

Bridge Inspection											
Bridge File Number	79464 -1 Bridge				Form Type	SG					
Year Built/Year Supstr	1984/1984				Lot No.	2					
Bridge or Town Name	ST. ALBERT				Inspector Name	Shane Hall					
Located Over	2:34 L1 4.051;2:34 R1 4.051				Inspector Class	BR CLS A					
Located On	37:04 R1 0.000;37:04 L1 0.000				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	22-Apr-2013					
Legal Land Location	SW SEC 3 TWP 55 RGE 25 W4M				Data Entry By	Theresa Lacusta					
Longitude, Latitude	-113:38:27, 53:42:58				Data Entry Date	01-May-2013					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux					
Contract Main. Area	CMA09				Review Date	30-Apr-2013					
Clear Roadway/Skew	17 / -12 deg. (LHF)				Dept. Reviewer Name	Brent Herrick					
AADT/Year	5,680 / 2012 (A)				Dept. Review Date	01-May-2013					
Road Classification	RAU-210-110				Follow-Up By						
Detour Length (km)	5										
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	MS300									----> Primary Span	

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 2 L1 5.8m, 2 R1 5.8m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)	6.0	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.7	In Advance (Y/N)	Yes
Remarks												
Required Load Posting (t)			Single		Semi		Truck Train					
Posted Loading (t)			Single		Semi		Truck Train					
Posted:	Lane	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Posted:	Lane	WB	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			Information, Speed, Direction, Warning.									

Utilities (Located at)										
Utility Attachments										
Telephone					Gas					
Power	On bridge (north side).				Municipal					
Others	Light standard on bridge pier.				Problem (Y/N)	No				
Remarks			For lighting. Lighting A/B missing cap on one bolt & cracked cap on another.							

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Typical interchange.
Vertical Alignment		6	6	Limited sight distance due to overpass geometry.
Roadway Width (m)	17.300			Void under NW corner of West approach slab. Erosion channel beside NW & NE wingwalls.-06-Jul-2011 300X150MM pot hole NW abutments with several potholes @ SE.-photos.
Approach Bump		5	5	
Guardrail (Y/N)	Yes			Insufficient post spacing @ bridge.
Guardrail		4	4	Broken BR to GR connection bolt SW.-photo 1 split post SW.-photo 2 sections damaged W-beam @ NE.-photo
Length (m)	99.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			

