Bridge Inspection

Bridge File Number	70935 -1 Bridge	Form Type	SG
Year Built/Year Supstr	1955/1955	Lot No.	2
		Inspector Name	Brian Pientsch
Bridge or Town Name	HOTCHKISS	Inspector Class	BR CLS A
Located Over	HOTCHKISS RIVER, 8.10.41.6, WATERCRS-ST	Assistant Name	Russel Vanderschaaf
		Assistant Class	BR CLS B
Located On	35:08 C1 15.399	Inspection Date	08-Dec-2011
Water Body Cl./Year		Data Entry By	Theresa Lacusta
Navigabil. Cl./Year		Data Entry Date	14-Dec-2011
Legal Land Location	SE SEC 11 TWP 93 RGE 23 W5M	Reviewer Name	Eric Carcoux
Longitude, Latitude	-117:34:32, 57:03:10	Review Date	13-Dec-2011
Road Authority	Alberta Transportation (AIT)	Dept. Reviewer Name	Steve Pasquan
Contract Main. Area	CMA04	Dept. Review Date	10-Jan-2012
Clear Roadway/Skew	11 /	Follow-Up By	
AADT/Year	1,700 / 2010 (A)		
Road Classification	RAU-209-110		
Detour Length (km)	3		

Allowable Load (t):	Single	CS1 63 GIRDER	Semi	CS2 87 GIRDER	Train	CS3 112 GIRDER	---> On Critical Spans --->Critical Member
Design Loading:		HS20					---> Primary Span

Posting Information

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)	Yes
Remarks	
Other Sign Types	Hotchkiss River @ SE corner. Curve signs

Utilities (Located at)

Utility Attachments			
Telephone	West side	Gas	
Power	East boundary of r/w - 3 wire.	Municipal	
Others	Waterline crosses RD. at north end.	Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Curves on both approaches, hills on both approaches. 6% grade south end.
Vertical Alignment		5	5	
Roadway Width (m)	9.700			
Approach Bump		5	5	
Guardrail (Y/N)	Yes			Approach rail not connected to bridge. Not thrie beam. Windrows under guardrail all 4 corners.
Guardrail		3	4	
Length (m)	68.400			
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN			
Drainage		5	5	
Approach Road General Rating		**5**	**5**	

Superstructure			
Bridge Component	**Last**	**Now**	**Explanation of Condition**
(Primary Span : **RB, 3 Spans, Lengths(m): 17.1-21.3-17.1, A-Ident Number: A0200-01**)			
Special Features			
Special Feature		X	
(Type :)			
Special Feature		X	
(Type :)			
Wearing Surface/Deck Top Detail Ratings			
	N (%) / 1 (%) / 2 (%) / 3 (%)		Partly gravel/sand covered.
Last	10 / 0 / 0 / 0		
Now	10.0 / 0.0 / 0.0 / 30.0		
Wearing Surface	4	3	Chipseal coat 95% worn off. Polymer overlay 10% worn off, causing water to seep inot concrete deck.photo
(Material Type : **CONCRETE - CONVENTIONAL CHIP SEAL COAT**)			
(Thickness(mm) : **50**)			
Deck Top	N	N	
Deck Rideability	7	7	
Deck Joints	8	8	
Temperature (deg. C) -18			
(Expansion Type : **GLAND (WABO-MAUER, TRANSFLEX, ETC)**)			
(Fixed Type :)			
Gap Size (mm) / Gap Location			
66 / Abut 1			
82 / Abut 2			
Deck Drainage	7	4	Deck drains above headslopes have eroded small gullies.
Drains Clogged (Y/N) No			
Curbs/Median	4	4	Isolated curb spalls throughout exterior fascia. Severe spalling on concrete approach parapets.
(Curb Type : **Standard**)			
Scaling (Percent Area) 10			
Bridge Rail	5	5	
(Type : **GALVANIZED STEEL VERTICAL BAR**)			
Bridge Rail Posts	7	7	
(Type : **GALVANIZED POST STEEL;GALVANIZED POST STEEL**)			
Bridge Rail/Posts Coating	5	5	
(Type : **GALVANIZED**)			
Sidewalk	X	X	
Girder/Beam			
Cover Plate	5	5	South: 2nd girder within mm of backwall (measured at base of web) 4th girder within 16mm of backwall (measured at base of web)
Flange	6	6	
Web	7	7	
Stiffeners	X	X	
Splice	7	7	
Weld	X	X	
Diaphragms/Cross Frame	5	5	

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **RB, 3 Spans, Lengths(m): 17.1-21.3-17.1, A-Ident Number: A0200-01**)				
Paint Condition		4	4	Superficial rust on 30% of bottom flange area.
(Colour Description : **GREEN**)				
(Colour Code : **14090**)				
Touchup Required (Y/N)	No			
Bearings		5	5	Rusting at exterior bearings.
Temperature (deg. C)	-18			
(Expansion Type : **ROCKER BEARING**)				
(Fixed Type : **PINNED BEARING**)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		5	4	100mm spall near S3G6 East side.
Stains (Percent Area)	5			Heavy effloresence and rust stains between S2G3, G5 and S2G2,G4 near piers.-photo
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		**5**	**4**	

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Abutments				
Bearing Seats/Caps		6	6	
(Type : **CONCRETE**)				
Backwalls/Breastwalls		5	5	
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		6	6	
Scour/Erosion		6	6	
Piers/Bents				
(Type : **PIER-COLUMN**)				
Bearing Seats/Caps		6	6	
(Type : **CONCRETE**)				
(Total Number of Bearing Piles : **2:2**)				Bearing piles not accessible.
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	Superficial rust on nose plates.
Paint/Coating		5	5	
(Colour Description : **GREEN**)				
(Colour Code : **14090**)				
Pier Stability		7	7	
Scour		4	4	Minor scour at W end pier 1.
Debris (Y/N)	Yes			Barrel and old piles in channel under bridge.

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Substructure General Rating		**6**	**6**	
Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **W**)				
(D/S Direction : **E**)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	Yes			
Slope Protection		5	4	Minor erosion beneath deck drains.
(Type :)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**5**	**4**	

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						
PATCH DECK	2012	Repair spall				
SEAL DECK	2012					
OVERLAY DECK	2012					
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) (%)	**61.1/55.6**	**Sufficiency Rating (Last/Now) (%)**	**73.2/68.5**	Est. Repl. Yr	2025	Maint. Reqd. (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	Brian Pientsch	Previous Assistant's Name			
Next Inspection Date	08-Sep-2013	Previous Inspection Date	17-Feb-2010		
Inspection Cycle (Default) (months)	21				
Comment					