

Bridge Inspection										
Bridge File Number	75664 -1 Bridge					Form Type	TH SG			
Year Built/Year Supstr	1954/1946					Lot No.	2			
Bridge or Town Name	GIROUXVILLE					Inspector Name	Brian Pientsch			
Located Over	LITTLE SMOKY RIVER, 8.10.58.7, WATERCRS-ST					Inspector Class	BR CLS A			
Located On	744:02 C1 17.058					Assistant Name	Russel Vanderschaaf			
Water Body Cl./Year						Assistant Class	BR CLS B			
Navigabil. Cl./Year						Inspection Date	07-Jan-2011			
Legal Land Location	NW SEC 20 TWP 76 RGE 22 W5M					Data Entry By	Theresa Lacusta			
Longitude, Latitude	-117:23:23, 55:36:04					Data Entry Date	23-Mar-2011			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Arnold Assenheimer			
Contract Main. Area	CMA03					Review Date	20-Mar-2011			
Clear Roadway/Skew	6.7 /					Dept. Reviewer Name	David Morrison			
AADT/Year	290 / 2010 (A)					Dept. Review Date	19-Jul-2011			
Road Classification	RCU-209-110					Follow-Up By				
Detour Length (km)	80									
Allowable Load (t):	Single	CS1 28 STRINGER			Semi	CS2 49		Train	CS3 63	----> 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)	5.2	In Advance (Y/N)		Lane	SB	On Bridge (m)	5.2	In Advance (Y/N)	Yes
Remarks	Measured 5.30. U11U11N2 5:45 South side											
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	Approach HM's are set outside of truss width											
Other Sign Types	Hill, Slide area 65km/h.											

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

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Curves and hills both sides.
Vertical Alignment		5	5	
Roadway Width (m)	9.000			
Approach Bump		5	5	
Guardrail (Y/N)	Yes			
Guardrail		3	7	
Length (m)	60.800			
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN			
Drainage		5	5	

Approach Road					
		Last	Now	Explanation of Condition	
Approach Road General Rating		5	5		
Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : TH, 4 Spans, Lengths(m): 39.6-76.2-21.3-18.3, A-Ident Number: A0168-02;A0176-02;A0195-01;A0207-04)					
Special Features					
Special Feature		5	5	Dywidag along bottom chord is corroding. (span 1 only)	
(Type : EXT LATER POST TENS)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Partly snow covered.
Last	5	0	0	10	
Now	10.0	0.0	0.0	0.0	
Wearing Surface/Deck Top		3	9	(Material Type : UNTREATED TIMBER) (Plank Thickness(mm) : 75) (Plank Width(mm) : 300)	
(Material Type : UNTREATED TIMBER)					
(Plank Thickness(mm) : 75)					
(Plank Width(mm) : 300)					
Deck Rideability		7	7		
Deck Joints		5	5		
Temperature (deg. C)		-6			
(Expansion Type : SLIDING PLATES)					
(Fixed Type : BUFFER ANGLES)					
Gap Size (mm)		Gap Location			
40		Pier 2			
Curbs/Wheel Guards		3	7	Majority of curbs covered by snow/ice.	
(Curb Type : Standard)					
(Type : CONCRETE)					
(Curb Height(mm) : 200)					
(Width(mm) : 300)					
Bridge Rail		4	9	Attached to verticals and steel posts S1 only. Double layer S1, S3, S4. Triple layer S2.	
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts/Blocking		7	7		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		4	7		
(Type : GALVANIZED)					
Sidewalk		X	X		

Superstructure							
Bridge Component		Last	Now	Explanation of Condition			
(Primary Span : TH, 4 Spans, Lengths(m): 39.6-76.2-21.3-18.3, A-Ident Number: A0168-02;A0176-02;A0195-01;A0207-04)							
Wide Load Damage (Y/N)	Yes			Every sway on N. truss bent. (There are 262holes that need filled in verticals. Three hanger bolts nailed down or missing.-May 16,2008) U7L8E 250mm x 30mm nick. See UT2008 for missing bolt details. (Numerous minor defects UT 2005) Est. 10-30% section loss on gussets connecting sway braces to bottom chord.-repainted Oct 2010-photo U1U1-S1 has 2 minor nicks. U7J7-S1 has 1 minor nick. Avg. 5% section loss on bottom flange of floor beams.-photo U1-U1-S2 has high load damage with 2 missing bolts.-photo Minor nick in U11-U11-S2 portal from high load damage.-photo Loss of section up to 3mm deep on exterior stringer webs and lower flanges, especially near floor beams.			
High Load Damage (Y/N)	Yes						
Top Chord		6	6				
Batter Posts		6	4				
Sway Bracings		6	6				
Diagonals		6	6				
Verticals		7	7				
Portals		4	4				
Connections		4	4				
Floor Beams		4	4				
Bottom Chord		5	5				
(No. of Stringers : 132;88)							
Stringer Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now							
Stringers			4	4			
(Type : STEEL)							
(Width(mm) : 150)							
(Depth(mm) : 250)							
(Spacing(mm) : 670)							
Paint Condition		3	3	Rust on bottom flanges of floor system and splash zones. - peeling throughout extensive salt staining.			
(Colour Description : BLUE)							
(Colour Code : 15182;502-105)							
Touchup Required (Y/N)	Yes						
Bearings		7	N	L12 Brg's A7 pier 2 have partial bite At large nut.-May 16, 2008 Snow covered.			
Temperature (deg. C)	-6						
(Expansion Type : REINFORCED PAD BEARING)							
(Fixed Type : SLIDING PLATE)							
Functioning (Y/N)	Yes						
Sub Deck/Deck Underside		4	7				
(Material Type : TREATED TIMBER)							
(Plank Thickness(mm) : 100)							
(Plank Width(mm) : 300)							
Defects (Percent Area)	0						
Span Alignment Problems							
Vertical (Y/N)	No						
Horizontal (Y/N)	No						
Superstructure General Rating		4	4				
Superstructure							
Bridge Component		Last	Now	Explanation of Condition			
(Secondary Span : RB)							
Special Features							
Special Feature			X				
(Type :)							
Special Feature			X				
(Type :)							

