

Bridge Inspection							
Bridge File Number	76480 -1 Bridge			Form Type	TH PT		
Year Built/Year Supstr	1927/1922			Lot No.	2		
Bridge or Town Name	FORT MACLEOD			Inspector Name	Jason Rusu		
Located Over	BELLY RIVER, 2.12.22, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	511:02 C1 5.102			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	18-Nov-2012		
Legal Land Location	NW SEC 11 TWP 8 RGE 25 W4M			Data Entry By	Kelsey Roberts		
Longitude, Latitude	-113:17:22, 49:38:08			Data Entry Date	15-Dec-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Garry Roberts		
Contract Main. Area	CMA26			Review Date	01-Dec-2012		
Clear Roadway/Skew	4.9 /			Dept. Reviewer Name	Tim Davies		
AADT/Year	200 / 2011 (A)			Dept. Review Date	27-Dec-2012		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	20						
Allowable Load (t):	Single	H 15 STRINGER	Semi	HS 19 U3L4	Train	CS3 26 U3L4	----> On Critical Spans ---->Critical Member
Design Loading:	HS20					----> Primary Span	

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N) Yes												
Posted:	Lane	NB	On Bridge (m)	4.7	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	4.7	In Advance (Y/N)	Yes
Remarks		N 4.81 S4.81 Both signs have multiple bullet holes, mostly legible										
Required Load Posting (t)			Single	16	Semi	19	Truck Train	26				
Posted Loading (t)			Single	16.0	Semi	19.0	Truck Train	25.0				
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	Yes				
Posted:	Lane	SB	At Junction (Y/N)	Yes	In Advance (Y/N)	Yes	At Bridge (Y/N)	Yes				
Remarks		Not checked @ NB junction										

Hazard Marker At Bridge (Y/N)	Yes											
Remarks												
Other Sign Types		CURVE, STOP IF ONCOMING TRAFFIC, 1 LANE BRIDGE, narrow bridge, rough road ahead.										

Utilities (Located at)												
Utility Attachments												
Telephone						Gas						
Power						Municipal						
Others						Problem (Y/N)	No					
Remarks		None visible										

Approach Road					
		Last	Now	Explanation of Condition	
Horizontal Alignment		6	6	Curves in both approaches North and South, slight sag to South, crest to North	
Vertical Alignment		6	6		
Roadway Width (m)	8.000			ACP north - Gravel south. Vegetation growing in at SW and SE	
Approach Bump		5	5		
Guardrail (Y/N)		Yes			
Guardrail		5	5	Type IV ends at North abut.	
Length (m)	7.600			Not thriebeam	
Current Standard (Y/N)		No			
Termination Type		TERMINAL END			
Drainage		5	5		
<b>Approach Road General Rating</b>		<b>6</b>	<b>6</b>		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : TH, 3 Spans, Lengths(m): 53.3-24.4-24.4, A-Ident Number: A0070-01;A0034-07;A0034-39)					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0.0	0.0	0.0	5.0	
Wearing Surface/Deck Top			4	3	Isolated rot in timber ends
(Material Type : <b>UNTREATED TIMBER</b> )					
(Plank Thickness(mm) : <b>75</b> )					
(Plank Width(mm) : <b>300</b> )					
Deck Rideability			7	7	
Deck Joints			X	X	50mm gap btwn trusses @ pier 2 deck. 85mm gap @ p1
Temperature (deg. C)		5			
(Expansion Type : )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
Curbs/Wheel Guards			7	7	440 x 280 x 180 TT blk
(Curb Type : <b>Standard</b> )					
(Type : <b>TREATED TIMBER</b> )					
(Thickness(mm) : <b>90</b> )					
(Width(mm) : <b>300</b> )					
Bridge Rail			7	5	Double layer Flexbeam on galv HSS blocking bolted to styl lattice. 100mm galv HSS blocking bolted to painted lattice
(Type : <b>STEEL LATTICE;TREATED TIMBER LATTICE</b> )					
Bridge Rail Posts/Blocking			7	5	Minor corrosion at HSS blocks
(Type : <b>POST STEEL</b> )					
Bridge Rail/Posts Coating			5	5	
(Type : <b>PAINT</b> )					
Sidewalk			X	X	

