

Bridge Inspection										
Bridge File Number	01294 -1 Bridge				Form Type	PCS				
Year Built/Year Supstr	1974/1974				Lot No.	1				
Bridge or Town Name	CARSTAIRS				Inspector Name	Jason Saly				
Located Over	TRIBUTARY TO BEAVERDAM CREEK, 3.89.8.11.1, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	766:04 C1 14.780				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	14-Feb-2012				
Legal Land Location	SW SEC 1 TWP 30 RGE 3 W5M				Data Entry By	Marcia Chavez				
Longitude, Latitude	-114:18:23, 51:32:05				Data Entry Date	08-Mar-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien				
Contract Main. Area	CMA28				Review Date	29-Feb-2012				
Clear Roadway/Skew	8.8 / 30 deg. (RHF)				Dept. Reviewer Name	Andrew Smikles				
AADT/Year	250 / 2010 (A)				Dept. Review Date	14-Mar-2012				
Road Classification	RCU-209-110				Follow-Up By					
Detour Length (km)	3									
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 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	Double sided hazards @ NW & SE.								
Other Sign Types	90 km/hr sign North of bridge 40m.								

Utilities (Located at)										
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE									
Telephone	West r/w.				Gas					
Power	2 wires OH East r/w.				Municipal					
Others					Problem (Y/N)		No			
Remarks										

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection SH 580 60m South. In vertical sag. Hills both ways, limited sight distance South, no passing. Farm approach 10m North of bridge @ NW corner.
Vertical Alignment		5	5	
Roadway Width (m)	8.100			Approaches settled slightly, wheel ruts.
Approach Bump		5	5	
Guardrail (Y/N)	Yes			
Guardrail		5	5	
Length (m)	8.100			Approach rail 15m long on NE & SE corners. Insufficient posts and length, not thrie beam.
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		6	N	Snow covered.
Approach Road General Rating		5	5	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : VS, 1 Spans, Lengths(m): 10.7, A-Ident Number:)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)	Snow & dirt covered.	
Last				30		
Now	100.0	0.0	0.0	0.0		
Wearing Surface				3	N	(30% worn bare. 30Sep2009).
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 50)						
Lateral Connection Problem (Y/N)		Yes				(Connector pocket grout cracked. 30Sep2009).
Deck Top				N	N	
Deck Rideability				5	6	
Deck Joints				X	N	Chipcoat covered. Buffer angles. Bump caused by approach settlement.
Bump (Y/N)		Yes				
Deck Drainage				5	N	No deck drains, drains between girders.
Drains Clogged (Y/N)		No				
Curbs/Median				6	6	Minor scrapes on East curb.
(Curb Type : Standard)						
Scaling (Percent Area)		2				
Bridge Rail				8	7	Double layer.
(Type : GALVANIZED STEEL FLEX BEAM)						
Bridge Rail Posts				8	7	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating				7	7	
(Type : GALVANIZED)						
Sidewalk				X	X	
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	1		
Girders				4	3	E ext wide crack turns to narrow and extends full length of girder on bottom side of girder. W ext has wide longit. crack with some staining from N abut to girder & at inside side edge on bottom. 100mm spall ext girder side. E ext girder has wide crack @ inside edge 1.7m long @ N. Lift pockets @ int girder void of grout. Cracked connector pockets and delams at some lift pockets.
Last Complete Inspection Date		14-Feb-2012				
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
Lift or Connector Pocket Grouted (Y/N)		Yes				
(Number Of Girders : 8)						
Span Alignment Problems						
Vertical (Y/N)		No				
Horizontal (Y/N)		No				
Superstructure General Rating				4	3	

