

Bridge Inspection												
Bridge File Number	00457 -1 Bridge					Form Type	CON					
Year Built/Year Supstr	1959/1959					Lot No.	1					
Bridge or Town Name	CARBON					Inspector Name	Owen Salava					
Located Over	CPR					Inspector Class	BR CLS A					
Located On	21:14 C1 11.898					Assistant Name						
Water Body Cl./Year						Assistant Class						
Navigabil. Cl./Year						Inspection Date	17-Sep-2012					
Legal Land Location	SW SEC 19 TWP 29 RGE 23 W4M					Data Entry By	Marcia Chavez					
Longitude, Latitude	-113:13:56, 51:29:30					Data Entry Date	02-Oct-2012					
Road Authority	Alberta Transportation (AIT)					Reviewer Name	John O'Brien					
Contract Main. Area	CMA20					Review Date	27-Sep-2012					
Clear Roadway/Skew	11.6 / 31 deg. (RHF)					Dept. Reviewer Name	Andrew Smikles					
AADT/Year	1,840 / 2011 (A)					Dept. Review Date	18-Oct-2012					
Road Classification	RAU-211.8-110					Follow-Up By						
Detour Length (km)	20											
Allowable Load (t):	Single	CS1 31 GIRDER	Semi	CS2 49	Train	CS3 64 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	EB	On Bridge (m)		In Advance (Y/N)	No	Lane	WB	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)	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												
Other Sign Types		Curve, (Stream ID @ SE corner. - should be located at SE corner of BF06565).										
Utilities (Located at)												
Utility Attachments												
Telephone						Gas						
Power						Municipal						
Others						Problem (Y/N)	No					
Remarks												
Approach Road												
			Last	Now	Explanation of Condition							
Horizontal Alignment			5	5	Bridge is in a curve.							
Vertical Alignment			5	5	Hills both sides. No passing both directions.							
Roadway Width (m)		11.000			ACP delaminated at S paving lip.							
Approach Bump			7	7								
Guardrail (Y/N)		Yes			Rail not attached @ SW, NE & NW corners - photo.							
Guardrail			3	3	SW rail end poses safety hazard if hit (photo).							
Length (m)		67.100										
Current Standard (Y/N)		No			Insufficient posts; not thrie beam.							
Termination Type		TURNED DOWN										
Drainage			5	5	Large void at NW curb/slab interface. Edge delam at NW corner drain.							
Approach Road General Rating			3	5								

Superstructure							
Bridge Component		Last		Now		Explanation of Condition	
(Primary Span : CT, 3 Spans, Lengths(m): 17.1-23.8-17.1, A-Ident Number:)							
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				5	5	Random cracking & random patches. (Over epoxy) ACP pushed toward curb at NW end of deck.	
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)							
(Thickness(mm) : 50)							
Deck Top				N	N		
Deck Rideability				7	7		
Deck Joints				4	4	Leakage at both abutments @ West.	
Temperature (deg. C)		25					
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))							
(Fixed Type :)							
Gap Size (mm)		Gap Location					
74		S abut					
71		N abut					
Deck Drainage				4	4	Retro drain causing erosion at NW and SW. 2 pipes broken off - photo.	
Drains Clogged (Y/N)		No					
Curbs/Median				3	3	Heavy scaling some spalling both curbs (photos).	
(Curb Type : Standard)							
Scaling (Percent Area)		15					
Bridge Rail				6	6	Minor bends. Small crease in 5th panel from SE. 25% cracked @ some posts, worst at 3rd post from NE.	
(Type : CONCRETE VERTICAL BAR)							
Bridge Rail Posts				5	5		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)							
Bridge Rail/Posts Coating				6	6		
(Type :)							
Sidewalk				X	X		
Girders				5	5	Some girder ends with heavy scaling & cracking - worst at S1G3 3rd abut.	
Diaphragms/Cross Frame				6	6		
Bearings				6	6	Rollers @ abutments. Rockers @ S pier, pinned at N pier. 40% corrosion pitted at exterior at abutments.	
Temperature (deg. C)		25					
(Expansion Type : ROLLER BEARING)							
(Fixed Type : ROCKER BEARING)							
Coating Adequate (Y/N)		No					
Functioning (Y/N)		Yes					
Deck Underside				7	7	Flexural cracks found in some girders with up to 0.20 mm width.	
Stains (Percent Area)		1					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CT, 3 Spans, Lengths(m): 17.1-23.8-17.1, A-Ident Number:)				
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		3	4	NW seat heavy scaling (photo).
Backwalls/Breastwalls		5	5	Stained/scaling.
Wingwalls		4	4	Heavy scaling at NE wingwall.
Piles		N	N	
Paint/Coating		4	4	Tar- peeling.
Abutment Stability		7	7	
Scour/Erosion		4	4	Large gully at N hslp (photo).
Piers/Bents				
(Type : PIER-COLUMN)				Surface spalls @ West end both piers.
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
Pier Shaft/Piles		7	7	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		4	4	Erosion caused by deck drainage at NW & SW corners.
Debris (Y/N)	No			
Substructure General Rating		3	4	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	Over decommissioned railway line.
Traffic Safety Features		X	X	
Type	NONE			
Slope Protection		6	6	Slope is 1:1 at South abutment.
(Type : NATURAL; NATURAL)				
Bank Stability		5	5	
Drainage		6	6	
Grade Separation General Rating		5	5	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL						
GALVANIZE/PAINT BRIDGE RAIL						
RETROFIT BRIDGE RAIL						
SEAL CURBS	2015	Patch curbs 10m3 & NE wingwall, OH-V.				
PATCH DECK						
SEAL DECK						
OVERLAY DECK						
REPAIR/REPLACE DECK JOINTS						
RESET/ PAINT BEARINGS	2015	Blast and recoat abut bearings				
WASHING						
SHOTCRETE REPAIRS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION	2012	Attach approach rail to bridge SW & NW & NE corners.				
OTHER ACTION	2015	Remove scaled area of abutment seat and patch 0.05m3 @ NW				
OTHER ACTION	2015	Plug hole At NW approach curb to stop erosion.				
OTHER ACTION	2012	Move Creek ID sign to SE corner of BF06565.				
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)		44.4/50.0	Sufficiency Rating (Last/Now) (%)	39.6/52.7	Est. Repl. Yr	2025	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	(Remove structure when hwy is upgraded. 16Feb2009). Defer all repairs where not safety related until structure is removed.			Department Comments				
Maintenance Reviewed By				Date	Estimated Total		0	
Proposed Long-Term Strategy		Rail road gone, remove about 2024. RS						
On 3-Year Program (Y/N)								

Proposed Action			
Previous Inspector's Name	Dave Lam	Previous Assistant's Name	
Next Inspection Date	17-Jun-2014	Previous Inspection Date	11-Nov-2010
Inspection Cycle (Default) (months)	21		
Comment			

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Special Comments for Next Inspection	(Remove structure when hwy is upgraded. 16Feb2009). Defer all repairs where not safety related until structure is removed.		Department Comments	Rehab programmed for 2017	
Maintenance Reviewed By	Andrew Smikles	Date	03-Dec-2012	Estimated Total	0
Proposed Long-Term Strategy	Rail road gone, remove about 2024. RS				
On 3-Year Program (Y/N)					
Proposed Action					
Previous Inspector's Name	Dave Lam	Previous Assistant's Name			
Next Inspection Date	17-Jun-2014	Previous Inspection Date	11-Nov-2010		
Inspection Cycle (Default) (months)	21				
Comment					