Approach Road						
			Last	Now	Explanation of Condition	
Drainage			3	3	Both down drain troughs on North side cracked but still fundtional. Gaps along NW approach curb allow deck draingage to run under abutment.-photo	
<b>Approach Road General Rating</b>			<b>6</b>	<b>6</b>		
Superstructure						
Bridge Component			Last	Now	Explanation of Condition	
(Primary Span : <b>WG, 2 Spans, Lengths(m): 38.5-38.5, A-Ident Number: A0979-01</b> )						
Special Features						
Special Feature				X	Lighting standard on bridge.	
(Type : )						
Special Feature				X		
(Type : )						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
<b>Last</b>						
<b>Now</b>						
Wearing Surface			5	5	Chipseal over high density.	
(Material Type : <b>CONVENTIONAL CHIP SEAL COAT</b> )						
(Thickness(mm) : )						
Deck Top			N	N	Deck delam (400mmx200mm) in EBL of SP1.-photo	
Deck Rideability			5	5		
Deck Joints			3	3	Abutment joint cover plates slapping under traffic, bolts are loose. 1 sheared cover plate bolt @ EB, and 2 at West abutment - photos.  Could not confirm sheared bolt at East abut.	
Temperature (deg. C)		4				
(Expansion Type : <b>ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES)</b> )						
(Fixed Type : )						
Gap Size (mm)		Gap Location				
75		West abutment				
80		East abutment				
Deck Drainage			3	3	Deck drains in S1 only. (Bird bath on South curb between 2nd and 10th posts, North curb 4th and 7th posts. 95/09/18) One retrofit deck drain. Note: Only culd confirm gap at NW corner. Drainage from deck runs under East and West approach in gaps along curbs. -photos	
Drains Clogged (Y/N)		No				
Curbs/Median			5	5	Transverse cracking in curb every 1m. Typ vertical hairline cracks in curb railing at rail posts. Coating failing along cracked edges. Coating peeling on South fascia, inside face patches protude 50mm.	
(Curb Type : <b>Standard</b> )						
Scaling (Percent Area)		1				
Bridge Rail			7	4	Single bridge tube. Missing one bridgerail splice bolt @ SW.-photo  1 missing bridgerail anchor bolt @ SW corner.-photo	
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )						
Bridge Rail Posts			4	4	7 post A/B nuts with insufficient threads. Loose nuts post 8 on SW-photo.	
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )						
Bridge Rail/Posts Coating			7	7	Dirty.  Rail sleeve shor at SW and 2 sections of rail are not connected. photo-06-Jul-2011	
(Type : <b>GALVANIZED</b> )						
Sidewalk			X	X		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : <b>WG, 2 Spans, Lengths(m): 38.5-38.5, A-Ident Number: A0979-01</b> )					
<b>Girder/Beam</b>					
Cover Plate		X	X	9 girder / span.	
Flange		8	8		
Web		8	8		
Stiffeners		8	8		
Splice		8	8		
Weld		8	8		
Diaphragms/Cross Frame		8	8		
Paint Condition		8	8	Weathering steel. Scaling at end of bottom flanges.	
(Colour Description : )					
(Colour Code : )					
Touchup Required (Y/N)	No				
Bearings		5	5	12 anchor bolts missing nuts. Anchor bolts are bent 30mm out of plumb. Exterior bearing A/B @ S1G1 East abutment is corroding.  Bearings are close to fully expanded at +4 suggesting abutments are moving or bearings not installed correctly.	
Temperature (deg. C)	4				
(Expansion Type : <b>REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL</b> )					
(Fixed Type : <b>REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL</b> )					
Coating Adequate (Y/N)	Yes				
Functioning (Y/N)	Yes				
Deck Underside		5	4	Small delam in deck U/S in S1 between G1/2.-photo Hairline white stained transverse cracking at 4.0 m o.c; more on the west half of the bridge. Efflorescence staining reflecting bottom mat rebar pattern.	
Stains (Percent Area)	5				
<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>					
Bearing Seats/Caps		7	7		
(Type : <b>CONCRETE</b> )					
Backwalls/Breastwalls		7	5		
Wingwalls		5	5	Scaling at SW. Medium horizontal crack at bottom of backwall from end of abut to G3.-photo	
Piles		N	N		
Paint/Coating		4	4	Wingwall peeling.	
Abutment Stability		4	4	Abutments moving, brgs jammed.-06-Jul-2011	
Scour/Erosion		X	X		
<b>Piers/Bents</b>					
(Type : <b>PIER-SOLID</b> )		Stained from water from gutters on deck, north end.			
Bearing Seats/Caps		7	7	Very small chip out of south leg.  Few vertical hairline cracks.	
(Type : <b>CONCRETE</b> )					

Substructure				
Bridge Component		Last	Now	Explanation of Condition
(Total Number of Bearing Piles : 0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		5	5	
(Colour Description : )				
(Colour Code : )				
Pier Stability		8	8	
Scour		X	X	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>4</b>	<b>4</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		8	8	Curve in both directions.
Traffic Safety Features		7	4	Collision damage NOOrth. 1 section of W-beam and 2 posts damaged.-photo
Type	Guardrail			
Slope Protection		4	6	
(Type : <b>CONCRETE; CONCRETE</b> )				
Bank Stability		4	6	
Drainage		7	7	
<b>Grade Separation General Rating</b>		<b>4</b>	<b>4</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Tighten loose nuts.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL	2013	Replace missing AB at SW corner and tighten loose bolts, replace missing splice bolt.					
SEAL CURBS							
PATCH DECK	2013	Repair deck delam in EBL.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Tighten loose cover plate bolts, replace shear bolts.					
RESET/ PAINT BEARINGS	2013	Reset @ next major rehab & replace missing nuts.					
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Seal gaps along NW approach, curbs.					
OTHER ACTION	2013	Patch pot holes.					
OTHER ACTION	2013	Replace broken approach rail post and connection bolt to BR at SE. Repair guardrail on Hwy 2.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>50.0/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>47.0/46.2</b>	Est. Repl. Yr	2044	Maint. Req. (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	Kris Bosters	Previous Assistant's Name	
Next Inspection Date	22-Jan-2015	Previous Inspection Date	06-Jul-2011
Inspection Cycle (Default) (months)	21		
Comment			