Superstructure								
Bridge Component		Last		Now		Explanation of Condition		
(Primary Span : TH, 3 Spans, Lengths(m): 53.3-24.4-24.4, A-Ident Number: A0070-01;A0034-07;A0034-39)								
Wide Load Damage (Y/N)	Yes				A few sway braces with up to 55mm local bends. Bottom lateral hanger broken in panel 1 (U8 E (chord), U4W (sway bracing), U9E (Portals) missing bolts) 15-Jun-2011 (Bullet hole @ cl u8u8, 10x100mm dent @ u1u1.) 15-Jun-2011  (Missing bolts at U4W, U8E, U9E.)  Fire damage, functional No missing rivets. 9/bay x 9 bays  20mm bend at exterior of U3L4 E 25mm dents at bottom chord of U4U4 and U5U5 from High Load.			
High Load Damage (Y/N)	Yes							
Top Chord			7	7				
Batter Posts			7	7				
Sway Bracings			4	5				
Diagonals			5	5				
Verticals			5	5				
Portals			6	6				
Connections			4	4				
Floor Beams			7	7				
Bottom Chord			6	6				
(No. of Stringers : 81)								
Stringer Detail Ratings								
	N (count)	1 (count)	2 (count)	3 (count)				
<b>Last</b>								
<b>Now</b>								
Stringers			5	5				
(Type : STEEL)								
(Width(mm) : 120)								
(Depth(mm) : 260)								
(Spacing(mm) : 649)								
Paint Condition			4	4	No paint @ bottom 25%. Replacement members @ floor system primed			
(Colour Description : GREEN)								
(Colour Code : 14090)								
Touchup Required (Y/N)	No							
Bearings			7	7	@ Pier 2 @ Abut 2			
Temperature (deg. C)	5							
(Expansion Type : SLIDING PLATE)								
(Fixed Type : PINNED BEARING)								
Functioning (Y/N)	Yes							
Sub Deck/Deck Underside			8	7				
(Material Type : TREATED TIMBER)								
(Plank Thickness(mm) : 100)								
(Plank Width(mm) : 300)								
Defects (Percent Area)	0							
<b>Span Alignment Problems</b>								
Vertical (Y/N)	No							
Horizontal (Y/N)	No							
<b>Superstructure General Rating</b>			<b>4</b>	<b>4</b>				
Superstructure								
Bridge Component		Last		Now		Explanation of Condition		
(Secondary Span : PT)								
<b>Special Features</b>								
Special Feature				X	Truss A0034-38 was damaged by fired and replaced with truss A0034-07			
(Type : )								
Special Feature				X				
(Type : )								

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Secondary Span : PT)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
<b>Last</b>	0	0	0	0		
<b>Now</b>	0.0	0.0	0.0	0.0		
Wearing Surface/Deck Top			4	4	25% abraded surface @ span 1 Isolated rot in plank ends	
(Material Type : <b>UNTREATED TIMBER</b> )						
(Plank Thickness(mm) : <b>75</b> )						
(Plank Width(mm) : <b>300</b> )						
Deck Rideability			7	7		
Deck Joints			X	X		
Temperature (deg. C)						
(Expansion Type : )						
(Fixed Type : )						
Gap Size (mm)		Gap Location				
Curbs/Wheel Guards			7	7		
(Curb Type : <b>Standard</b> )						
(Type : <b>TREATED TIMBER</b> )						
(Thickness(mm) : <b>90</b> )						
(Width(mm) : <b>300</b> )						
Bridge Rail			6	5	Double layer flexbeam on galv HSS blocking bolted to lattice.	
(Type : <b>STEEL LATTICE;TREATED TIMBER LATTICE</b> )						
Bridge Rail Posts/Blocking			5	5		
(Type : <b>POST STEEL</b> )						
Bridge Rail/Posts Coating			4	4	70% paint failure @ lattice, isolated sections.	
(Type : <b>PAINT</b> )						
Sidewalk			X	X		
Wide Load Damage (Y/N)		No			Minor sweep	
Top Chord			6	6	(S1-U1L1E missing bolt) 15-Jun-2011 U3L3W @ span 1 local 20mm bends S1-U1L1E- Wide Load damage- 25mm bend (30mm bend @ gusset @ L3W @ span ) 15-Jun-2011	
Batter Posts			7	7		
Diagonals			5	5		
Verticals			5	5		
Connections			5	5		
Floor Beams			5	5		
Bottom Chord			6	6		
Lateral Bracings			5	5		
(No. of Stringers : <b>48;48</b> )						
Stringer Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>						
<b>Now</b>						
Stringers			6	6	8/bay x 12 bays = 96	
(Type : <b>STEEL</b> )						
(Width(mm) : <b>120</b> )						
(Depth(mm) : <b>260</b> )						
(Spacing(mm) : <b>737</b> )						
Fire damage under Sp. 1						

