

Bridge Inspection										
Bridge File Number	76163 -1 Bridge					Form Type	TH			
Year Built/Year Supstr	1966/1965					Lot No.	2			
Bridge or Town Name	FT VERMILION					Inspector Name	Brian Pientsch			
Located Over	BOYER RIVER, 8.10.23, WATERCRS-ST					Inspector Class	BR CLS A			
Located On	88:18 C1 35.307					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	19-Jun-2012			
Legal Land Location	NW SEC 8 TWP 109 RGE 13 W5M					Data Entry By	Theresa Lacusta			
Longitude, Latitude	-116:08:45, 58:27:01					Data Entry Date	06-Nov-2012			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA01					Review Date	01-Nov-2012			
Clear Roadway/Skew	7.6 /					Dept. Reviewer Name	David Morrison			
AADT/Year	830 / 2011 (A)					Dept. Review Date	15-Jan-2013			
Road Classification	RAU-209-110					Follow-Up By				
Detour Length (km)	999									
Allowable Load (t):	Single	H 28 STRINGER			Semi	HS 49 STRINGER		Train	CS3 74 STRINGER	----> 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)	6.3	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	6.3	In Advance (Y/N)	Yes
Remarks												

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								

Hazard Marker At Bridge (Y/N)	Yes							
Remarks								
Other Sign Types	Curve, bump, narrow bridge, 65km/hr warning, Boyer River.							

Utilities (Located at)			
Utility Attachments			
Telephone	Conduit bottom chord-W. truss		Gas
Power	East boundary of r/w - 3 wire.		Municipal
Others			Problem (Y/N) Yes
Remarks Telus cable has fallen off most supports.			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Bottom of vertical sag curve with limited sight distance. Curve at top of S. hill. No passing.
Vertical Alignment		5	5	
Roadway Width (m)	8.300			Bump @ both ends of bridge - vehicles bounce onto deck. Both approach fills have settled approx. 40mm for a distance of 4m length.
Approach Bump		3	3	
Guardrail (Y/N)	Yes			
Guardrail		7	7	
Length (m)	45.000			
Current Standard (Y/N)	Yes			
Termination Type	TURNED DOWN ENDS			
Drainage		7	7	

Approach Road					
			Last	Now	Explanation of Condition
Approach Road General Rating			5	5	
Superstructure					
Bridge Component			Last	Now	Explanation of Condition
(Primary Span : TH, 1 Spans, Lengths(m): 76.2, A-Ident Number: A0532-01)					
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					
Wearing Surface/Deck Top			7	7	
(Material Type : COPPER CHROMATE ARSENATE TREATED TIMBER)					
(Plank Thickness(mm) : 75)					
(Plank Width(mm) : 300)					
Deck Rideability			8	8	
Deck Joints			X	X	
Temperature (deg. C)		20			
(Expansion Type :)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
Curbs/Wheel Guards			6	6	
(Curb Type : Standard)					
(Type : TREATED TIMBER)					
(Thickness(mm) : 100)					
(Width(mm) : 300)					
Bridge Rail			5	5	There are 4 bridge rail splice holes " expansion sleeves at S. end. - OK
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts/Blocking			7	7	Steel blocking
(Type : POST STEEL;POST STEEL)					
Bridge Rail/Posts Coating			8	8	
(Type : GALVANIZED)					
Sidewalk			X	X	

Superstructure								
Bridge Component				Last	Now	Explanation of Condition		
(Primary Span : TH, 1 Spans, Lengths(m): 76.2, A-Ident Number: A0532-01)								
Wide Load Damage (Y/N)	Yes				U4L4W 15mm dent near top. Minor crease top of LoU1W, 5mm. Section loss due to rust (photo).			
High Load Damage (Y/N)	No							
Top Chord			7	7				
Batter Posts			7	7				
Sway Bracings			7	7				
Diagonals			7	7				
Verticals			7	7				
Portals			7	7				
Connections			5	5				
Floor Beams			5	5				
Bottom Chord			5	5				
(No. of Stringers : 70)								
Stringer Detail Ratings								
	N (count)	1 (count)	2 (count)	3 (count)				
Last								
Now								
Stringers			5	5				
(Type : STEEL)								
(Width(mm) : 190)								
(Depth(mm) : 460)								
(Spacing(mm) : 1295)								
Paint Condition			4	3	Approx 35% of the floor system is rusted. MAINLY TOP & BOTTOM FLANGES. (photo) 40% paint loss on batter posts and 10-15% on all other members.			
(Colour Description : BLUE)								
(Colour Code : 15182)								
Touchup Required (Y/N)	No							
Bearings			5	5	South End - Exp. North End - Fixed 1 anchor bolt missing at NW bearing (photo).			
Temperature (deg. C)	20							
(Expansion Type : ROLLER NEST BEARING)								
(Fixed Type : DISC & DOME BEARING)								
Functioning (Y/N)	Yes							
Sub Deck/Deck Underside			5	5	Laminated timber subdeck			
(Material Type : TREATED TIMBER)								
(Plank Thickness(mm) : 200)								
(Plank Width(mm) : 65)								
Defects (Percent Area)	0							
Span Alignment Problems								
Vertical (Y/N)	No							
Horizontal (Y/N)	No							
Superstructure General Rating			5	5				
Substructure								
Bridge Component				Last	Now	Explanation of Condition		
Abutments								
(Extended Backwall Piles (Y/N) : Y)								
(Extended Backwall Piles Spacing(mm) : 2000)								

Substructure							
Bridge Component				Last	Now	Explanation of Condition	
(Total Number of Caps/Corbels : 26:26)						12 caps covered by dirt.	
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	12	0	0	0			
Now	12	0	0	0			
Bearing Seats/Caps/Corbels				7	6		
(Type : STEEL)							
(Depth(mm) : 300)							
(Width(mm) : 300)							
Backwalls/Breastwalls				4	4		Some plywood sheeting at S. abut. Planks bulding @ N. abutment next to W. bearing and the back wires broken.
Greatest Height (m)		3.00					
Wingwalls				4	4	Tintop missing NW ext. pile, Minor damage to top wingplank.	
(Total Number of Bearing Piles : 18:18)						5:5 backwall piles at abutments. Piles below corbels not visible. Pile rating based on visible backwall piles.	
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	36	0	0	0			
Now	36	0	0	0			
Piles				5	5		
Paint/Coating				X	X		
Abutment Stability				5	4		Abut 2 top of piling leaning toward stream. Bottom corbels not horizontal with of of bevels.
Scour/Erosion				5	5		
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 :)							
(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		
Scour				X	X		
Debris (Y/N)		No					

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		5	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				(Deck to streambed 10.65 m. 00/07/02)
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		4	4	North headslope eroding. 2m high vertical bank. 3m x 2m x 0.5m deep slump above vertical bank.
(Type : NONE; NONE)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPLACE STRIP DECK							
REPLACE SUB DECK							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE	2012	Painting					
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							
OTHER ACTION	2012	Replace tin top NW ext. pile.					
OTHER ACTION	2012	Patch both asphalt approaches.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/50.0	Sufficiency Rating (Last/Now) (%)	50.7/48.5	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor eroding headslope-North. Monitor paint deterioration-rust of floor beams-stringers. Monitor abut. 2 stability.		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	Brian Pientsch		Previous Assistant's Name				
Next Inspection Date	19-Mar-2014		Previous Inspection Date	07-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							