located Over	CNR				Inspector Class	BR CLS A				
Located On	16A:16 R1 0.981				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	10-Aug-2012				
Legal Land Location	SW SEC 6 TWP 53 RGE 26 W4M				Data Entry By	Theresa Lacusta				
Longitude, Latitude	-113:50:05, 53:32:36				Data Entry Date	10-Oct-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Stew Hagan				
Contract Main. Area	CMA11				Review Date	13-Sep-2012				
Clear Roadway/Skew	11.6 / -45 deg. (LHF)				Dept. Reviewer Name	Brent Herrick				
AADT/Year	26,380 / 2011 (A)				Dept. Review Date	10-Oct-2012				
Road Classification	RAD-412.4-120				Follow-Up By					
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 43 GIRDER	Semi	CS2 56 GIRDER	Train	CS3 74 GIRDER	----> On Critical Spans ---->Critical Member			
Design Loading:	HS20						----> Primary Span			

Posting Information									
Required Vert. Clearance Posting (m)									
Posted Vertical Clearance (Y/N)		No							
Posted:	Lane	EB	On Bridge (m)	In Advance (Y/N)	Lane	WB	On Bridge (m)	In Advance (Y/N)	
Remarks									
Required Load Posting (t)		Single		Semi		Truck Train			
Posted Loading (t)		Single		Semi		Truck Train			
Posted:	Lane	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Posted:	Lane	WB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)		
Remarks		Not required.							
Hazard Marker At Bridge (Y/N)		No							
Remarks		Not required.							
Other Sign Types		Curve, Speed, Slippery When Wet.							

Utilities (Located at)										
Utility Attachments	POWER UTILITIES-POWER LINE									
Telephone	South r/w				Gas					
Power	2 wires North r/w.				Municipal					
Others					Problem (Y/N)	No				
Remarks										

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Road is on horizontal "S" curve with a crest curve limiting sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	11.400			
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		4	6	
Length (m)	91.000			
Current Standard (Y/N)	Yes			
Termination Type	Turned Down			
Drainage		6	6	
Approach Road General Rating		6	6	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 3 Spans, Lengths(m): 19.5-19.5-19.5, A-Ident Number:)					
Special Features					
Special Feature		N	N	No key - locked.	
(SType : CATH PROTECTION)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now					
Wearing Surface		8	7	HDO w/fibres	
(Material Type : CONCRETE)					
(Thickness(mm) : 150)					
Lateral Connection Problem (Y/N)		No			
Deck Top		N	N		
Deck Rideability		7	7		
Deck Joints		7	7		
Temperature (deg. C)		22			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
75	E. abut				
75	E. pier				
75	W. pier				
75	W. abut				
Deck Drainage		6	6	No deck drains.	
Drains Clogged (Y/N)		No			
Curbs/Median		8	7		
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail		8	7		
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts		8	7		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		8	7		
(Type : GALVANIZED)					
Sidewalk		X	X		
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now				1	
Girders		5	3	Typical cracking at shoe plate. Vertical crack @ East end SP2G1.(photo) (Not debonding)	
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : 21)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 3 Spans, Lengths(m): 19.5-19.5-19.5, A-Ident Number:)				
Diaphragms/Cross Frame		6	6	Superficial rust.
Bearings		6	6	
Temperature (deg. C)	22			
(Expansion Type : SLIDING PLATE)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Stained from train exhaust. Some salt staining. Numerous patches.
Stains (Percent Area)	5			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		5	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		X	7	
Piers/Bents				
(Type : PIER-COLUMN)				Pier caps have been patched.
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 7:7)				
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		6	6	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	
Traffic Safety Features		X	X	
Type				
Slope Protection		5	5	East slope protection is humped, south side has started to break up. Both headslopes have gaps of 150mm or more to indicate sliding. Some repairs done.
(Type : CONCRETE; CONCRETE)				
Bank Stability		5	5	
Drainage		6	6	
Grade Separation General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	61.1/50.0	Sufficiency Rating (Last/Now) (%)	60.1/53.6	Est. Repl. Yr	2035	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor cracking at SP2G1.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Shane Hall		Previous Assistant's Name				
Next Inspection Date	10-May-2014		Previous Inspection Date	06-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							