

Bridge Inspection										
Bridge File Number	06565 -1 Bridge				Form Type	PSR				
Year Built/Year Supstr	1958/1958				Lot No.	1				
Bridge or Town Name	CARBON				Inspector Name	Owen Salava				
Located Over	KNEEHILLS CREEK, 3.46, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	21:14 C1 12.215				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	-113:13:52, 51:29:40				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 /				Dept. Reviewer Name	Andrew Smikles				
AADT/Year	1,840 / 2011 (A)				Dept. Review Date	19-Oct-2012				
Road Classification	RAU-211.8-110				Follow-Up By					
Detour Length (km)	20									
Allowable Load (t):	Single	CS1 41 GIRDER		Semi	CS2 49		Train	CS3 62		----> 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)	No								
Remarks	Not required.								
Other Sign Types	Curve, Creek I.D.								

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 on curve, steep hills both sides. Superelevated. No passing both directions.				
Vertical Alignment			5	5					
Roadway Width (m)	11.000								
Approach Bump			5	5					
Guardrail (Y/N)			Yes		Missing bolts @ guardrail to parapet @ SE & NE (photo).				
Guardrail			3	3					
Length (m)			73.700		Insufficient posts; not thrie beam.				
Current Standard (Y/N)			No						
Termination Type			TURNED DOWN						
Drainage			4	4	Scaling & exposed rebar @ NW trough drain - still functions. Holes at all corners btwn approach curbs & slabs. Some hslp gullies.				
<b>Approach Road General Rating</b>			<b>5</b>	<b>5</b>					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : PO, 3 Spans, Lengths(m): 27.4-27.4-27.4, A-Ident Number: )						
<b>Special Features</b>						
Special Feature			6	Steel Channel Reinforcing. Channel reinforcing @ N pier only at bearing seat.		
(Type : )						
Special Feature			X			
(Type : )						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
<b>Last</b>	0	0	0	0		
<b>Now</b>	0.0	0.0	0.0	0.0		
Wearing Surface			5	5	Chipcoat on HDC overlay. Some cracks in HDC @ abraded chipcoat areas.	
(Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )						
(Thickness(mm) : <b>50</b> )						
Lateral Connection Problem (Y/N)		No				
Deck Top			N	N		
Deck Rideability			7	7		
Deck Joints			7	7		
Temperature (deg. C)		25				
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )						
(Fixed Type : )						
Gap Size (mm)		Gap Location				
65		S. abut				
65		S. pier				
65		N. pier				
68		N. abut				
Deck Drainage			6	6	Erosion gully below seat at NW corner but from approach drainage.	
Drains Clogged (Y/N)		No				
Curbs/Median			4	5	Light to medium scaling & wide spread transverse narrow cracks. Local delam at various locations. Lift pocket grout delaminated (photo) S3 E side. Spall to SE transition curb.	
(Curb Type : <b>Standard</b> )						
Scaling (Percent Area)		20				
Bridge Rail			7	7	Missing post A/B at EP22, WP8, WP19 (photo W p19). Wide vert. crack at NE parapet.	
(Type : <b>GALVANIZED STEEL TUBE BEAM TYPE 1</b> )						
Bridge Rail Posts		3	3			
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )						
Bridge Rail/Posts Coating			6	6		
(Type : <b>GALVANIZED</b> )						
Sidewalk			X	X		
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	0		
<b>Now</b>	0	0	0	0		
Girders			7	7	Delaminated grout in one lift pocket.	
Cracking (Y/N)		No				
Spalling (Percent Area)		0				
(Number Of Girders : <b>21</b> )						

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 3 Spans, Lengths(m): 27.4-27.4-27.4, A-Ident Number: )				
Diaphragms/Cross Frame		7	7	
Bearings		5	5	(Bearings have caused problems in past from freezing. 92/12/09).
Temperature (deg. C)	25			Expansion @ abuts.
(Expansion Type : <b>SLIDING PLATE</b> )				
(Fixed Type : <b>PINNED BEARING</b> )				
Coating Adequate (Y/N)	No			Bearings are tied together at piers.
Functioning (Y/N)	Yes			50% superficial corrosion at exterior abut bearings - photo.
Deck Underside		7	7	
Stains (Percent Area)	0			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>5</b>	<b>5</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		5	5	Heavy scaling at NW corner (photo).
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		5	5	Heavy scaling with efflorescence staining, typical at both abuts (photo).
Wingwalls		4	4	Medium scaling on parapet, wide vert. crack at NW parapet. Wide vertical crack @ NE curtain wall end.
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		4	4	Erosion gully at NW & SW corners (photo).
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				
Bearing Seats/Caps		4	5	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>0:0</b> )				
Pier Shaft/Piles		6	6	Patches on SW side of South pier.
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	60% superficial corrosion at nose plate.
(Colour Description : )				
(Colour Code : )				
Pier Stability		6	6	
Scour		5	5	Minor erosion at South pier. Natural rock provides protection.
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>4</b>	<b>5</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>W</b> )		Steep banks U/S and D/S - rock lined at U/S. Cut banks @ SW & NE (photo).		
(D/S Direction : <b>E</b> )				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Curb)	2.5	No visible HWM - (noted HWM is approximate). Drift caught on girder bracing in S1 (photo).		
Drift (Y/N)	No			
Slope Protection		6	6	Concrete at N. Class 1 & natural at S.
(Type : <b>RIP RAP; RIP RAP</b> )				
Guidebank/Spurs		X	6	N slope protection extends to u/s bank 50m.
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>6</b>	<b>6</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Replace missing anchor bolts on bridgerail post (3).					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS	2012	Blast and recoat exterior abut bearings					
WASHING	2012						
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Install missing bolt @ SE transition & NE.					
OTHER ACTION	2012	Seal gap at all approach corners.					
OTHER ACTION	2012	Patch NW abut seat scaling & seal both seats.					
OTHER ACTION	2012	Patch & seal both abut backwall.					
OTHER ACTION	2012	Seal both pier caps.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>50.0/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>56.8/59.0</b>	Est. Repl. Yr	2027	Maint. Req'd. (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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	17-Jun-2014		Previous Inspection Date	11-Nov-2010			

Inspection Cycle (Default) (months)	21
Comment	