

Bridge Inspection										
Bridge File Number	77389 E-1 Bridge					Form Type	PSR			
Year Built/Year Supstr	1974/1974					Lot No.	2			
Bridge or Town Name	KAPASIWIN					Inspector Name	Wade Nanninga			
Located Over	25137:02 C1 0.274					Inspector Class	BR CLS A			
Located On	16:12 R1 38.386					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	09-Aug-2012			
Legal Land Location	NE SEC 7 TWP 53 RGE 3 W5M					Data Entry By	Theresa Lacusta			
Longitude, Latitude	-114:25:12, 53:34:12					Data Entry Date	22-Aug-2012			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA11					Review Date	21-Aug-2012			
Clear Roadway/Skew	12.2 /					Dept. Reviewer Name	Brent Herrick			
AADT/Year	9,920 / 2011 (A)					Dept. Review Date	30-Aug-2012			
Road Classification	RAD-412.4-120					Follow-Up By				
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 28			Semi	CS2 49		Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	HS25									----> Primary Span

Posting Information											
Required Vert. Clearance Posting (m)	UNDER: 25137 C1 5.2m										
Posted Vertical Clearance (Y/N)	Yes										
Posted:	Lane	NB	On Bridge (m)	5.2	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	In Advance (Y/N)	No
Remarks	SBL posted on 77389W.										
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)		In Advance (Y/N)		At Bridge (Y/N)				
Remarks	Not required.										
Hazard Marker At Bridge (Y/N)	No										
Remarks	Remarks not required.										
Other Sign Types	Information.										

Utilities (Located at)									
Utility Attachments									
Telephone	South r/w.				Gas				
Power	7 wires North r/w.				Municipal				
Others	Transmission line approx 300m South.				Problem (Y/N)		No		
Remarks									

Approach Road									
			<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>				
Horizontal Alignment			7	7	Typical overpass crest with on/off ramps.				
Vertical Alignment			6	6					
Roadway Width (m)	12.200				ACP at approach is cracked.				
Approach Bump			4	4					
Guardrail (Y/N)	Yes				Minor creases along rail, still functional. Insufficient posts at bridge, not thrie beam transition.				
Guardrail			4	4	Missing rail bolt @ NW.				
Length (m)	99.000								
Current Standard (Y/N)	No								
Termination Type	Turned Down								
Drainage			4	4	Water is running along all 4 wingwalls and getting underneath the concrete slope protection. SE down drain misaligned with concrete slope protection trough - photo.				
<b>Approach Road General Rating</b>			<b>6</b>	<b>6</b>					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : RD, 3 Spans, Lengths(m): 9.1-18.3-9.1, A-Ident Number: )					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>					
<b>Now</b>				5.0	
Wearing Surface			4	3	Raveling at piers & abutments. Old patches have ruts. Ponding @ NE corner, chipseal raveling.
(Material Type : <b>ACP - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			5	4	Bumps at piers. Ravelling waering surface.
Deck Joints			3	5	(Leaking @ East abutment - photo. 08/Dec/2008) Small tear in West pier gland - patched.
Temperature (deg. C)		20			
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
(Fixed Type : <b>ASPHALTIC FIBRE BOARD</b> )					
Gap Size (mm)		Gap Location			
70		W. pier			
70		E. pier			
Deck Drainage			4	4	(Leaking @ East abutment A1 FB. 08/Dec/2008)
Drains Clogged (Y/N)		No			
Curbs/Median			5	5	Minor spall on South curb. Typical cracking at curb ext under posts.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		5			
Bridge Rail			7	7	Grout pads @ base have delaminated. 10% post A/B with insufficient thread. Superficial rust on post bases.
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )					
Bridge Rail Posts			4	4	
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			4	4	
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
<b>Girder Detail Ratings</b>					
	N (count)	1 (count)	2 (count)	3 (count)	G1P1 Narrow long crack along underside.
<b>Last</b>				1	
<b>Now</b>	0	0	0	1	
Girders			3	3	Delam/spall S3G8 @ East pier - photo. Rust spots on bottom of several girders related to rebar chairs. 5% fascia coating peeling. S2G1, G2, G3,G4 & G11 are chipped from HLD. 25mm void S2G7- poor casting.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : <b>33</b> )					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RD, 3 Spans, Lengths(m): 9.1-18.3-9.1, A-Ident Number: )				
Diaphragms/Cross Frame		X	X	
Bearings		7	7	
Temperature (deg. C)	20			
(Expansion Type : <b>REINFORCED PAD BEARING</b> )				
(Fixed Type : <b>REINFORCED PAD BEARING</b> )				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		X	X	
Stains (Percent Area)				
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>3</b>	<b>3</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		6	6	
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		6	6	
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		5	5	East brestwall stained.
Abutment Stability		6	6	
Scour/Erosion		4	4	Water at all 4 corners flows along wingwalls and gets under slope protection - void.
<b>Piers/Bents</b>				
(Type : <b>PIER-COLUMN</b> )				
Bearing Seats/Caps		4	5	Light scaling North end of East pier.
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>7:7</b> )				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		4	4	Chaulky appearance. Superficial rust on 5%. Green.
(Colour Description : )				
(Colour Code : )				
Pier Stability		5	5	Concrete slope protection pushing on pier piles.
Scour		X	X	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>4</b>	<b>5</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		7	7	
Traffic Safety Features		X	X	
Type	None			
Slope Protection		4	4	East concrete slope protection down 190 out 175. West concrete slope protection down 110 out 125. East moved out 25 and West moved out 15mm since 14/June/2005. The east is cracking along toe and the west is starting to buckle along toe.
(Type : <b>CONCRETE; CONCRETE</b> )				
Bank Stability		5	5	Void under concrete slope protection, both abutments.
Drainage		5	5	Ponding along toes.
<b>Grade Separation General Rating</b>		<b>4</b>	<b>5</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK	2012	Patch ACP & repair ruts.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Flood joints and repair leak - if not done already.					
RESET/ PAINT BEARINGS							
WASHING	2012	Wash					
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2012	Redirect drainage to prevent undermining of slope protection. Seal gap @ top of concrete slope protection/breastwall, both abutments.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION	2012	Install rail bolt @ NE.					
OTHER ACTION	2012	Consider upgrading guardrail to meet standard.					
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>47.3/49.4</b>	Est. Repl. Yr	2030	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Repair grout pad deterioration & post thread @ next rehab. Monitor delam.		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	09-May-2014		Previous Inspection Date	06-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							