

Bridge Inspection							
Bridge File Number	77597 -1 Bridge			Form Type	PT TT		
Year Built/Year Supstr	1967/1966			Lot No.	2		
Bridge or Town Name	FOOTHILLS			Inspector Name	Wade Nanninga		
Located Over	PEMBINA RIVER, 8.11.84, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	734:22 C1 35.693			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	22-Apr-2013		
Legal Land Location	SE SEC 5 TWP 46 RGE 18 W5M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-116:34:09, 52:56:01			Data Entry Date	01-May-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Eric Carcoux		
Contract Main. Area	CMA13			Review Date	29-Apr-2013		
Clear Roadway/Skew	7.9 / 0 deg.			Dept. Reviewer Name			
AADT/Year	120 / 2012 (A)			Dept. Review Date			
Road Classification	RCU-208G-90			Follow-Up By			
Detour Length (km)	250						
Allowable Load (t):	Single	CS1 29 STRINGER	Semi	CS2 50 STRINGER	Train	CS3 70 U1U2	----> On Critical Spans ---->Critical Member
Design Loading:	HS20						----> 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								
Other Sign Types	Narrow Bridge, One truck on bridge, Pembina River ID, Park Info.							

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

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Park entrance 10m @ NE. Curves @ both ends. Limited sight distances.
Vertical Alignment		5	5	
Roadway Width (m)	8.500			
Approach Bump		5	5	
Guardrail (Y/N)	No			
Guardrail		X	X	
Length (m)				
Current Standard (Y/N)	No			
Termination Type				
Drainage		7	7	
<b>Approach Road General Rating</b>		<b>5</b>	<b>5</b>	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PT, 3 Spans, Lengths(m): 6.1-35.1-6.1, A-Ident Number: A0677-01)					
<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>	20.0				
Wearing Surface/Deck Top			5	5	
(Material Type : <b>UNTREATED TIMBER</b> )					
(Plank Thickness(mm) : <b>75</b> )					
(Plank Width(mm) : <b>300</b> )					
Deck Rideability			6	6	
Deck Joints			X	X	
Temperature (deg. C)					
(Expansion Type : )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
Curbs/Wheel Guards			6	6	
(Curb Type : <b>Standard</b> )					
(Type : <b>TREATED TIMBER</b> )					
(Thickness(mm) : <b>75</b> )					
(Width(mm) : <b>300</b> )					
Bridge Rail			7	7	
(Type : <b>STEEL NON-STANDARD RAIL; GALVANIZED STEEL NON-STANDARD RAIL</b> )					
Bridge Rail Posts/Blocking			X	X	
(Type : )					
Bridge Rail/Posts Coating			5	5	
(Type : <b>PAINT</b> )					
Sidewalk			X	X	
50% are CCA treated timber.					
Continuous steel 2 1/2 x 10" channel.					

Superstructure							
Bridge Component		Last		Now		Explanation of Condition	
<b>(Primary Span : PT, 3 Spans, Lengths(m): 6.1-35.1-6.1, A-Ident Number: A0677-01)</b>							
Wide Load Damage (Y/N)	No					See 2010 UT report for details.	
Top Chord			7	7			
Batter Posts			7	7			
Diagonals			7	7			
Verticals			7	7			
Connections			7	7			
Floor Beams			7	7			
Bottom Chord			7	7			
Lateral Bracings			7	7			
<b>(No. of Stringers : 84)</b>							
Stringer Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
<b>Last</b>							
<b>Now</b>							
Stringers			7	7			
(Type : <b>STEEL</b> )							
(Width(mm) : <b>170</b> )							
(Depth(mm) : <b>300</b> )							
(Spacing(mm) : <b>609</b> )							
Paint Condition			5	5		Top coating debonding in isolated areas. Primer coat is good.	
(Colour Description : <b>BLUE</b> )							
(Colour Code : <b>15182</b> )							
Touchup Required (Y/N)	No						
Bearings			7	7		SE bearing @ center position. Roller at South	
Temperature (deg. C)	3						
(Expansion Type : <b>ROLLER NEST BEARING</b> )							
(Fixed Type : <b>PINNED BEARING</b> )							
Functioning (Y/N)	Yes						
Sub Deck/Deck Underside			6	6			
(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)	Yes					North abutment set about 150mm lower than rest of bridge - not a real problem.	
Horizontal (Y/N)	No						
<b>Superstructure General Rating</b>			<b>6</b>	<b>6</b>			
Superstructure							
Bridge Component		Last		Now		Explanation of Condition	
<b>(Secondary Span : TT)</b>							
<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>	20.0						

