

Bridge Inspection									
Bridge File Number	76720 -1 Bridge				Form Type	PSR			
Year Built/Year Supstr	1977/1977				Lot No.	2			
Bridge or Town Name	BITTERN LAKE				Inspector Name	Owen Salava			
Located Over	CPR				Inspector Class	BR CLS A			
Located On	13:10 C1 19.493				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	27-Jun-2012			
Legal Land Location	SW SEC 36 TWP 46 RGE 22 W4M				Data Entry By	Marcia Chavez			
Longitude, Latitude	-113:04:02, 53:00:21				Data Entry Date	15-Jul-2012			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien			
Contract Main. Area	CMA16				Review Date	05-Jul-2012			
Clear Roadway/Skew	13.4 / -33 deg. (LHF)				Dept. Reviewer Name	Andrew Smikles			
AADT/Year	3,690 / 2011 (A)				Dept. Review Date	19-Jul-2012			
Road Classification	RAU-213.4-120				Follow-Up By				
Detour Length (km)	30								
Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member		
Design Loading:	HS25						----> Primary Span		

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)		No										
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	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	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 required.										
Hazard Marker At Bridge (Y/N)		No										
Remarks		Not required.										
Other Sign Types												

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

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	On grade, crest to East.
Vertical Alignment		6	6	
Roadway Width (m)	13.000			
Approach Bump		6	6	
Guardrail (Y/N)	Yes			Missing transition connector bolts SE & NE.
Guardrail		6	4	
Length (m)	99.000			No thrie beam.
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN			
Drainage		5	5	Hole at NE curb near the joint.
Approach Road General Rating		6	6	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : RD, 3 Spans, Lengths(m): 15.2-18.3-18.3, 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			7	7	Stained at underside of most girders from leakage.
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	Yes				
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			3	6	Extrusions & seal style joints replaced with KOCH or elastomeric style since last inspection.
Temperature (deg. C)		18			
(Expansion Type : OTHER)					
(Fixed Type : OTHER)					
Gap Size (mm)		Gap Location			
0		W. abut			
0		W. pier			
0		E. pier			
0		E. abut			
Deck Drainage			4	6	Seats stained. Water undermined concrete slope protection. Damage from previous joint leakage but joints have been replaced.
Drains Clogged (Y/N)		No			
Curbs/Median			6	6	
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			7	7	Rusting at bottom of base plate, type.
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts			7	7	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			5	5	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Girders			7	7	
Cracking (Y/N)		No			
Spalling (Percent Area)		0			
(Number Of Girders : 36)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RD, 3 Spans, Lengths(m): 15.2-18.3-18.3, A-Ident Number:)				
Diaphragms/Cross Frame		X	X	
Bearings		6	6	Reinforced pad brg.
Temperature (deg. C)	18			
(Expansion Type : REINFORCED PAD BEARING)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	From grout key leakage - old staining
Stains (Percent Area)	30			
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		3	4	Spalled at SW corner - photo
(Type : CONCRETE)				
Backwalls/Breastwalls		N	N	Not visible
Wingwalls		5	5	
Piles		N	N	
Paint/Coating		5	5	Tar
Abutment Stability		7	7	
Scour/Erosion		3	3	Concrete slope protection eroded and dropped, cracking, void below W abut (photo).
Piers/Bents				
(Type : PIER-COLUMN)				Both ends of west pier have small horizontal crack with rust staining.
Bearing Seats/Caps		5	5	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 8:8)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		5	5	
(Colour Description : YELLOW)				
(Colour Code : 13538)				
Pier Stability		7	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		3	4	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	
Traffic Safety Features		X	X	
Type				
Slope Protection		3	3	West slope protection in poor condition with extensive settlement. East side is settled and cracked - photo. Void @ NW. Water leaking between headslope cracks. Buckling at West abutment at bottom & heaved & cracked @ SW - photo. Cracks on East abutment slope protection. Settled 440mm East abutment. Settled 320mm West abutment, sealed with concrete @ top. Slope protection settled 100mm @ SE.
(Type : CONCRETE; CONCRETE)				
Bank Stability		5	5	
Drainage		5	5	
Grade Separation General Rating		3	5	

Proposed Action			
Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
Next Inspection Date	27-Mar-2014	Previous Inspection Date	31-Aug-2010
Inspection Cycle (Default) (months)	21		
Comment			