

Bridge Inspection												
Bridge File Number	81557 -1 Bridge					Form Type	PSR					
Year Built/Year Supstr	1989/1989					Lot No.	2					
Bridge or Town Name	RED DEER					Inspector Name	Owen Salava					
Located Over	CPR					Inspector Class	BR CLS A					
Located On	11:13 L1 0.009;11:13 R1 0.014					Assistant Name						
Water Body Cl./Year						Assistant Class						
Navigabil. Cl./Year						Inspection Date	01-Feb-2012					
Legal Land Location	NW SEC 19 TWP 38 RGE 27 W4M					Data Entry By	Marcia Chavez					
Longitude, Latitude	-113:51:21, 52:17:18					Data Entry Date	02-Mar-2012					
Road Authority	Alberta Transportation (AIT)					Reviewer Name	John O'Brien					
Contract Main. Area	UNDEFINED CMA					Review Date	23-Feb-2012					
Clear Roadway/Skew	32 / -19 deg. (LHF)					Dept. Reviewer Name	Andrew Smikles					
AADT/Year	15,000 / 2005 (E)					Dept. Review Date	09-Mar-2012					
Road Classification	RFD-412.4-130					Follow-Up By						
Detour Length (km)	7											
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)												
Posted Vertical Clearance (Y/N)												
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)	
Remarks												
Not required.												
Required Load Posting (t)												
Posted Loading (t)												
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)	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						Gas						
Power						Municipal						
Others						Street lights.						
						Problem (Y/N)						
						No						
Remarks												
Approach Road												
				Last	Now	Explanation of Condition						
Horizontal Alignment				7	7	Typical crest curve grade separation.						
Vertical Alignment				7	7							
Roadway Width (m)				39.600		22.6m WB curb to median. 17.0m EB curb to median. SW corner ACP separated and dropped, ok.						
Approach Bump				6	6							
Guardrail (Y/N)				Yes		Improper lap 1 section @ SE corner.						
Guardrail				4	6							
Length (m)				30.000		NW - 29.3m; SW & NE - 55.9m; SE - 14.1m. Adequate for urban. Bulb end at SE & NW. Insufficient posts @ SW.						
Current Standard (Y/N)				Yes								
Termination Type				Turn Down								
Drainage				4	6							
Approach Road General Rating				4	7							

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : CBC, 1 Spans, Lengths(m): 27, A-Ident Number:)					
Special Features					
Special Feature			7	MSE wall.	
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					Snow/gravel covered.
Now	20.0	0.0	0.0	0.0	
Wearing Surface			4	4	Narrow transverse crack in ACP, typical. Longit. crack on WBL near median. No staining under deck yet. Asphalt unravelling EB/WB - photo.
(Material Type : ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			8	8	
Deck Joints			5	5	Missing plow deflectors in W abut joint - 5 in EB, 5 in WB. Plow deflectors may not be required for 19 degree LHF skew. E jnt missing 5 deflectors, broken.
Temperature (deg. C)		-11			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
76		E abut - A2			
58		West abutment - A1			
Deck Drainage			8	8	
Drains Clogged (Y/N)		No			
Curbs/Median			5	5	Transverse cracks in face and top at 300 - 400mm intervals. Plow damage @ WBL, NW corner, minor. Sag in South curb. Appears to have been constructed that way.
(Curb Type : Standard)					
Scaling (Percent Area)		1			
Bridge Rail			8	8	Insufficient thread on one post A/B in South rail. 5% grout pads deteriorating.
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts			4	4	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			7	7	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	0	
Girders			8	8	6 girders added at South end for widening of bridge structure in 2001.
Cracking (Y/N)		No			
Spalling (Percent Area)		0			
(Number Of Girders : 27)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CBC, 1 Spans, Lengths(m): 27, A-Ident Number:)				
Diaphragms/Cross Frame		8	8	
Bearings		7	7	A/B's not plumb, cast that way. Slight deformation.
Temperature (deg. C)	-11			
(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		8	8	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		7	7	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		6	6	Medium vertical cracks under bearings, typical.
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		6	6	Wide vertical crack @ SW interface with bearing seat.
Piles		N	N	
Paint/Coating		6	6	Cracking on wingwalls.
Abutment Stability		8	8	
Scour/Erosion		7	7	
Piers/Bents				
(Type :)				
Bearing Seats/Caps		X	X	
(Type :)				
(Total Number of Bearing Piles :)				
Pier Shaft/Piles		X	X	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		X	X	
Scour		X	X	
Debris (Y/N)	Yes			
Substructure General Rating		6	6	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		9	9	Chain link fence along top of wall for access to bearings and for safety.
Traffic Safety Features		X	X	
Type				
Slope Protection (Type :)		X	X	
Bank Stability		8	8	Inter-lock retainer wall.
Drainage		8	8	
Grade Separation General Rating		8	8	

Inspection Cycle (Default) (months)	39
Comment	

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	2012	Reinstall SE section of guardrail with proper lap.	Operations	2012		
OTHER ACTION	2012	Redo asphalt on bridge.	Operations	2012		
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	72.2/72.2	Sufficiency Rating (Last/Now) (%)	51.9/61.4	Est. Repl. Yr	2044	Maint. Req. (Y/N)	Yes
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Special Comments for Next Inspection		Department Comments	DA
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Maintenance Reviewed By	Darron Ahlstedt	Date	05-Nov-2012	Estimated Total	0
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Proposed Long-Term Strategy			
On 3-Year Program (Y/N)			
Proposed Action			
Previous Inspector's Name	Owen Salava	Previous Assistant's Name	Chris Black
Next Inspection Date	01-May-2015	Previous Inspection Date	30-Mar-2010
Inspection Cycle (Default) (months)	39		
Comment			