Substructure					
Bridge Component		Last	Now	Explanation of Condition	
Abutments					
(Extended Backwall Piles (Y/N) : Y)				Ext pile @ each corner.	
(Extended Backwall Piles Spacing(mm) : 1500)					
(Total Number of Caps/Corbels : 5:5)				Double cap plus subcap on N wall & single cap plus subcap on S with 300 x 150 cap on top.	
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	0	
Bearing Seats/Caps/Corbels				7	7
(Type : TREATED TIMBER)					
(Depth(mm) : 300)					
(Width(mm) : 350)					
Backwalls/Breastwalls			7	7	
Greatest Height (m)		1.85			
Wingwalls			6	6	
(Total Number of Bearing Piles : 9:9)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	0	
Piles			4	4	
Paint/Coating			X	X	
Abutment Stability			7	7	
Scour/Erosion			8	7	
Piers/Bents					
(Type :)					
(Total Number of Caps/Corbels :)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Bearing Seats/Caps/Corbels			X	X	
(Type :)					
(Depth(mm) :)					
(Width(mm) :)					
(Total Number of Bearing Piles :)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Pier Shaft/Piles			X	X	
Greatest Height (m)					
Bracing/Struts/Sheathing			X	X	
Nose Plate			X	X	
Paint/Coating			X	X	
(Colour Description :)					
(Colour Code :)					
Pier Stability			X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : E)				
(D/S Direction : W)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)	1.1			(1999/02/26)
Drift (Y/N)	No			
Slope Protection		5	5	ACP rubble @ North. With some riprap.
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
REPAIR/REPLACE BRIDGE RAIL										
SEAL CURBS										
PATCH DECK										
OVERLAY DECK										
STRAIGHTEN/REPLACE MEMBERS										
WASHING										
SHOTCRETE REPAIRS										
CORE TIMBER CAPS/CORBELS										
REPAIR/REPLACE TIMBER CAPS										
REPAIR ABUTMENT SCOUR/EROSION										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL STRUTS										
OTHER ACTION	2012	Install hazard markers @ all corners.								
OTHER ACTION	2012	RegROUT lift pockets, if not yet done.								
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)	44.4/38.9	Sufficiency Rating (Last/Now) (%)	60.7/58.2	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes			
Special Comments for Next Inspection	No action for girders required at this time; continue regular inspections.		Department Comments							
Maintenance Reviewed By		Date			Estimated Total	0				
Proposed Long-Term Strategy	New paving suggest remove loose material, grout pockets (connector & lift as required) and pave max 50mm. With normal maintenance bridge OK until 2025. RS									
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Dave Lam	Previous Assistant's Name								
Next Inspection Date	14-May-2015	Previous Inspection Date	30-Sep-2009							
Inspection Cycle (Default) (months)	39									
Comment										

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL						
SEAL CURBS						
PATCH DECK						
OVERLAY DECK						
STRAIGHTEN/REPLACE MEMBERS						
WASHING						
SHOTCRETE REPAIRS						
CORE TIMBER CAPS/CORBELS						
REPAIR/REPLACE TIMBER CAPS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
INSTALL STRUTS						
OTHER ACTION	2012	Install hazard markers @ all corners.	Operations	2012		
OTHER ACTION	2012	RegROUT lift pockets, if not yet done.	Defer until more maint items.			
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	44.4/38.9	Sufficiency Rating (Last/Now) (%)	60.7/58.2	Est. Repl. Yr	2025	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection	No action for girders required at this time; continue regular inspections.		Department Comments	Programmed in PMA for replacement in 2021. DA		
Maintenance Reviewed By	Darron Ahlstedt		Date	05-Nov-2012	Estimated Total	0
Proposed Long-Term Strategy	New paving suggest remove loose material, grout pockets (connector & lift as required) and pave max 50mm. With normal maintenance bridge OK until 2025. RS					
On 3-Year Program (Y/N)						
Proposed Action						
Previous Inspector's Name	Dave Lam		Previous Assistant's Name			
Next Inspection Date	14-May-2015		Previous Inspection Date	30-Sep-2009		
Inspection Cycle (Default) (months)	39					

Comment	
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