

Bridge Inspection										
Bridge File Number	78360 -1 Bridge					Form Type	PSR			
Year Built/Year Supstr	1989/1989					Lot No.	2			
Bridge or Town Name	SPRUCE GROVE					Inspector Name	Wade Nanninga			
Located Over	16:14 R1 22.326;16:14 L1 22.335					Inspector Class	BR CLS A			
Located On	25136:02 R1 0.200;25136:02 L1 0.200					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	14-Nov-2012			
Legal Land Location	NW SEC 11 TWP 53 RGE 27 W4M					Data Entry By	Theresa Lacusta			
Longitude, Latitude	-113:53:07, 53:34:09					Data Entry Date	22-Jan-2013			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA11					Review Date	15-Jan-2013			
Clear Roadway/Skew	17 /					Dept. Reviewer Name	Brent Herrick			
AADT/Year	3,000 / 2012 (E)					Dept. Review Date	22-Jan-2013			
Road Classification	RAU-209-110					Follow-Up By				
Detour Length (km)	10									
Allowable Load (t):	Single	CS1 28			Semi	CS2 49		Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	CS750								----> Primary Span	

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 16 L1 5.4m, 16 R1 5.4m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	EB	On Bridge (m)	5.6	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.5	In Advance (Y/N)	Yes
Remarks		Change vertical clearance signs to 5.4m as per noted required VC.										
Required Load Posting (t)			Single			Semi			Truck Train			
Posted Loading (t)			Single			Semi			Truck Train			
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Remarks		Not required.										
Hazard Marker At Bridge (Y/N)		No										
Remarks		Not required.										
Other Sign Types		Information, Warning, Speed, Bump sign SE.										

Utilities (Located at)									
Utility Attachments									
Telephone						Gas			
Power	3 wires SE r/w along EBL ramp.					Municipal			
Others	Street lights					Problem (Y/N)	No		
Remarks									

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	On/off ramps.
Vertical Alignment		7	7	
Roadway Width (m)	8.500			Slight tear in SW rail. Still functioning. Not thrie beam. 6 broken posts @ NW corner - photo.
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		4	4	
Length (m)	19.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		4	4	NW drain trough cracked/spalled.06-Oct-2010 SE settled between trough & wingwall- covered with snow.
Approach Road General Rating		7	7	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : CBT, 2 Spans, Lengths(m): 40-40, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now	30.0				
Wearing Surface			4	4	SBL & NBL potholes & birdbaths forming - photo.
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			4	3	(Small nick in extrusion south abutment northbound lane. Bladder ok. 11/Dec/2008) Median curb cover plate bent @ North abutment. Missing 2 cover plate bolts @ SE. Appears to be leaking @ SE corner, evident by staining of abutment seat/breastwall. Cover plate on sidewall @ SE is lifted up and 12/16 bolt heads have pulled through plate - photo.-06-Oct-2010
Temperature (deg. C)		15			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
80			N. abut		
90			S. abut		
Deck Drainage			3	3	Seepage from weep tubes causing damage to girders - photo. Birdbath along wheel path -leaking S abut.
Drains Clogged (Y/N)		No			
Curbs/Median			5	5	Median has transverse cracks over its length. Typical vertical cracks in ext fascia at bridgerail posts.
(Curb Type : Standard)					
Scaling (Percent Area)		1			
Bridge Rail			9	9	Dirty.
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts		9	N		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			8	8	
(Type : GALVANIZED)					
Sidewalk			6	N	Approaches to sidewalks settled about 300mm.-06-Oct-2010
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last				4	
Now					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CBT, 2 Spans, Lengths(m): 40-40, A-Ident Number:)				
Girders		3	4	Weeping tubes were functioning & cause stain & cracks in girders. Rust spots on S2/G16, from leakage. Typical DBT cracking @ ends. 15 girders in span 2 have had HLD repaired.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
(Number Of Girders : 36)				
Diaphragms/Cross Frame		8	8	
Bearings		8	8	Pier, need snooper to inspect pier bearings. Viewed with binoculars.
Temperature (deg. C)	0			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Stained at weep tubes.
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		3	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	Vertical cracks on both breastwalls.
Wingwalls		6	6	West wingwall, both abutments have horizontal & vertical cracks.
Piles		N	N	
Paint/Coating		4	4	Cracked/peeling.
Abutment Stability		8	8	
Scour/Erosion		4	4	North headslope, erosion gully - 0.2x0.2x3m.
Piers/Bents				
(Type : PIER-COLUMN)				Hairline map cracks @ 0.4m spacing on cap. Hairline horizontal crack @ 0.5m spacing on columns.
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				Pier shafts
(Total Number of Bearing Piles : 0)				
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		5	5	Finish peeling north side pier near c/l, dripping from deck. Capseal. Grey.
(Colour Description :)				
(Colour Code :)				
Pier Stability		9	9	
Scour		X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Debris (Y/N)	No			
Substructure General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		9	9	
Traffic Safety Features		9	9	Median only.
Type	Guardrails			
Slope Protection		4	4	Dirt topped with washed pea gravel. (Erosion gully 0.5 deep x 1.5m wide @ NW - photo.-06-Oct-2010) 0.2x0.2x3m on NW headslope.
(Type : NONE; NONE)				
Bank Stability		4	6	
Drainage		6	5	
Grade Separation General Rating		4	4	

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	2013	Patch potholes on approaches.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Repair bent cover plate & replace broken bolts. Replace other bolts with washers so they don't pull through the cover plate, if not done already.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION	2013	Extend weep tubes					
OTHER ACTION	2013	Change vertical clearance signs to meet "required VC" noted.					
OTHER ACTION	2013	Recast bearing grout pad @ West light standard on bridge.					
OTHER ACTION	2013	Repair guardrail @ NW corner.					
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Structural Condition Rating (Last/Now) (%)	50.0/55.6	Sufficiency Rating (Last/Now) (%)	49.3/51.8	Est. Repl. Yr	2065	Maint. Req. (Y/N)	Yes

Special Comments for Next Inspection		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	14-Aug-2014	Previous Inspection Date	06-Oct-2010
Inspection Cycle (Default) (months)	21		
Comment			