

Bridge Inspection										
Bridge File Number	78802 S-2 Bridge				Form Type	SG				
Year Built/Year Supstr	1995/1995				Lot No.	2				
Bridge or Town Name	SPRUCE GROVE				Inspector Name	Kris Bosters				
Located Over	16:16 L1 0.000;16:16 R1 0.000;RAMP 99-1 C				Inspector Class	BR CLS A				
Located On	60:04 L1 3.171				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	17-Dec-2012				
Legal Land Location	NE SEC 9 TWP 53 RGE 26 W4M				Data Entry By	Theresa Lacusta				
Longitude, Latitude	-113:45:49, 53:34:11				Data Entry Date	07-Jan-2013				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux				
Contract Main. Area	CMA11				Review Date	03-Jan-2013				
Clear Roadway/Skew	10.4 /				Dept. Reviewer Name	Paul Catt				
AADT/Year	14,010 / 2011 (A)				Dept. Review Date	18-Jan-2013				
Road Classification	RAU-209-110				Follow-Up By					
Detour Length (km)	1									
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 5.7m, 16 R1 5.7m										
Posted Vertical Clearance (Y/N)		Yes										
Posted:	Lane	EB	On Bridge (m)	5.5	In Advance (Y/N)	No	Lane	WB	On Bridge (m)	5.5	In Advance (Y/N)	Yes
Remarks		Westbound clearance posted on Northbound structure.										
Required Load Posting (t)		Single				Semi				Truck Train		
Posted Loading (t)		Single				Semi				Truck Train		
Posted:	Lane	NB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)					
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.										

Utilities (Located at)									
Utility Attachments									
Telephone	SW adjacent to bridge.				Gas				
Power					Municipal				
Others	Street lights.				Problem (Y/N)	Yes			
Remarks		Cover plate missing at light standard on bridge - photo.							

Approach Road					
		Last	Now	Explanation of Condition	
Horizontal Alignment		7	7	Grade separation.	
Vertical Alignment		7	7		
Roadway Width (m)		10.900		Wide cracks in ACP at approaches. Ravelling at joints.-photos	
Approach Bump		7	4		
Guardrail (Y/N)		Yes		Snow covered, damage noted as previous inspection appears to have been repaired.	
Guardrail		4	N		
Length (m)		57.000			
Current Standard (Y/N)		No			
Termination Type		Turn Down			
Drainage		4	N	NE trough failed and water drains under trough & slope protection - photo.-06-Oct-2010 Snow covered.	
Approach Road General Rating		7	7		

Superstructure							
Bridge Component		Last		Now		Explanation of Condition	
(Primary Span : WG, 3 Spans, Lengths(m): 34-34-28, A-Ident Number: A1257-02)							
Special Features							
Special Feature						X	
(Type :)							
Special Feature						X	
(Type :)							
Wearing Surface/Deck Top Detail Ratings							
	N (%)	1 (%)	2 (%)	3 (%)	Snow along curbs.		
Last							
Now	20.0						
Wearing Surface				5	5	3m long x 40mm gouge has been sealed. Transverse cracking reflecting through the seal coat.	
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)							
(Thickness(mm) : 50)							
Deck Top				N	N		
Deck Rideability				8	8		
Deck Joints				4	6	Finger plate slapping under traffic.-06-Oct-2010	
Temperature (deg. C)		-18		Not slapping 17-Dec-2012			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC);FINGER PLATES)							
(Fixed Type :)							
Gap Size (mm)		Gap Location					
75		North Abutment					
105		South Abutment					
Deck Drainage				7	N	Too much snow to view.	
Drains Clogged (Y/N)		No					
Curbs/Median				6	N	Typical vertical and transverse cracks @ 0.3m spacing.	
(Curb Type : Standard)							
Scaling (Percent Area)		0		Snow covered.			
Bridge Rail				8	4	150mm x 3m dent bottom rail, SW corner of bridge. 2 rail sections damaged.-photo Bas of posts partially snow covered.	
(Type : GALVANIZED STEEL BRIDGE TUBE)							
Bridge Rail Posts				8	N		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)							
Bridge Rail/Posts Coating				8	8		
(Type : GALVANIZED)							
Sidewalk				X	X		
Girder/Beam							
Cover Plate				X	X	4 girders/span.	
Flange				8	8		
Web				8	8		
Stiffeners				8	8		
Splice				8	8		
Weld				8	8		
Diaphragms/Cross Frame				8	8		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : WG, 3 Spans, Lengths(m): 34-34-28, A-Ident Number: A1257-02)					
Paint Condition		X	X	Weathering steel.	
(Colour Description :)					
(Colour Code :)					
Touchup Required (Y/N)	No				
Bearings		8	8	South end too high to inspect. Need snooper to inspect South abutment. Pier bearings inspected from headslopes.	
Temperature (deg. C)	-18				
(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		5	5	Transverse cracks with efflorescence under curbs.	
Stains (Percent Area)	1				
Span Alignment Problems					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
Superstructure General Rating		5	5		
Substructure					
Bridge Component		Last	Now	Explanation of Condition	
Abutments					
Bearing Seats/Caps		8	7	Random narrow cracks.	
(Type : CONCRETE)					
Backwalls/Breastwalls		7	7	Random narrow cracks.	
Wingwalls		5	5	Medium cracks with rust staining @ SE. Map cracking at SW, NE & NW.	
Piles		N	N		
Paint/Coating		6	4	5% peeling/flaking.	
Abutment Stability		8	8		
Scour/Erosion		X	X		
Piers/Bents					
(Type : PIER-COLUMN)				Map cracking on cap ends.	
Bearing Seats/Caps		6	6		
(Type : CONCRETE)				Map cracking on shafts.	
(Total Number of Bearing Piles : 0:0)					
Pier Shaft/Piles		6	6		
Bracing/Struts/Sheathing		X	X		
Nose Plate		X	X		
Paint/Coating		6	5	Grey. Less than 5% flaking/peeling.	
(Colour Description :)					
(Colour Code :)					
Pier Stability		8	8		
Scour		X	X		
Debris (Y/N)	No				

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	5	In median only. Wide crack in ACP EBL.
Traffic Safety Features		7	7	
Type	Guardrail			
Slope Protection		4	4	Top separated & moving away from abutment. South protection settled 25mm, pulled away 15mm. North protection settled 75mm pulled away 175mm & drain troughs settled 75mm - photo.
(Type : CONCRETE; CONCRETE)				
Bank Stability		8	8	
Drainage		4	N	Ponding on shoulders - photo.-06-Oct-2010 Too much snow to view.
Grade Separation General Rating		4	4	Carried forward from 06-Oct-2010

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Replace damaged section of rail at SW.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2013	Seal cracks in ACP/chipseal.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Replace missing light standard access cover plate.					
OTHER ACTION	2013	Seal gap in top of both concrete slope protection.					
OTHER ACTION	2013	Repair NE concrete drain, if not already done.					
OTHER ACTION	2013	Remove sand/gravel from base of North headslope to improve drainage, if not already done.					
OTHER ACTION	2013	Patch ACP at approaches.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	61.1/61.1	Sufficiency Rating (Last/Now) (%)	51.9/50.6	Est. Repl. Yr	2047	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	17-Sep-2014	Previous Inspection Date	06-Oct-2010
Inspection Cycle (Default) (months)	21		
Comment			