

Bridge Inspection										
Bridge File Number	77426 -1 Bridge					Form Type	PSR			
Year Built/Year Supstr	1975/1975					Lot No.	2			
Bridge or Town Name	CARSTAIRS					Inspector Name	Owen Salava			
Located Over	2:20 R1 9.712;2:20 L1 9.712					Inspector Class	BR CLS A			
Located On	581:02 C1 4.877					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	11-Mar-2013			
Legal Land Location	SW SEC 13 TWP 30 RGE 1 W5M					Data Entry By	Marcia Chavez			
Longitude, Latitude	-114:01:30, 51:33:43					Data Entry Date	27-Mar-2013			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	John O'Brien			
Contract Main. Area	CMA29					Review Date	17-Mar-2013			
Clear Roadway/Skew	10.1 /					Dept. Reviewer Name	Chris Black			
AADT/Year	750 / 2011 (A)					Dept. Review Date	28-Mar-2013			
Road Classification	RCU-209-110					Follow-Up By				
Detour Length (km)	11									
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 Vert. Clearance Posting (m)			UNDER: 2 L1 5.4m, 2 R1 5.4m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)	5.4	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.5	In Advance (Y/N)	Yes
Remarks												
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)		No										
Remarks			Not required.									
Other Sign Types		Information, Route.										

Utilities (Located at)									
Utility Attachments									
Telephone	East, west ditches.					Gas			
Power	3 wires North 200m.					Municipal			
Others						Problem (Y/N)	No		
Remarks									

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Limited sight distance with ramp jct. all 4 corners.
Vertical Alignment		5	5	
Roadway Width (m)	11.000			Small tear in one section @ SW just off bridge - photo.
Approach Bump		5	5	
Guardrail (Y/N)		Yes		
Guardrail		4	5	
Length (m)	45.600			Not thrie beam transition.
Current Standard (Y/N)		No		
Termination Type		Turn Down		
Drainage		5	5	
Approach Road General Rating		5	5	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : VF, 2 Spans, Lengths(m): 36.6-36.6, A-Ident Number:)						
Special Features						
Special Feature		9	9			
(Type : EXT LATER POST TENS)						
Special Feature		9	9			
(Type : UNDERSLUNG DIAPHR)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	0	0	0	0		
Now	10.0	0.0	0.0	0.0		
Wearing Surface		5	5	Narrow longit.crack in EBL of both spans 4.3m from S gutter, line over grout key. Intermittent longit. crack in other areas of deck.		
(Material Type : CONCRETE)						
(Thickness(mm) : 50)						
Lateral Connection Problem (Y/N)	Yes					
Deck Top		N	N			
Deck Rideability		8	8			
Deck Joints		8	7	E abut finger plates. Finger plate at E abut plumbing good, (leaks through curb cover plate at NE). Chips to EBL paving lip at A2.		
Temperature (deg. C)		0				
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC);FINGER PLATES)						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
70		West - A1 - Gland - Exp				
73		Center - P1 - Gland - Exp				
95		East - A2 - Finger - Exp				
Deck Drainage		7	7	Drains extended.		
Drains Clogged (Y/N)		No				
Curbs/Median		8	7	Sealer peeling on outside face.		
(Curb Type : Standard)						
Scaling (Percent Area)		0				
Bridge Rail		8	8	Several posts with less than full nut engagement at bases.		
(Type : GALVANIZED STEEL BRIDGE TUBE)						
Bridge Rail Posts		6	6			
(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	0		
Now	0	0	0	0		
Girders		4	4	Marked and dated @ SW & SE, S2G1 - photo. Corrosion stain & medium width crack @ NW exterior. Efflorescence @ weep drains & corrosion stains. Typical VF girder cracks @ chamfers & lower 1/2 of webs. S1G7 has HLD chip above SBL.		
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
(Number Of Girders : 14)						

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : VF, 2 Spans, Lengths(m): 36.6-36.6, A-Ident Number:)				
Diaphragms/Cross Frame		6	6	Vertical cracks in 25% @ diaphragms.
Bearings		5	5	Some bearings were not cast horizontal at construction causing uneven bearing/pressure on pads causing deformation - photo.
Temperature (deg. C)	0			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL; PINNED BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Chamfer cracks are medium width.
Stains (Percent Area)	1			
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		6	6	
(Type : CONCRETE)				
Backwalls/Breastwalls		8	8	
Wingwalls		8	7	Vertical crack at NE wingwall.
Piles		N	N	
Paint/Coating		4	4	Peeling/scaling.
Abutment Stability		8	8	
Scour/Erosion		4	4	Gap at corner drains with erosion below.
Piers/Bents				
(Type : PIER-SOLID)				
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0)				Piles are buried.
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		8	8	
(Colour Description :)				
(Colour Code :)				
Pier Stability		9	9	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		6	6	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		9	9	
Traffic Safety Features		9	9	
Type	Guardrail			
Slope Protection		4	4	Slope has settled 50mm @ top - photo; out 80mm at A2, 50mm at A1 Bulging at base of both hspls.
(Type : CONCRETE; CONCRETE)				
Bank Stability		4	4	Erosion @ NE embankment beside drain trough - photo. Void under trough.
Drainage		7	7	
Grade Separation General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
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							
OTHER ACTION	2013	Seal or line trough at NE.					
OTHER ACTION	2013	Seal gap at top of concrete slope protection where pulled away.					
OTHER ACTION	2013	Reseal curb/wingwall sealer where peeled.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	51.6/51.2	Est. Repl. Yr	2039	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girder cracks & bearing deformation - no action required.		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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	11-Dec-2014		Previous Inspection Date	10-Aug-2011			
Inspection Cycle (Default) (months)	21						

Comment	
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