

Bridge Inspection							
Bridge File Number	75337 S-2 Bridge			Form Type	SG		
Year Built/Year Supstr	1962/1962			Lot No.	2		
Bridge or Town Name	RED DEER			Inspector Name	Randy Bredo		
Located Over	CNR			Inspector Class	BR CLS A		
Located On	2:26 L1 2.368			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	18-Oct-2012		
Legal Land Location	SE SEC 8 TWP 39 RGE 27 W4M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-113:51:06, 52:20:15			Data Entry Date	05-Nov-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA19			Review Date	01-Nov-2012		
Clear Roadway/Skew	12.2 / 41 deg. (RHF)			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	35,980 / 2011 (A)			Dept. Review Date	13-Nov-2012		
Road Classification	RFD-412.4-130			Follow-Up By			
Detour Length (km)	1						
Allowable Load (t):	Single	CS1 57 GIRDER	Semi	CS2 75 GIRDER	Train	CS3 90 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	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No											
Remarks												Not required.											
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																							
Other Sign Types																							

Utilities (Located at)			
Utility Attachments			
Telephone	Yes - no marker.		Gas
Power			Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Highway crests over RR.
Vertical Alignment		7	7	
Roadway Width (m)	12.100			No rail @ SE corner. Not fully a PL2 standard.
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		7	7	
Length (m)	99.000			Not fully a PL2 standard.
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		4	4	NW ditch has caused a shallow slide of the fill which now appears stabilized - monitor.
Approach Road General Rating		7	7	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : RB, 3 Spans, Lengths(m): 17.7-22.6-17.7, A-Ident Number: A0385-01)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	0	
Now	0.0	0.0	0.0	0.0	
Wearing Surface			8	4	Shallow rutting in wheelpaths - monitor.
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Deck Top			N	N	
Deck Rideability			8	8	
Deck Joints			5	5	Missing 6 plow deflectors S, missing 6 plow deflectors N. We lane & shoulder deflectors missing. Expansion: A1, A2.
Temperature (deg. C)		9			
(Expansion Type : GLAND (SILICON SEAL))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
67			S. abut		
71			N. abut		
Deck Drainage			7	7	
Drains Clogged (Y/N)		No			
Curbs/Median			5	5	Wide transverse 0.3 to 1m spacing.
(Curb Type : Standard)					
Scaling (Percent Area)		3			
Bridge Rail			6	5	Retrofit rail installed. Panel 13th from NW & 1st, 2nd, 4th and 5th from NE have minor damage to vertical bars also 2nd from SW; no action since retrofit rail in place. Bolts do not offer enough thread for 77 post nuts; average is approx 2 threads below top of nut - photo. Grout pad at SE corner broken up.
(Type : GALVANIZED STEEL VERTICAL BAR)					
Bridge Rail Posts			6	4	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			7	7	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder/Beam					
Cover Plate			7	7	Griders viewed from ground.
Flange			7	7	
Web			7	7	
Stiffeners			7	7	
Splice			7	7	
Weld			7	7	
Diaphragms/Cross Frame			7	7	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RB, 3 Spans, Lengths(m): 17.7-22.6-17.7, A-Ident Number: A0385-01)				
Paint Condition		7	6	Yellow.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		5	5	Curb girders neoprene bearings partially bulging under shoe plate. Expansion: Abutments. Fixed: Pier. Masonry plate surfaces deeply pitted. Curb bearings losing primer coating.
Temperature (deg. C)	9			
(Expansion Type : NEOPRENE STRIP BEARING)				
(Fixed Type : NEOPRENE STRIP BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		5	5	Deck has many narrow flexural cracks. Soffit vertical cracks weeping salt water will lead to delamination.
Stains (Percent Area)	2			
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		6	6	Abuts have moved slightly from skew pressures.
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	
Wingwalls		7	7	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-COLUMN)				Two columns each pier.
Bearing Seats/Caps		8	7	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0)				
Pier Shaft/Piles		8	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	7	Concrete slope protection sliding against piers.
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	Gaps and wide cracks, ok.
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		7	7	
Grade Separation General Rating		7	7	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL	2013	Repair grout pad at SE corner.				
GALVANIZE/PAINT BRIDGE RAIL						
RETROFIT BRIDGE RAIL						
SEAL CURBS						
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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	61.1/61.1	Sufficiency Rating (Last/Now) (%)	70.6/70.6	Est. Repl. Yr	2037	Maint. Req'd. (Y/N)	No
--	-----------	-----------------------------------	-----------	---------------	------	---------------------	----

Special Comments for Next Inspection	Department Comments

Maintenance Reviewed By	Date	Estimated Total
		0

Proposed Long-Term Strategy

On 3-Year Program (Y/N) Y

Proposed Action 2008.01.29 ACP overlay and membrane in 2008. Chip seal South Bound in 2008, North Bound in 2009.

Previous Inspector's Name Owen Salava

Next Inspection Date 18-Jul-2014

Inspection Cycle (Default) (months) 21

Previous Assistant's Name
 Previous Inspection Date 14-Sep-2011
 Comment

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL	2013	Repair grout pad at SE corner.	Defer until next onsite			
GALVANIZE/PAINT BRIDGE RAIL						
RETROFIT BRIDGE RAIL						
SEAL CURBS						
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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	61.1/61.1	Sufficiency Rating (Last/Now) (%)	70.6/70.6	Est. Repl. Yr	2037	Maint. Req. (Y/N) No
Special Comments for Next Inspection			Department Comments	Currently scheduled for upgrade in 2025. DA		
Maintenance Reviewed By	Darron Ahlstedt	Date	18-Apr-2013	Estimated Total	0	
Proposed Long-Term Strategy						
On 3-Year Program (Y/N)	Y					
Proposed Action	2008.01.29 ACP overlay and membrane in 2008. Chip seal South Bound in 2008, North Bound in 2009.					
Previous Inspector's Name	Owen Salava	Previous Assistant's Name				

Next Inspection Date	18-Jul-2014	Previous Inspection Date	14-Sep-2011
Inspection Cycle (Default) (months)	21		
Comment			