

Bridge Inspection											
Bridge File Number	07740 -2 Bridge				Form Type	SG					
Year Built/Year Supstr	2003/2003				Lot No.	2					
Bridge or Town Name	ENTWISTLE				Inspector Name	Wade Nanninga					
Located Over	PEMBINA RIVER, 8.11.84, WATERCRS-ST				Inspector Class	BR CLS A					
Located On	16A:08 C1 10.877				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	10-Aug-2012					
Legal Land Location	SW SEC 29 TWP 53 RGE 7 W5M				Data Entry By	Lisa Fairhurst					
Longitude, Latitude	-115:00:14, 53:35:60				Data Entry Date	24-Aug-2012					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux					
Contract Main. Area	CMA12				Review Date	21-Aug-2012					
Clear Roadway/Skew	8 / -30 deg. (LHF)				Dept. Reviewer Name	Brent Herrick					
AADT/Year	1,050 / 2011 (A)				Dept. Review Date	30-Aug-2012					
Road Classification	RAU-209-110				Follow-Up By						
Detour Length (km)	3										
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 Load Posting (t)	Single			Semi			Truck Train		
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	Posting not required.								
Hazard Marker At Bridge (Y/N)	Yes								
Remarks	Only @ NW & SE corners. Required all corners.								
Other Sign Types	45 kph on East & 35 kph on West, winding road both. Information, "Pembina River".								

Utilities (Located at)										
Utility Attachments										
Telephone	North r/w.				Gas					
Power					Municipal					
Others					Problem (Y/N)	No				
Remarks										

Approach Road															
		Last	Now	Explanation of Condition											
Horizontal Alignment		4	4	Farm entrance 30m South, curve both ends with limited sight distance. Grade 7% North & 6.5% South. No passing.											
Vertical Alignment		4	4												
Roadway Width (m)	8.500														
Approach Bump		5	5	Bump both ends.											
Guardrail (Y/N)		Yes													
Guardrail		7	4	Rail has scrape marks at SE. Thrie beam transition. Missing bolt @ connection to bridge @ NE, 4 split posts @ SW, 1 @ NW, 1 @ NE											
Length (m)		48.000													
Current Standard (Y/N)		Yes													
Termination Type		Turn Down													
Drainage		4	6												
Approach Road General Rating		4	4												

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : WG, 2 Spans, Lengths(m): 57-57, A-Ident Number: A1461-01)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last						
Now	0.0	0.0	0.0	0.0		
Wearing Surface			4	4	ACP is raveling at North joint - photo. There are transverse cracks reflecting through the ACP. Losing aggregate in wheelpaths and a few 100mm diameter potholes in NBL - photo.	
(Material Type : ACP)						
(Thickness(mm) : 50)						
Deck Top			N	N		
Deck Rideability			8	8		
Deck Joints			7	7		
Temperature (deg. C)		25				
(Expansion Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
40		North				
		South				
Deck Drainage			7	7	(Leakage through joint at corners. 06/Dec/2008)	
Drains Clogged (Y/N)		No				
Curbs/Median			7	7	Narrow transverse cracks at 0.6m o/c.	
(Curb Type : Standard)						
Scaling (Percent Area)		0				
Bridge Rail			8	8		
(Type : GALVANIZED STEEL BRIDGE TUBE)						
Bridge Rail Posts			8	8		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating			8	8		
(Type : GALVANIZED)						
Sidewalk			4	4	ACP has settled 180mm at ends of walk on both approaches - photo.	
Girder/Beam						
Cover Plate			X	X		
Flange			9	9		
Web			9	9		
Stiffeners			9	9		
Splice			9	9		
Weld			9	9		
Diaphragms/Cross Frame			9	9		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 2 Spans, Lengths(m): 57-57, A-Ident Number: A1461-01)				
Paint Condition		7	7	Weathering steel.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		6	6	South abutment A/B's bent.
Temperature (deg. C)	25			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	6	Narrow transverse cracks. Cracks with efflorescence @ some drain tubes
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		6	6	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
Backwalls/Breastwalls		8	8	
Wingwalls		8	8	
Piles		N	N	
Paint/Coating		6	6	Some graffiti on breastwall/wingwall.
Abutment Stability		8	8	
Scour/Erosion		8	8	
Piers/Bents				
(Type : PIER-SOLID)				Solid concrete shaft.
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0)				
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		X	X	
Nose Plate		8	8	
Paint/Coating		8	8	
(Colour Description :)				
(Colour Code :)				
Pier Stability		9	9	
Scour		8	8	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : E)				Slight curve U/S & curves right D/S.
(D/S Direction : W)				
Alignment		7	7	
Bank Stability		4	5	High bank prone to slide, not affecting bridge.
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	Yes			
Slope Protection		8	8	
(Type : RIP RAP; GEOTEXTILE; RIP RAP; GEOTEXTILE)				
Guidebank/Spurs		X	X	
Adequacy of Opening		9	9	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	7	

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							
SEAL DECK	2012	Chipseal.					
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	(Determine cause of leaking @ corners & repair. 06/Dec/2008) - if not done					
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Install hazard markers @ corners where missing.					
OTHER ACTION							
OTHER ACTION	2012	Install coldmix @ both sidewalk approaches to minimize trip hazard.					
OTHER ACTION	2012	Repair GR posts (6)					
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	59.3/63.0	Est. Repl. Yr	2083	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor bending of S abutment bearing A/B's.		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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	10-May-2014		Previous Inspection Date	05-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							