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
<b>(Secondary Span : PT)</b>						
Paint Condition		4	4	30% corrosion A34-39. No paint @ floor system @ panels 1 & 2		
(Colour Description : )				Burned paint		
(Colour Code : )						
Touchup Required (Y/N)	No					
Bearings		5	5	STEEL SLIDING PLATE		
Temperature (deg. C)	516			one AB broken@ NE span 2 @ Pier 1 @ A1 and P2 and A2		
(Expansion Type : <b>SLIDING PLATE</b> )						
(Fixed Type : <b>PINNED BEARING</b> )						
Functioning (Y/N)	Yes					
Sub Deck/Deck Underside		8	7			
(Material Type : <b>TREATED TIMBER</b> )						
(Plank Thickness(mm) : <b>100</b> )						
(Plank Width(mm) : <b>300</b> )						
Defects (Percent Area)	0					
<b>Span Alignment Problems</b>						
Vertical (Y/N)	No					
Horizontal (Y/N)	No					
<b>Superstructure General Rating</b>		<b>5</b>	<b>5</b>			
Substructure						
Bridge Component		Last	Now	Explanation of Condition		
<b>Abutments</b>						
(Extended Backwall Piles (Y/N) : <b>Y</b> )						
(Extended Backwall Piles Spacing(mm) : <b>900</b> )						
(Total Number of Caps/Corbels : <b>8:8</b> )				350x370 HP corbels on 1 WP cap and 2 HP back caps		
Bearing Seats/Caps/Corbels Detail Ratings				AB1 300x300 TT Top Cap AB2 100x290 TT plank used as top cap.		
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	3	0	0	0		
<b>Now</b>	3	0	0	0	Does not extend full width of backwall. AB2 Front cap 300x300 TT, buried to top.	
Bearing Seats/Caps/Corbels		7	7			
(Type : <b>STEEL</b> )						
(Depth(mm) : <b>350</b> )						
(Width(mm) : <b>370</b> )						
Backwalls/Breastwalls		6	6			
Greatest Height (m)	1.80					
Wingwalls		7	7	No wingwalls at Abut 2.		
(Total Number of Bearing Piles : <b>8:8</b> )				Abut. 2 not visible		
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	8	0	0	0		
<b>Now</b>	8	0	0	0		
Piles		6	6			
Paint/Coating		5	5	Uncoated steel caps and corbels with surface rust		
Abutment Stability		7	7			
Scour/Erosion		7	7			

Substructure						
Bridge Component		Last	Now	Explanation of Condition		
<b>Piers/Bents</b>						
(Type : <b>PIER-SOLID</b> )				Piers rehabed		
(Total Number of Caps/Corbels : : )						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	0		
<b>Now</b>	0	0	0	0		
Bearing Seats/Caps/Corbels				6	6	
(Type : <b>CONCRETE</b> )						
(Total Number of Bearing Piles : <b>0:0</b> )						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	100	0	0	0		
<b>Now</b>	100	0	0	0		
Pier Shaft/Piles				6	6	
Greatest Height (m)		6.40				
Bracing/Struts/Sheathing				X	X	
Nose Plate				7	7	
Paint/Coating				5	5	
(Colour Description : )						
(Colour Code : )						
Pier Stability				7	7	
Scour				N	6	
Debris (Y/N)		Yes		Minor drift caught at pier noses		
<b>Substructure General Rating</b>				<b>6</b>	<b>6</b>	
Structure Usage						
		Last	Now	Explanation of Condition		
<b>Channel</b>						
(U/S Direction : <b>W</b> )						
(D/S Direction : <b>E</b> )						
Alignment			8	8		
Bank Stability			5	5		
HWM (m below Top of Curb)			3.5		(8.0 m 1986 - 3 m below bottom chord)	
Drift (Y/N)		Yes		No visible HWM.		
Slope Protection			5	5		
(Type : <b>NATURAL; RIP RAP</b> )						
Guidebank/Spurs			X	X		
Adequacy of Opening			6	6		
(Fish Compensation Measure 1 : <b>NONE</b> )						
(Fish Compensation Measure 2 : <b>NONE</b> )						
<b>Channel General Rating</b>			<b>5</b>	<b>5</b>		



Maintenance Reviewed By		Date		Estimated Total	0
Proposed Long-Term Strategy					
On 3-Year Program (Y/N)					
Proposed Action					
Previous Inspector's Name	Ed Kowal	Previous Assistant's Name			
Next Inspection Date	18-Feb-2016	Previous Inspection Date	15-Jun-2011		
Inspection Cycle (Default) (months)	39				
Comment					