

Bridge Inspection										
Bridge File Number	73077 -1 Bridge				Form Type	SG				
Year Built/Year Supstr	1982/1982				Lot No.	2				
Bridge or Town Name	EAST COULEE				Inspector Name	Owen Salava				
Located Over	RED DEER RIVER, 3, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	10:08 C1 21.642				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	01-Nov-2011				
Legal Land Location	SW SEC 28 TWP 27 RGE 18 W4M				Data Entry By	Marcia Chavez				
Longitude, Latitude	-112:28:49, 51:19:55				Data Entry Date	29-Nov-2011				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien				
Contract Main. Area	CMA21				Review Date	14-Nov-2011				
Clear Roadway/Skew	10 / -20 deg. (LHF)				Dept. Reviewer Name	Andrew Smikles				
AADT/Year	590 / 2010 (A)				Dept. Review Date	02-Dec-2011				
Road Classification	RAU-209-110				Follow-Up By					
Detour Length (km)	5									
Allowable Load (t):	Single	CS1 28		Semi	CS2 49		Train	CS3 62		----> On Critical Spans ---->Critical Member
Design Loading:	MS230									----> 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	Information, curve, stop ahead, River ID.									

Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	West r/w.				Gas				
Power	South of bridge.				Municipal				
Others					Problem (Y/N)		No		
Remarks	Utilities conduit in west curb.								

Approach Road					
		Last	Now	Explanation of Condition	
Horizontal Alignment		6	6	Curves at both ends. "T" intersection 120m North.	
Vertical Alignment		7	7		
Roadway Width (m)	9.800			North approach and deck are 70mm lower than road.	
Approach Bump		6	6		
Guardrail (Y/N)		Yes		Missing 1 bolt at SE transition to bridgerail. Not thrie beam.	
Guardrail		4	4		
Length (m)	40.400			Missing bolt & blocking at SE, SW rail posts (photos).	
Current Standard (Y/N)		No			
Termination Type		Turn Down			
Drainage		6	6		
Approach Road General Rating		6	6		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : WG, 3 Spans, Lengths(m): 52-66-52, A-Ident Number: A0902-01)					
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			6	6	(Core hole in deck S2 not filled to top. Cracks in wear surface run full width of deck. These are every 1.0m at midspan, sealed. Small popouts throughout deck. Crack width 0.3mm to 0.8mm wide. 30/05/2005). Previously noted cracks covered by chipseal.
(Material Type : CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) :)					
Deck Top			N	N	
Deck Rideability			8	8	
Deck Joints			4	4	N abut fingers are 15mm higher at road side. S fingers 10mm higher on road side.
Temperature (deg. C)		2			
(Expansion Type : FINGER PLATES)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
82		South			
55		North			
Deck Drainage			8	8	
Drains Clogged (Y/N)		No			
Curbs/Median			4	4	Transverse 0.3 to 0.6mm wide cracks in curb every 0.60m to 1.5m. 5 locations in East curb where curb spalled exposing waterstop due to low cover.
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			9	9	Square tube. Several A/B nuts barely flush - not rated down.
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts		8	8		
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		7	7		
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder/Beam					
Cover Plate		8	X	Girders appear to have slight sag, all spans.	
Flange		7	7		
Web		8	8		
Stiffeners		8	8		
Splice		8	8		
Weld		7	7		
Diaphragms/Cross Frame		8	8		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 3 Spans, Lengths(m): 52-66-52, A-Ident Number: A0902-01)				
Paint Condition		X	X	Weathering steel.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		6	6	Bearings are fully extended both abutments.
Temperature (deg. C)	2			
(Expansion Type : ROCKER BEARING)				
(Fixed Type : ROCKER BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Cracks underneath deck exterior. Efflorescence @ cracks.
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	Buried.
Paint/Coating		5	5	
Abutment Stability		8	8	
Scour/Erosion		7	7	
Piers/Bents				
(Type : PIER-SOLID)				Narrow vertical cracking under 3 girder bearings.
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0)				
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		X	X	
Nose Plate		8	8	
Paint/Coating		5	5	
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		N	6	
Debris (Y/N)	No			
Substructure General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				Very erodable sandy material.
(D/S Direction : E)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Curb)				No visible HWM.
Drift (Y/N)		No		
Slope Protection (Type : CONCRETE; CONCRETE)		4	4	Natural @ top of North. South abutment slope protection pulled away from abutment. 135mm & 230mm deep at South abutment. Void under slab.
Guidebank/Spurs		7	7	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Install 3/4" dia x 3" long galv bolt @ SE flexbeam to rail connection - c/w nut & washer. Drill through rail to install.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2012	Patch East curb exposed waterstop and seal.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Shim & weld fingers in both abutment joints.					
RESET/ PAINT BEARINGS	2012	Reset.					
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Repair South abutment slope protection, seal top - 1 m3 fillcrete & tar.					
OTHER ACTION	2012	Install 2 posts to rail bolts at S guardrail, c/w blocking.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	72.2/72.2	Sufficiency Rating (Last/Now) (%)	67.4/67.5	Est. Repl. Yr	2043	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2003.06.25 Chip coat in 2007 or polymer in 2009. Second intervention 2030. replace bridge in 2060.						
On 3-Year Program (Y/N)	Y						
Proposed Action	2003.06.25 Chip Coat in 2007 or Polymer in 2009.						
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	01-Aug-2013		Previous Inspection Date	11-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							