

Bridge Inspection											
Bridge File Number	73637 -1 Bridge				Form Type	PSR					
Year Built/Year Supstr	1987/1987				Lot No.	3					
Bridge or Town Name	CARMANGAY				Inspector Name	Tom Carey					
Located Over	LITTLE BOW RIVER, 2.12.12, WATERCRS-ST				Inspector Class	BR CLS A					
Located On	23:04 C1 41.356				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	18-Feb-2013					
Legal Land Location	NW SEC 31 TWP 13 RGE 23 W4M				Data Entry By	Anne Roberts					
Longitude, Latitude	-113:08:13, 50:07:54				Data Entry Date	17-Mar-2013					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Garry Roberts					
Contract Main. Area	CMA25				Review Date	03-Mar-2013					
Clear Roadway/Skew	13.1 / -25 deg. (LHF)				Dept. Reviewer Name	Tim Davies					
AADT/Year	2,320 / 2011 (A)				Dept. Review Date	25-Mar-2013					
Road Classification	RLU-208G-90				Follow-Up By						
Detour Length (km)	6										
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	MS300									----> 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									
Other Sign Types	Curve signs River ID								

Utilities (Located at)									
Utility Attachments									
Telephone	At East r/w.				Gas				
Power	3 wires 20m South.				Municipal				
Others					Problem (Y/N)	No			
Remarks									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	Curves at both ends down to bridge.				
Vertical Alignment			6	6					
Roadway Width (m)			14.200		Ravelling at SW				
Approach Bump			7	6					
Guardrail (Y/N)			Yes		Lower bolts missing @ bridge rail connection at North East and North West. 5 bolts missing at turndown ends at each end. Not thriebeam.				
Guardrail			4	4					
Length (m)			90.000						
Current Standard (Y/N)			No						
Termination Type			TURNED DOWN						
Drainage			7	7					
Approach Road General Rating			6	6					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : DBT, 1 Spans, Lengths(m): 42, A-Ident Number:)					
Special Features					
Special Feature					
(Type :)					
Special Feature					
(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			6	4	Transverse cracks @ 2 m average spacing. Most open - sealing has deteriorated. Ravelling at shoulders.
(Material Type : ACP)					
(Thickness(mm) : 90)					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			7	7	
Temperature (deg. C)		-4			
(Expansion Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
(Fixed Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
Gap Size (mm)		Gap Location			
25		North			
40		South			
Deck Drainage			8	8	
Drains Clogged (Y/N)		No			
Curbs/Median			6	6	Minor break @ NE. Vertical 0.3 to 0.4 mm wide cracks @ curb exteriors @ A/B's & through curbs.
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			5	5	Missing 10 splice bolts 6 A/B nuts with insufficient thread 5% corrosion @ base plate & grout spalls @ pads - 20%
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts			4	4	
(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	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : DBT, 1 Spans, Lengths(m): 42, A-Ident Number:)				
Girders		4	4	Typical 0.1mm - 0.2mm wide end block cracks. Some @ 0.1mm wide cracks extend into narrow web section - minor. Girders sag 10mm.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
(Number Of Girders : 12)				
Diaphragms/Cross Frame		8	8	
Bearings		8	8	Expansion is @ south
Temperature (deg. C)	-4			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : REINFORCED PAD BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		8	8	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
Backwalls/Breastwalls		8	8	
Wingwalls		7	7	
Piles		N	N	
Paint/Coating		X	5	
Abutment Stability		8	8	
Scour/Erosion		7	7	
Piers/Bents				
(Type :)				
Bearing Seats/Caps		X	X	
(Type :)				
(Total Number of Bearing Piles :)				
Pier Shaft/Piles		X	X	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		X	X	
Scour		X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Debris (Y/N)	No			
Substructure General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				No visible HWM
Drift (Y/N)	No			
Slope Protection		8	8	
(Type : CONCRETE; CONCRETE)				
Guidebank/Spurs		8	8	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2014	Replace 10 splice bolts					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK	2014	Seal transverse cracks.					
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2014	Install lower bolts @ guardrail / bridge rail 2 @ 16mm c/w nuts & washers x 50mm long. At North end.					
OTHER ACTION	2014	Install gaurdrail turn down bolts 16 to 20.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	60.3/60.2	Est. Repl. Yr	2041	Maint. Req. (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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	18-Nov-2014		Previous Inspection Date	18-May-2011			
Inspection Cycle (Default) (months)	21						
Comment							