Bridge Inspection

Bridge File Number	78213 -1 Bridge	Form Type	PT
Year Built/Year Supstr	1910/1912	Lot No.	4
		Inspector Name	Garry Roberts
Bridge or Town Name	MILLARVILLE	Inspector Class	BR CLS A
Located Over	THREEPOINT CREEK, 2.13.27.2.9, WATERCRS-ST	Assistant Name	
		Assistant Class	
Located On	LOCAL ROAD	Inspection Date	11-Dec-2011
Water Body Cl./Year		Data Entry By	Erin Roberts
Navigabil. Cl./Year		Data Entry Date	29-Jan-2012
Legal Land Location	NE SEC 6 TWP 21 RGE 4 W5M	Reviewer Name	Tom Carey
Longitude, Latitude	-114:32:29, 50:45:21	Review Date	21-Dec-2011
Road Authority	Alberta Transportation (AIT)	Dept. Reviewer Name	Tim Davies
Contract Main. Area	UNDEFINED CMA	Dept. Review Date	06-Feb-2012
Clear Roadway/Skew	4.3 /	Follow-Up By	
AADT/Year	24 / 2011 (E)		
Road Classification	RLU-207G-60		
Detour Length (km)	22		

Allowable Load (t):	Single	CS1 20 STRINGER	Semi	CS2 27 U1L2	Train	CS3 35 L0L1	---> On Critical Spans ---->Critical Member
Design Loading:		HS15					---> Primary Span

Posting Information

Required Load Posting (t)			Single	21	Semi	28	Truck Train	35
Posted Loading (t)			Single	21.0	Semi	28.0	Truck Train	36.0
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	Yes	At Bridge (Y/N)	Yes
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	Yes
Remarks	Signs adequate due to junction distance and other bridge load signs							

Hazard Marker At Bridge (Y/N)	Yes
Remarks	
Other Sign Types	Information route, Creek ID, Travel @ own risk. Road closed Dec 1 - May 15

Utilities (Located at)

Utility Attachments			
Telephone		Gas	43.0 m South
Power	South ROW	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		4	5	Gate at East end. Closed Dec 1 - May 15
Vertical Alignment		6	5	
Roadway Width (m)	5.000			Texas gate 25m West of bridge.
Approach Bump		5	5	
Guardrail (Y/N)				
Guardrail		X	X	
Length (m)				
Current Standard (Y/N)				
Termination Type				
Drainage		5	5	
Approach Road General Rating		**4**	**5**	

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **PT, 1 Spans, Lengths(m): 24.4, A-Ident Number: A0036-19**)				
Special Features				
Special Feature			X	
(Type :)				
Special Feature			X	
(Type :)				
Wearing Surface/Deck Top Detail Ratings				
	N (%) / 1 (%) / 2 (%) / 3 (%)			Snow covered.
Last	90 / 0 / 0 / 0			
Now	90.0 / 0.0 / 0.0 / 0.0			
Wearing Surface/Deck Top		6	N	
(Material Type : **UNTREATED TIMBER**)				
(Plank Thickness(mm) : **75**)				
(Plank Width(mm) : **300**)				
Deck Rideability		7	7	
Deck Joints		X	X	
Temperature (deg. C)				
(Expansion Type :)				
(Fixed Type :)				
Gap Size (mm)	Gap Location			
Curbs/Wheel Guards		5	5	
(Curb Type : **Standard**)				
(Type : **TREATED TIMBER**)				
(Thickness(mm) : **100**)				
(Width(mm) : **300**)				
Bridge Rail		7	7	3 ply flexbeam over lattice.
(Type : **FLEX BEAM**)				
Bridge Rail Posts/Blocking		7	7	
(Type : **POST STEEL;POST STEEL**)				
Bridge Rail/Posts Coating		5	5	Minor rusting - 10% @ lattice rail
(Type : **PAINT**)				
Sidewalk		X	X	

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **PT, 1 Spans, Lengths(m): 24.4, A-Ident Number: A0036-19**)				
Wide Load Damage (Y/N)	No			(Strengthened top chord Mar '93)
Top Chord		6	7	
Batter Posts		7	7	
Diagonals		6	7	
Verticals		7	7	
Connections		7	7	
Floor Beams		7	7	
Bottom Chord		6	7	
Lateral Bracings		7	7	
(No. of Stringers : **42**)				6 bays x 7 stringers = 42
Stringer Detail Ratings				
	N (count)	1 (count)	2 (count)	3 (count)
Last				
Now				
				For Details, see 2011 UT Report
Stringers		7	7	
(Type : **STEEL**)				
(Width(mm) : **120**)				
(Depth(mm) : **255**)				
(Spacing(mm) : **800**)				
Paint Condition		7	6	
(Colour Description : **BLUE**)				
(Colour Code : **15182**)				
Touchup Required (Y/N)	No			
Bearings		5	6	
Temperature (deg. C)	-5			
(Expansion Type : **SLIDING PLATE**)				A2
(Fixed Type : **PINNED BEARING**)				A1
Functioning (Y/N)	Yes			
Sub Deck/Deck Underside		7	7	
(Material Type : **TREATED TIMBER**)				
(Plank Thickness(mm) : **100**)				
(Plank Width(mm) : **305**)				
Defects (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		**5**	**6**	

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Abutments				
(Extended Backwall Piles (Y/N) : **Y**)				Spall crack under SE bearing @ East abutment.
(Extended Backwall Piles Spacing(mm) : **800**)				Concrete abutment East end.

Substructure					
Bridge Component				**Last**	**Now**	**Explanation of Condition**
(Total Number of Caps/Corbels : **12:1**)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				5	5	
(Type : **TREATED TIMBER**)						
(Depth(mm) : **305**)						
(Width(mm) : **305**)						
Backwalls/Breastwalls				7	7	
Greatest Height (m)	2.70					
Wingwalls				7	6	
(Total Number of Bearing Piles : **12:0**)						Back pile @ South side of West abutment 20mm split - is banded.
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Piles				5	5	
Paint/Coating				X	X	
Abutment Stability				7	7	
Scour/Erosion				7	7	
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**	**5**	
Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **N**)				
(D/S Direction : **S**)				
Alignment		7	7	
Bank Stability		5	4	Shale bank at East abutment is eroded to within 0.5m of concrete footing.
HWM (m below Top of Curb)	2.4			
Drift (Y/N)	No			
Slope Protection		4	4	Natural loose rock bank @ West & natural rock wall @ East.
(Type : **NATURAL; NATURAL**)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	6	
(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						
PATCH DECK						
REPLACE SUB DECK						
RESET/ PAINT BEARINGS						
REPAINT SUPERSTRUCTURE						
STRAIGHTEN/REPLACE MEMBERS						
WASHING						
CORE TIMBER CAPS/CORBELS						
REPAIR/REPLACE TIMBER CAPS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**55.6/61.1**	**Sufficiency Rating (Last/Now) (%)**	**39.3/49.3**	Est. Repl. Yr	2025	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor erosion of shale bank at East abut. Currently within 0.5m at South end. May require rock protection in future.	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	Owen Salava	Previous Assistant's Name			
Next Inspection Date	11-Mar-2015	Previous Inspection Date	08-Jun-2011		
Inspection Cycle (Default) (months)	39				
Comment					