

Bridge Inspection									
Bridge File Number	77251 E-1 Bridge					Form Type	CON		
Year Built/Year Supstr	1976/1976					Lot No.	2		
Bridge or Town Name	CALGARY - 32 AVENUE NORTH					Inspector Name	Garry Roberts		
Located Over	2:15 R1 37.097;2:15 L1 37.189					Inspector Class	BR CLS A		
Located On	10245:02 R1 0.080					Assistant Name			
Water Body Cl./Year						Assistant Class			
Navigabil. Cl./Year						Inspection Date	08-Jan-2013		
Legal Land Location	NE SEC 26 TWP 24 RGE 1 W5M					Data Entry By	Lauren Korte		
Longitude, Latitude	-114:02:05, 51:04:53					Data Entry Date	28-Jan-2013		
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Tom Carey		
Contract Main. Area	DEERFOOT/STONEYP					Review Date	17-Jan-2013		
Clear Roadway/Skew	12.2 / 35 deg. (RHF)					Dept. Reviewer Name	Tim Davies		
AADT/Year	44,100 / 2001 (E)					Dept. Review Date	29-Jan-2013		
Road Classification	RLU-208-100					Follow-Up By			
Detour Length (km)	10								
Allowable Load (t):	Single		Semi		Train			----> On Critical Spans	
Design Loading:								---->Critical Member	
								----> Primary Span	

Posting Information												
Required Vert. Clearance Posting (m)	UNDER: 2 L1 5.2m, 2 R1 5.2m											
Posted Vertical Clearance (Y/N)	Yes											
Posted:	Lane	NB	On Bridge (m)	5.4	In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	
Remarks	S/B posting on BF 77251W											
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												
Other Sign Types	ROUTE, 50KM/HR RAMP 60KM/HR.											

Utilities (Located at)										
Utility Attachments	POWER UTILITIES-POWER LINE									
Telephone	At SW.				Gas					
Power	South and North ROW.				Municipal		Manhole approaches NW.			
Others	Light standards.				Problem (Y/N)		No			
Remarks	Underside deck lighting.									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	Ramps controlled intersections @ both ends.				
Vertical Alignment			6	6	B2134				
Roadway Width (m)	24.000								
Approach Bump			7	6					
Guardrail (Y/N)	Yes				HSS rail on I-beam posts.				
Guardrail			4	4	All post to rail welds broke at SE and 3 at SW.				
Length (m)	99.000								
Current Standard (Y/N)	Yes								
Termination Type	TURN DOWN								
Drainage			7	7					
Approach Road General Rating			6	6					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : CB, 2 Spans, Lengths(m): 42.7-47.2, 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	5.0	0.0	0.0	0.0	
Wearing Surface			6	4	Longitudinal cracks. Approx 1m2 pothole at SW corner ACP transition paving onto deck. Another 4m2 is delaminated. Approx 2m2 of concrete deck spalls.
(Material Type : CONCRETE)					
(Thickness(mm) : 50)					
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			3	3	Paving lips spalled @ East & West - shallow spalls and missing 150mm section of angle at East abut but joint is sound. (Gland torn @ outside E/B lane @ West abutment- approx 1m long) Gland is dirt filled not able to confirm.
Temperature (deg. C)		-1			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
50			E Abut		
70			W Abut		
Deck Drainage			4	4	Staining between structures. No drains. Gland joint @ median between structures. Good longitudinally. Torn @ abuts. Leaks @ West abut joint @ SW.
Drains Clogged (Y/N)		No			
Curbs/Median			4	4	Cracked and spalled at SE curb fascia of Sp.1 over S/B lane at 3 locations.
(Curb Type : Standard)					
Scaling (Percent Area)		2			
Bridge Rail			7	7	1 nut missing & Sheared both @ 19th post & 3rd post from from SE. 8 post A/B nuts not fully engaged. Corrosion @ base plates.
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts			4	4	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			4	4	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girders			4	4	Voided slab. Approx 1mm wide x 700 long vertical crack at SE fascia.
Diaphragms/Cross Frame			X	X	
Bearings			5	5	Covered with expanded metal and visible only at SW. Corrosion at exteriors.
Temperature (deg. C)		-1			
(Expansion Type : POT BEARING)					
(Fixed Type :)					
Coating Adequate (Y/N)		No			
Functioning (Y/N)		Yes			
Deck Underside			4	4	Corrosion staining and cracks under median between structures. SE, SW scaling and corrosion @ Deck exterior underside.
Stains (Percent Area)		5			

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CB, 2 Spans, Lengths(m): 42.7-47.2, A-Ident Number:)				
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		4	4	2 wide vertical cracks and 1 spall 1m x 0.15 at East abut. Heavy scaling at SW.
Backwalls/Breastwalls		6	6	
Wingwalls		6	6	
Piles		N	N	Buried.
Paint/Coating		4	4	Peeling.
Abutment Stability		7	7	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-SOLID)				Integral @ pier.
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				Map cracking.
Pier Shaft/Piles		7	7	
Nose Plate		X	X	
Paint/Coating		5	5	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		6	6	Curves both sides.
Traffic Safety Features		7	7	Cable barrier system.
Type	Steel Median			
Slope Protection		5	4	Isolated 10mm cracks @ NW. Cracked slope protection @ SE and 20mm open joint. Bottom sections cracked at both ends.
(Type : CONCRETE; CONCRETE)				
Bank Stability		6	6	
Drainage		7	7	
Grade Separation General Rating		5	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Extend bolts and add nuts at South bridgerail. Repair welds at approach rails.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2013	SE exterior curb spall- approx 1.2m2.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Replace West abut joint gland - if not already done. Reseal median joint and install seals at ends where open.					
RESET/ PAINT BEARINGS	2013	Blast and recoat bearings.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Epoxy inject girder crack- 700mm.					
OTHER ACTION	2013	Clean patch and seal at SW and under median joint.					
OTHER ACTION	2013	Seal slope protection cracks and gaps approx 20m.					
OTHER ACTION	2013	Repair abut spall approx 1m2.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	29.0/30.2	Est. Repl. Yr	2031	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	08-Oct-2014		Previous Inspection Date	12-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							