

Bridge Inspection										
Bridge File Number	77054 E-1 Bridge					Form Type	PSR			
Year Built/Year Supstr	1973/1973					Lot No.	2			
Bridge or Town Name	HINTON					Inspector Name	Shane Hall			
Located Over	SWITZER DR					Inspector Class	BR CLS A			
Located On	16:02 R1 26.998					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	06-Jul-2012			
Legal Land Location	SW SEC 14 TWP 51 RGE 25 W5M					Data Entry By	Theresa Lacusta			
Longitude, Latitude	-117:34:32, 53:24:09					Data Entry Date	05-Sep-2012			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA13					Review Date	20-Aug-2012			
Clear Roadway/Skew	12 / -10 deg. (LHF)					Dept. Reviewer Name	Brent Herrick			
AADT/Year	8,730 / 2011 (A)					Dept. Review Date	18-Sep-2012			
Road Classification	RAD-412.4-120					Follow-Up By				
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 47 GIRDER			Semi	CS2 60 GIRDER		Train	CS3 70 GIRDER	----> On Critical Spans ---->Critical Member
Design Loading:	HS20									----> Primary Span

Posting Information														
Required Vert. Clearance Posting (m)				UNDER: SWITZER DR 7.4m										
Posted Vertical Clearance (Y/N)				Yes										
Posted:	Lane	NB	On Bridge (m)	7.4	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	7.4	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	At Bridge (Y/N)	No				
Posted:	Lane	WB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)		At Bridge (Y/N)					
Remarks				Not required.										
Hazard Marker At Bridge (Y/N)				Yes										
Remarks				At approaching ends only.										
Other Sign Types				Information.										

Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	North r/w.					Gas			
Power	Street lighting, Southeast.					Municipal			
Others	Lighting on pier, street lights on grade separation.					Problem (Y/N)	No		
Remarks									

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Wide horizontal superelevated curve. Grade on upward curve to East; good sightline.
Vertical Alignment		6	6	
Roadway Width (m)	11.200			No guardrail @ NE & SE, pedestrian walkway South side.
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		5	5	
Length (m)	30.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		4	4	Seeping onto A1 - photo. Sw drain trough has significant spalling with exposed rebar.-photo
Approach Road General Rating		6	6	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : FC, 2 Spans, Lengths(m): 31.4-31.4, A-Ident Number:)					
Special Features					
Special Feature		7	7		
(Type : UNDERSLUNG DIAPHR)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now					
Wearing Surface		4	4	300 x 300mm pothole in South lane @ A1.-photo.	
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N		
Deck Rideability		6	6		
Deck Joints		3	3	Seepage @ SW & center of A1; staining on back & breastwall - photo. Seepage under G4 @ P1.-photo	
Temperature (deg. C)		21			
(Expansion Type : ARMOURED GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
(Fixed Type : ARMOURED GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
Gap Size (mm)		Gap Location			
30		East abutment (A2)			
53		Pier			
37		West abutment (A1)			
Deck Drainage		4	4	Stains at SW of A1 on back and breastwalls.-photo	
Drains Clogged (Y/N)		Yes			
Curbs/Median		7	6		
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail		4	4	Connection bolts missing @ pier.-photo Grout pads deteriorated, insufficient thread on a few bolts.	
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts		4	4		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		7	7		
(Type : GALVANIZED)					
Sidewalk		7	7	Sidewalk railing does not meet standard height, 1090mm.	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : FC, 2 Spans, Lengths(m): 31.4-31.4, A-Ident Number:)				
Girders		4	4	Typical FC cracking @ ends. 540 longitudinal medium crack on S1G9 propagating from West bearing. G1 on S1 & S2 medium longitudinal cracks. Diagonal crack extends 310mm from connection bolt in South leg of G2SP1 & 200mm in N leg of G1SP1.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
(Number Of Girders : 18)				
Diaphragms/Cross Frame		4	4	End diaphragms are lightly scaled with two having bottom delam cracks with rust stains. 15mm deep exposed agg @ G1, most severe.
Bearings		4	4	Superficial rust on ext bearing plate. Most abutment bearing pads bulging. Most severe @ G1 & G2 - photo. Missing anchor bolt nut @ G4W & G5W. Anchor bolts @ P1, G4,5,6 are bent to South.-photo
Temperature (deg. C)	21			
(Expansion Type : SLIDING PLATE)				
(Fixed Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		7	7	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	6	Several medium vertical cracks along A1 & A2.
(Type : CONCRETE)				
Backwalls/Breastwalls		7	6	
Wingwalls		7	5	Wide vertical crack @ NW wing.
Piles		N	N	
Paint/Coating		5	5	2% peeling.
Abutment Stability		7	7	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-COLUMN)				Rust stain from metal rebar supports.
Bearing Seats/Caps		5	5	Medium cracks @ underside.
(Type : CONCRETE)				
(Total Number of Bearing Piles : 2)				2 delaminations at base of North column.-photo
Pier Shaft/Piles		6	4	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		5	5	Rust stains under cap, coating peeling off columns, 2%. Grey.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		5	4	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	
Traffic Safety Features		5	5	Lo-rise precast curbs as pedestrian barrier. Light mounted on pier column; guardrail protecting pier column.
Type	Light/Guardrail			
Slope Protection		4	4	50mm separation @ W abutment between conc. slope protection and breaswalls.-photo
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		8	8	
Grade Separation General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Bore out rail expansion sleeve holes & install bolts.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK	2013	Patch pot hole.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Replace or repair glands.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2013	Seal gap at top of concrete slope protection & breastwall, both abutments.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Repair drain trough at SW corner.					
OTHER ACTION	2013	Repair delaminations at pier.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/44.4	Sufficiency Rating (Last/Now) (%)	56.6/54.5	Est. Repl. Yr	2045	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor bearings.		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	Eric Carcoux		Previous Assistant's Name				
Next Inspection Date	06-Apr-2014		Previous Inspection Date	15-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							