

Bridge Inspection							
Bridge File Number	71291 -1 Bridge			Form Type	SG		
Year Built/Year Supstr	1972/1972			Lot No.	2		
Bridge or Town Name	PAKAN BRIDGE			Inspector Name	Wade Nanninga		
Located Over	NORTH SASKATCHEWAN RIVER, 6, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	855:18 C1 11.440			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	17-Dec-2012		
Legal Land Location	NW SEC 4 TWP 58 RGE 17 W4M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-112:28:35, 53:59:24			Data Entry Date	15-Jan-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Eric Carcoux		
Contract Main. Area	CMA07			Review Date	10-Jan-2013		
Clear Roadway/Skew	8.5 /			Dept. Reviewer Name	Paul Catt		
AADT/Year	650 / 2011 (A)			Dept. Review Date	18-Jan-2013		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	42						
Allowable Load (t):	Single	H 50 GIRDER	Semi	HS 71 GIRDER	Train	CS3 72	----> 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							
Hazard Marker At Bridge (Y/N)	Yes						
Remarks	3 hazard markers broken or cut off at post. NW low but there.						
Other Sign Types	North Sask. River signs.						

Utilities (Located at)			
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	Crosses road 150 m north. Buried 14m West of c/l.	Gas	
Power	2 wires OH, 300 M N. of bridge	Municipal	
Others	Light stds. @ N. end of bridge	Problem (Y/N)	No
Remarks	Survey Canada BM's 94A412 and @ NE94A411 @ SW & NE		

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Bridge is part of long sag curve over river.
Vertical Alignment		6	6	
Roadway Width (m)	8.000			Requires one extra post near bridge at NE and NW corners.
Approach Bump		7	7	
Guardrail (Y/N)	Yes			
Guardrail		4	7	
Length (m)	175.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		6	6	
Approach Road General Rating		6	6	

Superstructure								
Bridge Component		Last	Now	Explanation of Condition				
(Primary Span : WG, 5 Spans, Lengths(m): 48.8-61-61-61-48.8, A-Ident Number: A0645-01)								
Special Features								
Special Feature			9	Catwalk				
(Type :)								
Special Feature			X					
(Type :)								
Wearing Surface/Deck Top Detail Ratings								
	N (%)	1 (%)	2 (%)	3 (%)				
Last	0	0	0	0				
Now	30.0	0.0	0.0	0.0				
Wearing Surface			8	7				
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)								
(Thickness(mm) : 80)								
Deck Top			N	N				
Deck Rideability			8	8				
Deck Joints			4	7	S. Deck Joint - misaligned fingers in contact with one side.-14-Jul-2012			
Temperature (deg. C)		-15						
(Expansion Type : FINGER PLATES)								
(Fixed Type :)								
Gap Size (mm)		Gap Location						
75		N. Abut (A2)						
110		S. Abut (A1)						
Deck Drainage			4	7	(S5 - E. curb missing clamp on down spout. S. Abut (A1) - erosion @ drain trough, basin susceptible to cracking due to erosion, clamp is missing.-14-Jul-2012			
Drains Clogged (Y/N)		No						
Curbs/Median			5	N	Cracks, spalling on backside. Scaling on face, medium to wide transverse cracks.-14-Jul-2012			
(Curb Type : Standard)								
Scaling (Percent Area)		5						
Bridge Rail			5	5	1 rail - E. side with loose bolt. 1 missing AB nut, insufficient threads 1 post cap with missing bolt.-14-Jul-2012			
(Type : GALVANIZED STEEL BRIDGE TUBE)								
Bridge Rail Posts			5	5				
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)								
Bridge Rail/Posts Coating			5	5	Onset of coating failure, rust bloom. (1 rusted bridgerail cap 123m from South abutment, East side 21-Sep-2010).			
(Type : GALVANIZED)								
Sidewalk			9	X				
Girder/Beam								
Cover Plate			X	X	Girders painted 2010. Deflector plates installed on outside girder splice plates. Deteriorated stiffener welds. CIF prone details,insuff. web cap; LS splice; pack rust on ext. field splices.-14-Jul-2012			
Flange			7	7				
Web			7	7				
Stiffeners			4	4				
Splice			5	5				
Weld			5	5				
Diaphragms/Cross Frame			4	4	Loose bolts.-14-Jul-2012			

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 5 Spans, Lengths(m): 48.8-61-61-61-48.8, A-Ident Number: A0645-01)				
Paint Condition		9	9	Yellow
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		4	4	North abutment rockers all bearing @ 70% expanded. (A1 exp 33mm, A2 exp 55mm. P4 contr 15 @ +8 degree C. NA exp 60 @ 8. P1 centered. 21-Sep-2010). (A1 & A2 brgs are over-extended.-14-Jul-2012)
Temperature (deg. C)	-15			
(Expansion Type : ROCKER BEARING)				
(Fixed Type :)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		5	5	Leaching & corrosion stains; transverse cracks @ 1-3 M apart.
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	4	CIF Prone details
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	7	
Piles		N	N	
Paint/Coating		7	7	Silver
Abutment Stability		5	5	Suspect movement at N Abut (A2) & S. Abut (A1).
Scour/Erosion		5	5	Erosion of South headslope toe from road drainage.
Piers/Bents				
(Type : PIER-SOLID)				Minor cracks at random locations on piers.
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0:0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	Painr 50% abraided.
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		N	N	
Debris (Y/N)	Yes			Drift accumulation at toe of South headslope up to P1.
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		8	8	
Bank Stability		5	5	
HWM (m below Top of Curb)	0.0			HWM not visible.
Drift (Y/N)	Yes			Drift @ P1
Slope Protection		5	5	
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Replace missing AB nut; tighten loose rail bolt on E. curb. Replace damaged TT @ NE approach rail, if not done.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2013	Caulkin curb cold joints, sealing curbs, if not done.					
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	2013	CIF repairs, if not done.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/50.0	Sufficiency Rating (Last/Now) (%)	56.8/55.6	Est. Repl. Yr	2056	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	Establish if abutment movement has stabilized @ A1 & A2. Monitor bearings.		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	Ed Kowal		Previous Assistant's Name				
Next Inspection Date	17-Mar-2016		Previous Inspection Date	14-Jul-2012			
Inspection Cycle (Default) (months)	39						
Comment							