

Bridge Inspection											
Bridge File Number	75919 S-1 Bridge					Form Type	SG				
Year Built/Year Supstr	1967/1967					Lot No.	2				
Bridge or Town Name	FORT MACLEOD					Inspector Name	Garry Roberts				
Located Over	CPR					Inspector Class	BR CLS A				
Located On	2:08 L1 8.365					Assistant Name					
Water Body Cl./Year						Assistant Class					
Navigabil. Cl./Year						Inspection Date	23-Jan-2010				
Legal Land Location	NW SEC 30 TWP 9 RGE 26 W4M					Data Entry By	Kelsey Roberts				
Longitude, Latitude	-113:31:07, 49:46:04					Data Entry Date	27-Feb-2010				
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Tom Carey				
Contract Main. Area	CMA26					Review Date	01-Feb-2010				
Clear Roadway/Skew	13.4 / 45 deg. (RHF)					Dept. Reviewer Name	Lorenz Bohnert				
AADT/Year	5,000 / 2008 (A)					Dept. Review Date	02-Mar-2010				
Road Classification	RAU-211.8-110					Follow-Up By					
Detour Length (km)	10										
Allowable Load (t):	Single	CS1 62 GIRDER			Semi	CS2 73 GIRDER		Train	CS3 81 GIRDER		----> On Critical Spans ---->Critical Member
Design Loading:	HS20					----> Primary Span					

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)					No							
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)		Lane	WB	On Bridge (m)		In Advance (Y/N)	
Remarks	Not req.											
Required Load Posting (t)			Single		Semi		Truck Train					
Posted Loading (t)			Single		Semi		Truck Train					
Posted:	Lane	NB	At Junction (Y/N)			In Advance (Y/N)			At Bridge (Y/N)			
Posted:	Lane	SB	At Junction (Y/N)		No	In Advance (Y/N)		No	At Bridge (Y/N)		No	
Remarks	Not req.											
Hazard Marker At Bridge (Y/N)			No									
Remarks												
Other Sign Types			CURVE									

Utilities (Located at)									
Utility Attachments									
Telephone					Gas				
Power					Municipal				
Others					Problem (Y/N) No				
Remarks									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	Typical crest curve over RR tracks. Blind hill to south.				
Vertical Alignment			5	5					
Roadway Width (m)		13.000		Isolated missing splice bolts- approx. 8 at SW. Not fastened to bridgerail & Insufficient posts.					
Approach Bump		6	7						
Guardrail (Y/N)		Yes							
Guardrail		7	4						
Length (m)		99.000							
Current Standard (Y/N)		No							
Termination Type		TURNED DOWN							
Drainage			9	7					

Approach Road				
		Last	Now	Explanation of Condition
Approach Road General Rating		6	5	
Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RB, 3 Spans, Lengths(m): 16.5-20.4-16.5, A-Ident Number: A0482-01)				
Special Features				
Special Feature			X	
(Type :)				
Special Feature			X	
(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	6	Transverse cracks-50% sealed
(Material Type : ACP)				
(Thickness (mm) : 50)				
Deck Top		N	N	
Deck Rideability		7	7	
Deck Joints		4	5	10mm vertical misalignment in travel direction not affecting plows.
Temperature (deg. C)		-7		
(Expansion Type : FINGER PLATES)				
(Fixed Type : ASPHALTIC FIBRE BOARD)				
Gap Size (mm)		Gap Location		
10		S. ABUT.		
Deck Drainage		4	4	Weep tube drainage corrodes girders. Drainage goes under south slope protection and also corrodes bearings. Drainage at south goes under slope protection. No drains.
Drains Clogged (Y/N)		No		
Curbs/Median		4	5	Flexural cracks every 1.5 m w/leaching outside of curb. Map cracks at NE, minor break @ NW Corner
(Curb Type : Standard)				
Scaling (Percent Area)		0		
Bridge Rail		7	7	
(Type : VERTICAL BAR)				
Bridge Rail Posts		7	7	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)				
Bridge Rail/Posts Coating		7	5	
(Type :)				
Sidewalk		X	X	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : RB, 3 Spans, Lengths(m): 16.5-20.4-16.5, A-Ident Number: A0482-01)					
Girder/Beam					
Cover Plate		7	6		
Flange		5	6		
Web		6	6		
Stiffeners		X	X		
Splice		7	7		
Weld		7	7		
Diaphragms/Cross Frame		6	7		
Paint Condition		3	3	WEEP TUBES DRIP ONTO BOTTOM FLANGE OF EXT. GIRDER-PHOTO. BLISTERS + CORROSION ON OUTER FLANGE OF OUTER GIRDERS; SOME DIAPHRAGMS @ W END RUST.	
(Colour Description :)				Orange	
(Colour Code :)					
Touchup Required (Y/N)	Yes				
Bearings		4	4	2 ANCHOR BOLTS MISSING @ S ABUT 1 1/4" DIA. OTHER BOLTS ALL BENT @ S. PITTED RUST ON EXT. BEARINGS & @ ALL @ S ABUT. 750% CORROSION W/ SOME PITTING-PHOTO.	
Temperature (deg. C)	-7				
(Expansion Type : ROCKER BEARING)					
(Fixed Type : PINNED BEARING)					
Coating Adequate (Y/N)	No				
Functioning (Y/N)	No				
Deck Underside		4	4	Weep tubes drip and have caused punch outs and scaling at NW. Leaching through hairline cracks especially outer sections. Skew pressure at abutment interfaces - minor.	
Stains (Percent Area)	5				
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		5	6		
(Type : CONCRETE)					
Backwalls/Breastwalls		6	6		
Wingwalls		6	6		
Piles		N	N		
Paint/Coating		X	X		
Abutment Stability		5	6		
Scour/Erosion		X	5		
Piers/Bents					
(Type : PIER-COLUMN)					
Bearing Seats/Caps		7	7		
(Type : CONCRETE)					
(Total Number of Bearing Piles : 12:12)				Sliding conc slope protection pressure Concrete repoved by chipping behind piles.	
Pier Shaft/Piles		7	7		
Bracing/Struts/Sheathing		X	X		

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Nose Plate		X	X	
Paint/Coating		7	7	brown
(Colour Description :)				
(Colour Code :)				
Pier Stability		5	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		5	6	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	Over abandoned railway.
Traffic Safety Features		X	X	
Type				
Slope Protection		3	3	Is undermine 300mm deep @ north and causing concrete cracking at top Centerline S. Settled 100mm & moved out 350mm. Center N. settled 20mm & moved out 90mm. Also, there is a 60mm gap along lower N. at centerling
(Type :)				
Bank Stability		5	5	
Drainage		7	6	
Grade Separation General Rating		5	3	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
REPAIR/SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS	2015	Install 2 bolts at south and paint. abut. bearings.					
REPAINT SUPERSTRUCTURE	2015	Touch up painting at exterior girders.					
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2012	Fill gaps at top of both slope protections (approx. 1m3 grout)					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/55.6	Sufficiency Rating (Last/Now) (%)	58.5/57.7	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Railroad is abandoned. Depending on highway realignment plans, only minimal work should be completed until bridge can be removed. (G.Roberts Jan.23/10)		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	23-Oct-2011		Previous Inspection Date	07-Dec-2007			
Inspection Cycle (Default) (months)	21						
Comment							