Bridge Inspection

Bridge File Number	85097 S-2 Bridge	Form Type	SG
Year Built/Year Supstr	2011/2011	Lot No.	2
		Inspector Name	Randy Bredo
Bridge or Town Name	216 / Manning Drive Interchange	Inspector Class	BR CLS A
Located Over	216:02 L1 6.691	Assistant Name	
Located On	15:03 L1 0.690	Assistant Class	
Water Body Cl./Year		Inspection Date	16-Apr-2012
Navigabil. Cl./Year		Data Entry By	Jill Potts
Legal Land Location	SE SEC 1 TWP 54 RGE 24 W4M	Data Entry Date	03-May-2012
Longitude, Latitude	-113:23:40, 53:38:05	Reviewer Name	Dave Lam
Road Authority	Alberta Transportation (AIT)	Review Date	22-Apr-2012
Contract Main. Area	UNDEFINED CMA	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	12.9 /	Dept. Review Date	12-Jun-2012
AADT/Year		Follow-Up By	
Road Classification			
Detour Length (km)	1		

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)											
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)	No	Lane	WB	On Bridge (m)		In Advance (Y/N)
Remarks	Road is not open. VC signs required when road is opened to traffic.										

Required Load Posting (t)			Single		Semi		Truck Train	
Posted Loading (t)			Single		Semi		Truck Train	
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Posted:	Lane	NB	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)	Yes
Remarks	Light standards not grouted.		

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment			7	
Vertical Alignment			7	
Roadway Width (m)	14.000			
Approach Bump			8	
Guardrail (Y/N)	Yes			Exit 30m long.
Guardrail			8	
Length (m)	86.000			
Current Standard (Y/N)	Yes			
Termination Type	Attenuation			
Drainage			4	Drainage working well but settlement in corners.
Approach Road General Rating			**7**	

Superstructure			
Bridge Component	**Last**	**Now**	**Explanation of Condition**
(Primary Span : **WG, 2 Spans, Lengths(m): 41.207-60.808, A-Ident Number:**)			
Special Features			
Special Feature		8	MSE Wall. Both abutments. Slight waviness.
(Type :)			
Special Feature		X	
(Type :)			

Wearing Surface/Deck Top Detail Ratings				
	N (%)	1 (%)	2 (%)	3 (%)
Last				
Now				

Wearing Surface		8	
(Material Type : **ACP**)			
(Thickness(mm) : **80**)			
Deck Top		N	
Deck Rideability		8	
Deck Joints		8	Integral abutments.
Temperature (deg. C) 4			
(Expansion Type : **GLAND (WABO-MAUER, TRANSFLEX, ETC)**)			
(Fixed Type :)			

Gap Size (mm)	Gap Location
91	Abutment 1 - gland - exp.
97	Abutment 2 - gland - exp.

Deck Drainage		8	No drains.
Drains Clogged (Y/N) No			
Curbs/Median		8	Still working on curbs and fascia. Rubbed finish.
(Curb Type : **SINGLE SLOPE CONCRETE BARRIER**)			
Scaling (Percent Area) 0			
Bridge Rail		X	
(Type :)			
Bridge Rail Posts		X	
(Type :)			
Bridge Rail/Posts Coating		X	
(Type :)			
Sidewalk		X	
Girder/Beam			
Cover Plate		X	
Flange		9	
Web		9	
Stiffeners		9	
Splice		9	
Weld		N	
Diaphragms/Cross Frame		9	

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **WG, 2 Spans, Lengths(m): 41.207-60.808, A-Ident Number:**)				
Paint Condition			9	Weathering steel. Rust stains lower flange at A2 from fill water. It may stop.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings			9	Abutments are integral - no bearings.
Temperature (deg. C)	4			
(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			8	Narrow stress cracks from bottom flange to pour line (only 1 side of all 4 girders).
(Type : **CONCRETE**)				
Backwalls/Breastwalls			8	
Wingwalls			8	
Piles			N	
Paint/Coating			8	
Abutment Stability			8	
Scour/Erosion			X	
Piers/Bents				
(Type : **PIER-COLUMN**)				2 concrete columns.
Bearing Seats/Caps			9	
(Type : **CONCRETE**)				
(Total Number of Bearing Piles : **24**)				Buried.
Pier Shaft/Piles			9	
Bracing/Struts/Sheathing			X	
Nose Plate			X	
Paint/Coating			9	Tan.
(Colour Description :)				
(Colour Code :)				
Pier Stability			9	
Scour			X	
Debris (Y/N)	No			

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Substructure General Rating			**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment			7	
Traffic Safety Features			4	
Type	Lighting			
Slope Protection			5	South abutment galvanized strip water prevention attachments are stressed from concrete heaving.
(Type : **CONCRETE; CONCRETE**)				
Bank Stability			9	
Drainage			7	
Grade Separation General Rating			**7**	

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						
REPAINT SUPERSTRUCTURE						
STRAIGHTEN/REPLACE MEMBERS						
WASHING						
SHOTCRETE REPAIRS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION	2012	Complete concrete painting/finishing.				
OTHER ACTION	2012	Clean/remove staining on barrier exterior.				
OTHER ACTION	2012	Grout light standard bases.				
OTHER ACTION	2012	Finish grading of embankments.				
OTHER ACTION	2012	Is sealer required between girders? Improve on sealer detailing.				
OTHER ACTION	2012	Repair flashing where heaved at top of slope protection.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**/94.4**	**Sufficiency Rating (Last/Now) (%)**	**/75.5**	Est. Repl. Yr	2087	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	Monitor stress cracking under girders at abutments. Monitor seepage onto girders at abutment 1.	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	16-Jan-2014	Previous Inspection Date	
Inspection Cycle (Default) (months)	21		
Comment			