

Bridge Inspection										
Bridge File Number	75054 -1 Bridge					Form Type	PSR			
Year Built/Year Supstr	1967/1967					Lot No.	1			
Bridge or Town Name	HIGH RIVER					Inspector Name	Jason Rusu			
Located Over	2:12 R1 0.000;2:12 L1 0.000					Inspector Class	BR CLS A			
Located On	23:08 L1 42.975;23:08 R1 42.975					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	08-Oct-2011			
Legal Land Location	SW SEC 4 TWP 19 RGE 28 W4M					Data Entry By	Anne Roberts			
Longitude, Latitude	-113:49:44, 50:34:19					Data Entry Date	24-Nov-2011			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Jason Rusu			
Contract Main. Area	CMA27					Review Date	09-Nov-2011			
Clear Roadway/Skew	23.5 /					Dept. Reviewer Name	Tim Davies			
AADT/Year	10,280 / 2010 (A)					Dept. Review Date	25-Nov-2011			
Road Classification	RAU-211.8-110					Follow-Up By				
Detour Length (km)	5									
Allowable Load (t):	Single	CS1 38			Semi	CS2 42		Train	CS3 47	----> On Critical Spans ---->Critical Member
Design Loading:	HS20									----> Primary Span

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 2 L1 5.4m, 2 R1 5.4m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)	5.4	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.4	In Advance (Y/N)	Yes
Remarks		ALSO SIGNED 5.4M @ APPROACH LOOPS										
Required Load Posting (t)			Single			Semi	42	Truck Train	47			
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)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Remarks		Not req.										

Hazard Marker At Bridge (Y/N)	No											
Remarks												
Other Sign Types		ROUTE, SPEED.										

Utilities (Located at)												
Utility Attachments												
Telephone						Gas						
Power	Lighting on structure.					Municipal						
Others	Light standards all 4 corners.					Problem (Y/N)	No					
Remarks												

Approach Road					
		Last	Now	Explanation of Condition	
Horizontal Alignment		7	7	Limited & sight distance over structure with ramps on all 4 corners	
Vertical Alignment		6	6		
Roadway Width (m)		23.700		Missing 2 splice bolts at SE and 2 at SW. Not thriebeam. 3 broken posts at SW, SE and NE.	
Approach Bump		7	7		
Guardrail (Y/N)		Yes			
Guardrail		4	3		
Length (m)		46.000			
Current Standard (Y/N)		No			
Termination Type		TURNED DOWN ENDS			
Drainage		5	5		

Approach Road						
			Last	Now	Explanation of Condition	
Approach Road General Rating			6	6		
Superstructure						
Bridge Component			Last	Now	Explanation of Condition	
(Primary Span : FC, 3 Spans, Lengths(m): 29-16.2-29, A-Ident Number:)						
Special Features						
Special Feature			5	5	On W span near W abut/strand loose At 5th grp out- since installation.	
(Type : EXT LATER POST TENS)						
Special Feature			7	7	Partial underslung beams- 2 rows Sp. 1 and 3	
(Type : UNDERSLUNG DIAPHR)						
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			5	4	Some cracks appear over keys @ all spans Map cracking @ ctr span. 4 small potholes in left lane of WB traffic.	
(Material Type : CONCRETE)						
(Thickness(mm) : 50)						
Lateral Connection Problem (Y/N)		Yes				
Deck Top			X	X		
Deck Rideability			7	7		
Deck Joints			3	3	One bolt sheared @ west pier WBL and West abut joints @ East bound lanes	
Temperature (deg. C)		-13				
(Expansion Type : ARMOURED GLAND (WABO UNDER FINGER OR SLIDING PLATES))						
(Fixed Type : ARMOURED GLAND (WABO UNDER FINGER OR SLIDING PLATES))						
Gap Size (mm)		Gap Location				
80		W. abut				
89		W. pier				
89		E. pier				
89		E. abut				
Deck Drainage			5	5		
Drains Clogged (Y/N)		No				
Curbs/Median			5	5	Concrete parapets @ ext Cracks @ bottoms of most parapets	
(Curb Type : JERSEY/F SHAPE)						
Scaling (Percent Area)		0				
Bridge Rail			7	7	Box beam rail at median 6 bolts not fully engaged	
(Type : GALVANIZED STEEL BRIDGE TUBE)						
Bridge Rail Posts			6	4		
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating			5	5		
(Type : GALVANIZED)						
Sidewalk			X	X		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : FC, 3 Spans, Lengths(m): 29-16.2-29, A-Ident Number:)					
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	1	
Girders			4	3	Hangers rehabed in 2003 Corrosion from 3" long wide crack at S1 G15 ext. Minor high load damage NBL at G1 and G2 S3 6 Girders have medium to wide width longitudinal cracks Typical narrow chamfer cracks Corrosion spots at Sp.3-G13 and G14 and several at G12 South leg.. 3 girders @ west abut have wide cracks @ shoe plates- G13 is worst Corrosion spot at S1 G1 ext. 4 m from P 1.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		1			
(Number Of Girders : 45)					
Diaphragms/Cross Frame			4	4	Spalls and cracking at abut. diaphragms and exterior hanger diaphragms have spalls and corrosion.
Bearings			6	5	Pads at A2 are curling. Shoe plates are warped.
Temperature (deg. C)		-12			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)					
(Fixed Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)					
Coating Adequate (Y/N)		No			
Functioning (Y/N)		Yes			
Deck Underside			6	6	
Stains (Percent Area)		5			
Span Alignment Problems					
Vertical (Y/N)		No			
Horizontal (Y/N)		No			
Superstructure General Rating			4	3	
Substructure					
Bridge Component		Last	Now	Explanation of Condition	
Abutments					
Bearing Seats/Caps			6	6	
(Type : CONCRETE)					
Backwalls/Breastwalls			5	5	
Wingwalls			5	5	Minor spall at SW.
Piles			N	N	
Paint/Coating			4	4	
Abutment Stability			7	7	
Scour/Erosion			X	X	
Piers/Bents					
(Type : PIER-COLUMN)					
Bearing Seats/Caps			7	7	
(Type : CONCRETE)					
(Total Number of Bearing Piles : 0:0)					Delamination crack P1 at lower SE corner and P2 at lower SW. 8 diagonal Pier columns
Pier Shaft/Piles			5	5	
Bracing/Struts/Sheathing			X	X	
Nose Plate			X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Paint/Coating		5	5	
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		7	7	
Debris (Y/N)	Yes			Large gravel accumulation at East toe - clean.
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	Settlement of headslopes is causing slope protection to settle & buckle at the toe of the slope. Some 20mm wide cracks at E.
Traffic Safety Features		7	7	Lighting under girders. Accident damage SE guard rail. 2 - 4 m sections at SW guard rail, 3 split posts and 3 damaged sections.
Type	Guardrail			
Slope Protection		6	6	
(Type : CONCRETE; CONCRETE)				
Bank Stability		6	6	
Drainage		6	5	
Grade Separation General Rating		6	6	

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	2011	Repair 4 small potholes.					
SEAL DECK	2012	Epoxy seal deck.					
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2011	Replace 2 missing bolts.					
RESET/ PAINT BEARINGS							
WASHING	2011	Clean gravel from toes of headslopes.					
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Repair guardrail (15 linear meters and 6 posts).					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/44.4	Sufficiency Rating (Last/Now) (%)	48.6/42.2	Est. Repl. Yr	2020	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Recommend level 2 inspection of stains from crack at S1 G15 exterior.		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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	08-Jul-2013		Previous Inspection Date	27-Jan-2010			
Inspection Cycle (Default) (months)	21						
Comment							