

Bridge Inspection							
Bridge File Number	00541 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1966/1966			Lot No.	1		
Bridge or Town Name	RED WILLOW			Inspector Name	Todd Warshawski		
Located Over	REDWILLOW CREEK, 5.31.1, WATERCRS-ST			Inspector Class	BR CLS B		
Located On	601:04 C1 6.526			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	11-Mar-2013		
Legal Land Location	SW SEC 13 TWP 40 RGE 18 W4M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-112:28:34, 52:26:03			Data Entry Date	16-Apr-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA20			Review Date	08-Apr-2013		
Clear Roadway/Skew	8.2 / -30 deg. (LHF)			Dept. Reviewer Name	Chris Black		
AADT/Year	140 / 2012 (A)			Dept. Review Date	22-Apr-2013		
Road Classification	RCU-209G-90			Follow-Up By			
Detour Length (km)	10						
Allowable Load (t):	Single	CS1 28 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 65 GIRDER	----> 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	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)	Yes						
Remarks	At varying heights; do not meet std. Spring mounts at NE & SE.						
Other Sign Types							

Utilities (Located at)			
Utility Attachments			
Telephone	N r/w.	Gas	
Power	3 wires 15m South of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Approach 70m SW of bridge & 160m SE. Small rise to E.
Vertical Alignment		7	7	
Roadway Width (m)	10.000			
Approach Bump		5	6	
Guardrail (Y/N)	Yes			1 dented section at NW & SE rail - still functional. Missing TT block at 1st post off bridge at SW corner (photo). Splice bolts missing at bridgerail connection. Insufficient posts/spacing; too low - 500mm c/l of rail to gravel surface. Approach rub rail not fabricated to skew.
Guardrail		4	4	
Length (m)	22.800			
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		5	4	Gravel windrows along approach rail close to bridge.
Approach Road General Rating		7	7	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : HC, 3 Spans, Lengths(m): 6.1-8.5-6.1, A-Ident Number:)						
Special Features						
Special Feature		9	8	External stirrup bracket. S2G9 (photo).		
(Type : UNDERSLUNG DIAPHR)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)	Gravel on deck.	
Last	50	0	0	0		
Now	60.0	0.0	0.0	0.0		
Wearing Surface		X	X			
(Material Type :)						
(Thickness(mm) :)						
Lateral Connection Problem (Y/N)	No					
Deck Top		4	4	Girder edges worn. Shallow spall at S end of S2 exposing jnt rebar. Only centre portion visible; both sides gravel covered.		
Deck Rideability		6	6			
Deck Joints		4	4	Bent in 1 girder & missing section at another over P2 E (photo).		
Bump (Y/N)		No				
Deck Drainage		4	4	Gravel built up along both curbs.		
Drains Clogged (Y/N)		Yes				
Curbs/Median		4	4	Minor spall at N side over P2 (photo). Spall on S2, S curb, 4th post.		
(Curb Type : Standard)						
Scaling (Percent Area)		0				
Bridge Rail		8	7	Double layer. Low height.		
(Type : GALVANIZED STEEL W-BEAM)						
Bridge Rail Posts		7	4	With TT blocks. Concrete spall affecting post anchorage on S2, S curb, post 4.		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating		8	8			
(Type : GALVANIZED)						
Sidewalk		X	X			
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	1		
Now	0	0	0	0		
Girders		3	4	Long. cracks & spalls in S2G8-10. S2G6 narrow shear crack with staining at each end. S2G3 narrow shear crack at W pier with long. crack/spall in AZ on same leg - sound concrete. Drift pin cracks & spalls on several girders.		
Last Complete Inspection Date		11-Mar-2013				
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
Lift or Connector Pocket Grouted (Y/N)		Yes				
(Number Of Girders : 30)						
Span Alignment Problems						
Vertical (Y/N)		No		Bridge not aligned with road on N side due to skew. S2 - 70mm to N at P2.		
Horizontal (Y/N)		Yes				
Superstructure General Rating		3	4			

Substructure							
Bridge Component			Last	Now	Explanation of Condition		
Abutments							
(Extended Backwall Piles (Y/N) : Y)							
(Extended Backwall Piles Spacing(mm) : 1800)							
(Total Number of Caps/Corbels : 3:3)							
Caps replaced in 2007.							
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0			
Now	0	0	0	0			
Bearing Seats/Caps/Corbels				8	7	Wide checks up to 5mm on several caps.	
(Type : TREATED TIMBER)							
(Depth(mm) : 350)							
(Width(mm) : 300)							
Backwalls/Breastwalls				6	6		
Greatest Height (m)		2.50					
Wingwalls				5	5		
(Total Number of Bearing Piles : 6:6)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	1	A2P1 split with rot. A2P6 minor split.		
Now	0	0	0	1			
Piles				3	3		
Paint/Coating				X	X		
Abutment Stability				5	5		
Scour/Erosion				6	5		
Piers/Bents							
(Type : PIER-COLUMN)							
(Total Number of Caps/Corbels : 3:3)							
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0			
Now	0	0	0	0			
Bearing Seats/Caps/Corbels				8	8		
(Type : TREATED TIMBER)							
(Depth(mm) : 300)							
(Width(mm) : 350)							
(Total Number of Bearing Piles : 8:9)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0	P1p4 split, banded (photo). P1p6 spliced with steel sleeve (photo). P2p8 spliced with steel sleeve (photo). P1p3 rot with small voids. P2p3 start of rot at base.		
Now	0	0	0	1			
Pier Shaft/Piles				5	3		
Greatest Height (m)		4.20					
Bracing/Struts/Sheathing				6	6		
Nose Plate				X	X		
Paint/Coating				X	X		
(Colour Description :)							
(Colour Code :)							

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		5	5	
Scour		5	5	
Debris (Y/N)	No			
Substructure General Rating		4	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : S)				
(D/S Direction : N)				
Alignment		5	6	
Bank Stability		5	N	(Bank sloughing to SE. 11Jul2011).
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		5	5	Minor erosion gullies developing due to leakage btwn girders. Some CL1 rock at base of pier.
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		5	6	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Proposed Long-Term Strategy	2004.04.29 Bridge has original caps. Should be ok until 2016.		
On 3-Year Program (Y/N)	Y		
Proposed Action	2008.05.22 Bridge repairs identified, check with CB if done, see level 2 inspection report.		
Previous Inspector's Name	Dave Lam	Previous Assistant's Name	
Next Inspection Date	11-Jun-2016	Previous Inspection Date	11-Jul-2011
Inspection Cycle (Default) (months)	39		
Comment			