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Secondary Span : RB)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	5	0	0	5	
Now	10.0	0.0	0.0	0.0	
Wearing Surface			3	9	
(Material Type : UNTREATED TIMBER)					
(Thickness(mm) : 75)					
Deck Top			X	X	
Deck Rideability			7	7	
Deck Joints			5	5	
Temperature (deg. C)		-6			
(Expansion Type : SLIDING PLATES)					
(Fixed Type : BUFFER ANGLES)					
Gap Size (mm)		Gap Location			
40		P2			
Deck Drainage			X	X	No deck drains
Drains Clogged (Y/N)		No			
Curbs/Median			4	7	Timberwheel guards.
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			4	9	Double layer.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			5	7	Posts painted-paint peeling with some rust.
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			3	4	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder/Beam					
Cover Plate			X	X	
Flange			6	6	
Web			7	7	
Stiffeners			X	X	
Splice			X	X	
Weld			X	X	
Diaphragms/Cross Frame			5	5	Some diaphragms misaligned - OK.
Paint Condition			3	3	Bottom girder flanges rusting.-photo
(Colour Description : BLUE)					
(Colour Code : 15182)					
Touchup Required (Y/N)		Yes			

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Secondary Span : RB)						
Bearings		5	N	Snow covered.		
Temperature (deg. C)	-6					
(Expansion Type : REINFORCED PAD BEARING)						
(Fixed Type : SLIDING PLATE)						
Coating Adequate (Y/N)	No					
Functioning (Y/N)	Yes					
Deck Underside		5	7			
Stains (Percent Area)	2					
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) : N)						
(Extended Backwall Piles Spacing(mm) :)						
(Total Number of Caps/Corbels : 1:1)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Bearing Seats/Caps/Corbels		7	7			
(Type : CONCRETE)						
(Depth(mm) :)						
(Width(mm) :)						
Backwalls/Breastwalls		7	7			
Greatest Height (m)	1.70					
Wingwalls		7	7			
(Total Number of Bearing Piles : 0:0)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	100	0	0	0		
Now	100	0	0	0		
Piles		N	N			
Paint/Coating		X	X			
Abutment Stability		7	7			
Scour/Erosion		7	7			
Piers/Bents						
(Type : PIER-SOLID)						
(Total Number of Caps/Corbels : 1:1:9)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0	Extensive salt staining and delan cracks.	
Now						
Bearing Seats/Caps/Corbels		4	4			
(Type : CONCRETE)						

Substructure							
Bridge Component				Last	Now	Explanation of Condition	
(Total Number of Bearing Piles : 0:0:0)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)		Rust staining near caps. Extensive salt staining. Delam cracks. 2 small spalls exposing rebar and steel pile @ base of P1-photo-21-Jan-2010	
Last	100	0	0	0			
Now	100	0	0	0			
Pier Shaft/Piles				4	4	Snow covered Wide vertical crack full height of P1 on S side.-photo 1000mmx300mm spall @ P2 w exposed rebar South side.-photo	
Greatest Height (m)		8.50					
Bracing/Struts/Sheathing				7	7		
Nose Plate				7	7		
Paint/Coating				4	4	Rust & pitting on nose plates and P3.	
(Colour Description : BLUE)							
(Colour Code : 15182)							
Pier Stability				7	7		
Scour				5	5		
Debris (Y/N)		No					
Substructure General Rating				4	4		
Structure Usage							
				Last	Now	Explanation of Condition	
Channel							
(U/S Direction : E)							
(D/S Direction : W)							
Alignment				7	7		
Bank Stability				6	6		
HWM (m below Top of Curb)		2.2				(HWM 950608)	
Drift (Y/N)		Yes					
Slope Protection				7	7	Concrete on S. headslope only.	
(Type : CONCRETE)							
Guidebank/Spurs				X	X		
Adequacy of Opening				8	8		
(Fish Compensation Measure 1 : NONE)							
(Fish Compensation Measure 2 : NONE)							
Channel General Rating				6	6		

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							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS	2011	Weld nut to pins on both ends.					
REPAINT SUPERSTRUCTURE	2011						
STRAIGHTEN/REPLACE MEMBERS	2011	fill 184 open holes with 7/8" bolts and 78 with 3/4" bolts, install 3 hanger bolts.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION	2011	Fill approach potholes with ACP.-(if not done)					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	41.9/42.9	Est. Repl. Yr	2022	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor corrosion of gussets on floorbeams and stringers. Monitor highload damage in portals and wide load damage on U7L8E. Monitor spalling at piers.		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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	07-Apr-2014		Previous Inspection Date	21-Jan-2010			
Inspection Cycle (Default) (months)	39						
Comment							