Bridge Inspection

Bridge File Number	85103 -1 Bridge	Form Type	PSR
Year Built/Year Supstr	2011/2011	Lot No.	1
		Inspector Name	Randy Bredo
Bridge or Town Name		Inspector Class	BR CLS A
Located Over	28:02 L1 1.810;28:02 C1 2.098	Assistant Name	
Located On	LOCAL ROAD	Assistant Class	
Water Body Cl./Year		Inspection Date	22-Apr-2012
Navigabil. Cl./Year		Data Entry By	Jill Potts
Legal Land Location	SE SEC 17 TWP 54 RGE 24 W4M	Data Entry Date	03-May-2012
Longitude, Latitude	-113:29:58, 53:39:28	Reviewer Name	Dave Lam
Road Authority	Alberta Transportation (AIT)	Review Date	28-Apr-2012
Contract Main. Area	CMA09	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	14.9 /	Dept. Review Date	12-Jun-2012
AADT/Year		Follow-Up By	
Road Classification			
Detour Length (km)			

Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	---> On Critical Spans ---->Critical Member	
Design Loading:		CL800					---> Primary Span	

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)				Yes							
Posted:	Lane	NB	On Bridge (m)	5.5	In Advance (Y/N)	No	Lane	SB	On Bridge (m)	5.5	In Advance (Y/N)	No
Remarks	Advance VC signs required.										

Required Load Posting (t)			Single		Semi		Truck Train	
Posted Loading (t)			Single		Semi		Truck Train	
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Posted:	Lane	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Remarks	Not required.							

Hazard Marker At Bridge (Y/N)	No
Remarks	Not required.
Other Sign Types	

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others	Light standards.	Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment			8	
Vertical Alignment			7	
Roadway Width (m)	14.500			
Approach Bump			6	
Guardrail (Y/N)	Yes			Transition has failed at NW due to insufficient thread and rail torqued too tight.
Guardrail			3	
Length (m)	42.000			
Current Standard (Y/N)	Yes			
Termination Type	Attenuation			
Drainage			3	Corners require final grading.
Approach Road General Rating			**7**	

Superstructure					
Bridge Component			**Last**	**Now**	**Explanation of Condition**
(Primary Span : **NU, 2 Spans, Lengths(m): 47.9-52.9, A-Ident Number:**)					
Special Features					
Special Feature				3	MSE Wall. Geotextile requires trimming along top. Fill infiltrating between blocks at NW corner.
(Type :)					
Special Feature				X	
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now					
Wearing Surface				8	H2 with waterproofing system.
(Material Type : **ACP**)					
(Thickness(mm) : **80**)					
Lateral Connection Problem (Y/N)	No				
Deck Top				N	
Deck Rideability				8	
Deck Joints				X	No joints - integral.
Temperature (deg. C)	5				
(Expansion Type :)					
(Fixed Type :)					
Gap Size (mm)	Gap Location				
Deck Drainage				8	No drains.
Drains Clogged (Y/N)	No				
Curbs/Median				3	Caulking failed at NW and NE. Other 2 are starting to fail.
(Curb Type : **SINGLE SLOPE CONCRETE BARRIER**)					
Scaling (Percent Area)	0				
Bridge Rail				8	
(Type : **GALVANIZED STEEL BRIDGE TUBE**)					
Bridge Rail Posts				8	
(Type : **GALVANIZED POST STEEL;GALVANIZED POST STEEL**)					
Bridge Rail/Posts Coating				8	
(Type : **GALVANIZED**)					
Sidewalk				X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Girders				9	
Cracking (Y/N)	No				
Spalling (Percent Area)	0				
(Number Of Girders : **5**)					

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **NU, 2 Spans, Lengths(m): 47.9-52.9, A-Ident Number:**)				
Diaphragms/Cross Frame			9	
Bearings			X	Pier integral. Abutments integral with bearings.
Temperature (deg. C)	5			
(Expansion Type : **REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL**)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside			9	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating			**9**	

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Abutments				
Bearing Seats/Caps			9	
(Type : **CONCRETE**)				
Backwalls/Breastwalls			8	
Wingwalls			6	Wingwalls are wavy. Geotextile requires trimming.
Piles			N	
Paint/Coating			7	
Abutment Stability			8	
Scour/Erosion			X	
Piers/Bents				
(Type : **PIER-COLUMN**)				5 concrete columns.
Bearing Seats/Caps			9	
(Type : **CONCRETE**)				
(Total Number of Bearing Piles : **5**)				Buried.
Pier Shaft/Piles			9	
Bracing/Struts/Sheathing			X	
Nose Plate			X	
Paint/Coating			3	Bottom of piers still require coating.
(Colour Description :)				Tan.
(Colour Code :)				
Pier Stability			9	
Scour			X	
Debris (Y/N)	Yes			Construction debris.
Substructure General Rating			**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment			8	
Traffic Safety Features			8	
Type	Lighting			
Slope Protection			3	West slope protection appears to have been constructed approx 200mm too high. Backwall may also have been constructed too high.
(Type : **CONCRETE; CONCRETE**)				
Bank Stability			8	
Drainage			3	Median is ponding water around pier.
Grade Separation General Rating			**3**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL	2012	Grout sidewalk rail post bases.				
GALVANIZE/PAINT BRIDGE RAIL						
SEAL CURBS						
PATCH DECK						
SEAL DECK						
OVERLAY DECK						
REPAIR/REPLACE DECK JOINTS						
RESET/ PAINT BEARINGS						
WASHING						
SHOTCRETE REPAIRS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION	2012	Repair caulking at corners (address barrier settlement issues).				
OTHER ACTION	2012	Complete final grading throughout.				
OTHER ACTION	2012	Repair rail transition sections and loosen guardrail.				
OTHER ACTION	2012	Rectify elevation problems of concrete slope protection at West abutment.				
OTHER ACTION	2012	Address fill infiltration at the NW corner of MSE wall.				
OTHER ACTION	2012	Remove concrete splash along sidewalk.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**/94.4**	**Sufficiency Rating (Last/Now) (%)**	**/72.8**	Est. Repl. Yr	2087	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection		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		Previous Assistant's Name			
Next Inspection Date	22-Jan-2014	Previous Inspection Date			

Inspection Cycle (Default) (months)	21
Comment	