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
<b>(Secondary Span : TT)</b>						
Wearing Surface/Deck Top				4	4	Moderate gravel wear & grader damage at end spans.
(Material Type : <b>UNTREATED TIMBER</b> )						
(Plank Thickness(mm) : <b>75</b> )						
(Plank Width(mm) : <b>300</b> )						
Deck Rideability				5	5	
Wheel Guards				7	7	
(Curb Type : <b>Standard</b> )						
(Type : <b>TREATED TIMBER</b> )						
(Thickness(mm) : <b>100</b> )						
(Width(mm) : <b>300</b> )						
Bridge Rail				4	4	Single layer. Wrong lap at NE and SW.
(Type : <b>GALVANIZED STEEL FLEX BEAM</b> )						
Bridge Rail Posts				6	3	One broken post @ NW.-photo
(Type : <b>TREATED TIMBER;TREATED TIMBER;TREATED TIMBER;TREATED TIMBER</b> )						
Bridge Rail/Posts Coating				4	4	Some paint peeling, rust spots.
(Type : <b>PAINT</b> )						
<b>(No. of Stringers : 18;18)</b>						S1 stringer 11-split 1.0m long.
<b>Stringer Detail Ratings</b>						SP3 S14 cracked 1m long.
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	0		
<b>Now</b>						
Stringers				5	4	
(Type : <b>TREATED TIMBER</b> )						
(Width(mm) : <b>150</b> )						
(Depth(mm) : <b>400</b> )						
(Spacing(mm) : <b>450</b> )						
Sub Deck/Deck Underside				6	6	
(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>4</b>	
Substructure						
Bridge Component				Last	Now	Explanation of Condition
<b>Abutments</b>						
(Extended Backwall Piles (Y/N) : <b>N</b> )						
(Extended Backwall Piles Spacing(mm) : )						

Substructure						
Bridge Component				Last	Now	Explanation of Condition
<b>(Total Number of Caps/Corbels : 1:1)</b>						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	0		
<b>Now</b>						
Bearing Seats/Caps/Corbels				7	7	
(Type : <b>TREATED TIMBER</b> )						
(Depth(mm) : <b>350</b> )						
(Width(mm) : <b>300</b> )						
Backwalls/Breastwalls				4	4	Not low enough at S. abut but not causing problems at present. Breastwall added.
Greatest Height (m)		2.50				
Wingwalls				X	X	
<b>(Total Number of Bearing Piles : 5:5)</b>						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	0		
<b>Now</b>						
Piles				6	6	
Paint/Coating				X	X	
Abutment Stability				6	6	
Scour/Erosion				6	6	
<b>Piers/Bents</b>						
(Type : <b>PIER-COLUMN</b> )						
<b>(Total Number of Caps/Corbels : 5:5)</b>						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	0		
<b>Now</b>						
Bearing Seats/Caps/Corbels				7	7	Piers have steel H beam corbels and streamside cap. TT caps under approach spans.
(Type : <b>TREATED TIMBER;STEEL</b> )						
(Depth(mm) : <b>300</b> )						
(Width(mm) : <b>300</b> )						
<b>(Total Number of Bearing Piles : 10:10)</b>						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	0		
<b>Now</b>						
Pier Shaft/Piles				6	5	S1 P3 and S2 P3 have been banded. 2 rows piles. South pier pile 2 & North pier pile 5 with wide checks.
Greatest Height (m)		3.80				
Bracing/Struts/Sheathing				6	6	Missing a row of sheathing at waterline on river side of pier 2.-07-Jun-2010
Nose Plate				6	6	
Paint/Coating				4	4	Superficial rust.
(Colour Description : )						
(Colour Code : )						
Pier Stability				7	7	
Scour				5	N	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>6</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>W</b> )				
(D/S Direction : <b>E</b> )				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		6	6	
(Type : <b>NATURAL; NATURAL</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>7</b>	<b>6</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Broken post @ NW.					
RETROFIT BRIDGE RAIL							
PATCH DECK	2013	3x12x8 - Replace wheelpaths					
REPLACE STRIP DECK							
REPLACE SUB DECK							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS	2013	Band/sister cracked stringers.(2)					
WASHING							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Band and treat 2 pier piles.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>61.1/50.0</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>65.7/59.1</b>	Est. Repl. Yr	2025	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Caps replaced in 2007.		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	Garry Roberts		Previous Assistant's Name	Randy Bredo			
Next Inspection Date	22-Jul-2016		Previous Inspection Date	07-Jun-2010			
Inspection Cycle (Default) (months)	39						
Comment							