

Bridge Inspection										
Bridge File Number	75543 E-1 Bridge					Form Type	PSR			
Year Built/Year Supstr	1965/1965					Lot No.	2			
Bridge or Town Name	Salisbury Interchange					Inspector Name	Wade Nanninga			
Located Over	216:04 R1 6.548;216:04 L1 6.533					Inspector Class	BR CLS A			
Located On	SHERWOOD PARK FREEWAY:02 R1 3.307					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	14-Jan-2013			
Legal Land Location	SE SEC 29 TWP 52 RGE 23 W4M					Data Entry By	Lisa Fairhurst			
Longitude, Latitude	-113:20:42, 53:30:47					Data Entry Date	26-Mar-2013			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux			
Contract Main. Area	ANTHONY HENDAY DRIVE					Review Date	25-Mar-2013			
Clear Roadway/Skew	15.8 / 16 deg. (RHF)					Dept. Reviewer Name	Brent Herrick			
AADT/Year	33,860 / 2011 (A)					Dept. Review Date	26-Mar-2013			
Road Classification	RAU-213.4-120					Follow-Up By				
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 39 GIRDER			Semi	CS2 55 GIRDER		Train	CS3 71 GIRDER	----> On Critical Spans ---->Critical Member
Design Loading:	HS20									----> Primary Span

Posting Information													
Required Vert. Clearance Posting (m)		UNDER: 216 L1 5.3m, 216 R1 5.3m											
Posted Vertical Clearance (Y/N)		Yes											
Posted:	Lane	NB	On Bridge (m)	5.3	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.3	In Advance (Y/N)	Yes	
Remarks		SB on North structure. Spot measured at West shoulder @ 5.6m.											
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		Not required.											
Other Sign Types		Information, Speed, Direction.											

Utilities (Located at)										
Utility Attachments										
Telephone						Gas	South r/w.			
Power						Municipal				
Others	Lighting.					Problem (Y/N)	No			
Remarks										

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Typical grade separation. On/off ramps and crest curve.
Vertical Alignment		6	6	
Roadway Width (m)	12.500			ACP deteriorating on East side of joint @ A2 forming pothole 5m long x 80mm wide x 30mm deep - photo.
Approach Bump		5	4	
Guardrail (Y/N)		Yes		Not connected to bridge.
Guardrail		4	4	Creased at SE
Length (m)	38.000			
Current Standard (Y/N)		No		
Termination Type		Bulb/Turn Down		
Drainage		5	5	
<b>Approach Road General Rating</b>		<b>6</b>	<b>6</b>	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : FC, 4 Spans, Lengths(m): 12.2-19.8-19.8-12.2, A-Ident Number: )					
<b>Special Features</b>					
Special Feature		7	7		
(Type : <b>UNDERSLUNG DIAPHR</b> )					
Special Feature			X		
(Type : )					
<b>Wearing Surface/Deck Top Detail Ratings</b>					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>	20	0	0	0	
<b>Now</b>	30.0	0.0	0.0	0.0	
Wearing Surface			5	5	Chip seal on 70mm FRC. Chip seal missing from 3% of deck. Worst @ West end span 3.
(Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			6	6	
Deck Joints			5	4	Poured rubberized material on top of gland is coming off over 2m length at SE corner.  Snow plough deflectors missing on 50% of abutment joints.
Temperature (deg. C)		-5			
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC);ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES)</b> )					
(Fixed Type : <b>ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES)</b> )					
Gap Size (mm)		Gap Location			
75		West abut - Exp.			
27		Pier 1			
27		Pier 2 - Fixed			
30		Pier 3			
80		East abut - Exp.			
Deck Drainage			5	5	No drains.
Drains Clogged (Y/N)					
Curbs/Median			4	4	Medium scaling with rust staining on both curbs. Vertical crack & scaling on exterior face below posts. Wide delamination crack S1 North & South & S2 North curb. Narrow delam crack S4 North curb. 600mm x 200mm spall @ SE corner on curb/wingwall. Medium delamination crack S2 South curb.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		40			
Bridge Rail			5	5	3 sections of rail with bent vertical slats.
(Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )					
Bridge Rail Posts		5	5		
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating		6	6		
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
<b>Girder Detail Ratings</b>					
	N (count)	1 (count)	2 (count)	3 (count)	Viewed from headslopes.
<b>Last</b>	0	0	0	1	
<b>Now</b>	0	0	0	1	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : FC, 4 Spans, Lengths(m): 12.2-19.8-19.8-12.2, A-Ident Number: )					
Girders		3	3	Spall in web of G1S4 @ A2 with exposed stirrup - photo. Wide crack above masonry plate extends into leg @ South side of G1S4 from pack rust - photo. Typical FC chamfer cracks. Few high load chips on south side, NBL/SBL. Rust spots on 5 girders. Veretical crack G1SP1 over pier. G10 S2 spalled N leg near P2 - 300mm long.	
Cracking (Y/N)	Yes				
Spalling (Percent Area)	3				
(Number Of Girders : 40)					
Diaphragms/Cross Frame		4	4	One diaphragm SE curb has spalled.	
Bearings		4	4	Bearing pads are deteriorated, typical. Choo-choo bearings at P1 & P3. AB nuts not fully threaded. Some bolts leaning/twisted.	
Temperature (deg. C)	-5				
(Expansion Type : <b>ROLLER BEARING</b> )					
(Fixed Type : <b>PINNED BEARING</b> )					
Coating Adequate (Y/N)	No				
Functioning (Y/N)	Yes				
Deck Underside		4	4	Rebar is exposed. Spalling on underside of curb girders @ weep holes. Weep tubes no longer active due to concrete overlay.	
Stains (Percent Area)	5				
<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		4	4	Wide delam cracks @ East abutment seat.	
(Type : <b>CONCRETE</b> )					
Backwalls/Breastwalls		5	5		
Wingwalls		4	4	600mm x 200mm spall @ SE corner on outside face of curb/wingwall.	
Piles		N	N		
Paint/Coating		5	5		
Abutment Stability		7	7		
Scour/Erosion		X	6		
<b>Piers/Bents</b>					
(Type : <b>PIER-COLUMN</b> )				Pier caps have been patched. Narrow vertical crack South end of P3 & P2.	
Bearing Seats/Caps		5	5		
(Type : <b>CONCRETE</b> )				Delam/spalls on North end of P1 - photo.	
(Total Number of Bearing Piles : <b>0:0:0</b> )					
Pier Shaft/Piles		4	4		
Bracing/Struts/Sheathing		X	X		
Nose Plate		X	X		
Paint/Coating		5	5	Rust stains P3N. Pigmented sealer, patched areas not sealed.	
(Colour Description : )					
(Colour Code : )					
Pier Stability		8	8		
Scour		X	N		

Substructure				
Bridge Component		Last	Now	Explanation of Condition
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		7	7	
Traffic Safety Features		3	6	
Type	Median / Guardrail			
Slope Protection		5	5	Wide cracks in East headslope & West headslope.-02-Jun-2009
(Type : <b>CONCRETE; CONCRETE</b> )				Snow covered.
Bank Stability		N	N	
Drainage		5	5	
<b>Grade Separation General Rating</b>		<b>3</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							
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							
OTHER ACTION	2013	Patch girder with approved AIT OH material.					
OTHER ACTION	2013	Fill pothole @ A2					
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>44.8/47.3</b>	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor spalling at East abutment seat and P1.		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	Arnold Assenheimer		Previous Assistant's Name	Wade Nanninga			
Next Inspection Date	14-Oct-2014		Previous Inspection Date	09-Mar-2011			
Inspection Cycle (Default) (months)	21						
Comment							