

Bridge Inspection										
Bridge File Number	82401 N2-1 Bridge					Form Type	PSR			
Year Built/Year Supstr	2007/2007					Lot No.	3			
Bridge or Town Name	Deerfoot - Stoney Trail North Interchange					Inspector Name	Garry Roberts			
Located Over	201:02 C1-1OL 0.015;201:02 L1 0.012					Inspector Class	BR CLS A			
Located On	2:15 R1 48.752;RAMP 2872-1 D					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	21-Aug-2011			
Legal Land Location	SW SEC 33 TWP 25 RGE 29 W4M					Data Entry By	Erin Roberts			
Longitude, Latitude	-114:00:02, 51:10:31					Data Entry Date	07-Sep-2011			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Tom Carey			
Contract Main. Area	DEERFOOT/STONEY					Review Date	24-Aug-2011			
Clear Roadway/Skew	31.1 /					Dept. Reviewer Name	Tim Davies			
AADT/Year						Dept. Review Date	08-Sep-2011			
Road Classification						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:	CL800									----> Primary Span

Posting Information										
Required Vert. Clearance Posting (m)	UNDER: 201 C1-1OL 7.3m, 201 L1 7.0m									
Posted Vertical Clearance (Y/N)	Yes									
Posted:	Lane	WB	On Bridge (m)	5.4	In Advance (Y/N)	No	Lane	EB	On Bridge (m)	In Advance (Y/N)
Remarks	Posted V.C. on Sp.1- 5.4m Sp.2- 5.4m									
Required Load Posting (t)	Single				Semi				Truck Train	
Posted Loading (t)	Single				Semi				Truck Train	
Posted:	Lane	WB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)			
Posted:	Lane	EB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)			
Remarks	Not req.									

Hazard Marker At Bridge (Y/N)	No								
Remarks	Not req.								
Other Sign Types									

Utilities (Located at)										
Utility Attachments										
Telephone						Gas				
Power	North and East side. Also under bridge					Municipal				
Others	Light standards					Problem (Y/N)	No			
Remarks										

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	
Vertical Alignment		8	8	
Roadway Width (m)				Bridge is approx. 15-20mm higher than approach slab at both ends.
Approach Bump		5	6	
Guardrail (Y/N)	Yes			Only 2 bolts at post to block at first 7 posts at SW, NW, and SE- SW has 4 bolts.
Guardrail		5	4	3 Loose bolts at SW and 1 loose bolt at NE transition plates.
Length (m)	18.000			18m at NW- Approach end is continous.
Current Standard (Y/N)	Yes			
Termination Type	Attenuator			
Drainage		4	7	
Approach Road General Rating		7	7	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : NU, 2 Spans, Lengths(m): 37.5-37.5, A-Ident Number:)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	0	0	0	0		
Now	0.0	0.0	0.0	0.0		
Wearing Surface			5	8		
(Material Type : ACP)						
(Thickness(mm) : 90)						
Lateral Connection Problem (Y/N)		No				
Deck Top			N	N	Paved over.	
Deck Rideability			8	8		
Deck Joints			3	4	SW parapet cover plate missing 1 bolt and 3 others are loose. 2 bolts missing at NW.	
Temperature (deg. C)		23				
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
80		Abut 1- South				
70		Abut 2- North				
Deck Drainage			7	7		
Drains Clogged (Y/N)		No				
Curbs/Median			3	8	Cable barrier seperates 3 through lanes from 2 exit lanes.	
(Curb Type :)						
Scaling (Percent Area)		0				
Bridge Rail			X	X	Pigmented sealer at parapet exteriors.	
(Type :)						
Bridge Rail Posts			X	X		
(Type :)						
Bridge Rail/Posts Coating			8	7		
(Type :)						
Sidewalk			X	X		
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Girders			4	4	Hairline diagonal and longitudinal cracks in end blocks of most girders at both abut. and pier ends. Cracks are marked from previous Level 2 inspection.	
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
(Number Of Girders : 10)						
Diaphragms/Cross Frame			8	8		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : NU, 2 Spans, Lengths(m): 37.5-37.5, A-Ident Number:)				
Bearings		9	8	Exp. at both abuts. Exterior 3 girders do not have A/B. Pier is integral.
Temperature (deg. C)	23			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		5	5	Cracks with staining and other areas with staining. Some cracks appear to be sealed.
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		9	8	
(Type : CONCRETE)				
Backwalls/Breastwalls		8	8	Isolated vertical cracks. Access hatch between G5-G6
Wingwalls		8	8	
Piles		N	N	Buried.
Paint/Coating		6	7	Pigmented sealer
Abutment Stability		9	8	
Scour/Erosion		4	7	
Piers/Bents				
(Type : PIER-COLUMN)				
Bearing Seats/Caps		9	8	
(Type :)				
(Total Number of Bearing Piles : 0)				
Pier Shaft/Piles		9	8	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	Pigmented sealer
Paint/Coating		8	8	
(Colour Description :)				
(Colour Code :)				
Pier Stability		9	8	
Scour		7	X	
Debris (Y/N)	No			
Substructure General Rating		9	8	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	
Traffic Safety Features		X	X	
Type				
Slope Protection		8	8	
(Type : CONCRETE; CONCRETE)				
Bank Stability		5	7	
Drainage		7	7	
Grade Separation General Rating		5	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2011	Tighten thriebeam bolts and transition bolts					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2011	Install 3 cover plate bolts- tighten others.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2011	Install V.C. signs in advance W/B					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	72.2/66.7	Sufficiency Rating (Last/Now) (%)	67.9/64.4	Est. Repl. Yr	2065	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Re-rate NU girder cracks after girder rating guide is available from AT- expected early in 2010 (G. Roberts Nov 27/09)		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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	21-May-2013		Previous Inspection Date	27-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							