

Bridge Inspection										
Bridge File Number	77173 E-1 Bridge				Form Type	SG				
Year Built/Year Supstr	1971/1971				Lot No.	2				
Bridge or Town Name	CALGARY - COUNTRY HILLLS BOULEVARD				Inspector Name	Garry Roberts				
					Inspector Class	BR CLS A				
Located Over	2:15 R1 45.932;2:15 L1 46.055				Assistant Name					
Located On	COUNTRY HILLS BOULEVARD:04 R1 0.421				Assistant Class					
Water Body Cl./Year					Inspection Date	07-Jan-2013				
Navigabil. Cl./Year					Data Entry By	Lauren Korte				
Legal Land Location	SW SEC 25 TWP 25 RGE 1 W5M				Data Entry Date	28-Jan-2013				
Longitude, Latitude	-114:01:08, 51:09:16				Reviewer Name	Tom Carey				
Road Authority	Alberta Transportation (AIT)				Review Date	17-Jan-2013				
Contract Main. Area	DEERFOOT/STONEY				Dept. Reviewer Name	Tim Davies				
Clear Roadway/Skew	8.5 / -44 deg. (LHF)				Dept. Review Date	29-Jan-2013				
AADT/Year	26,770 / 2001 (E)				Follow-Up By					
Road Classification	RLU-208-100									
Detour Length (km)	1									
Allowable Load (t):	Single		Semi		Train		----> On Critical Spans ---->Critical Member			
Design Loading:	HS20				----> Primary Span					

Posting Information											
Required Vert. Clearance Posting (m)	UNDER: 2 L1 5.3m, 2 R1 5.3m										
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)	No
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			
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	40 km/h @ ramps										

Utilities (Located at)											
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE										
Telephone					Gas						
Power					Municipal	Manhole @ SE.					
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	A2151					
Roadway Width (m)	8.500				Wrong lap at South East and North East. Missing 4 bolts at NW. Not thriebeam.					
Approach Bump			6	6						
Guardrail (Y/N)	Yes									
Guardrail			4	4						
Length (m)	11.400									
Current Standard (Y/N)	No									
Termination Type	TURNDOWN									
Drainage			7	7						

Approach Road					
		Last	Now	Explanation of Condition	
Approach Road General Rating		6	6		
Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : WG, 2 Spans, Lengths(m): 57.9-57.9, A-Ident Number:)					
Special Features					
Special Feature			X	Carbon Fibre Sheets under concrete & fibre deck overlay.	
(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	5	Medium width transverse cracks - widespread.	
(Material Type : CONCRETE)					
(Thickness(mm) : 50)					
Deck Top		N	N		
Deck Rideability		6	6		
Deck Joints		4	4	(50mm long tear @ inside lane @ West deck joint). Could not confirm.	
Temperature (deg. C)		-6			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))		700 X 100 spall developing at West joint shoulder lane, and at North end of A1. Minor spalls at A2.			
(Fixed Type :)					
Gap Size (mm)		Gap Location			
55		E abut			
65		W abut			
Deck Drainage		6	6		
Drains Clogged (Y/N)		No			
Curbs/Median		5	5	Some isolated cracking and scaling at tops and soffits.	
(Curb Type : Standard)					
Scaling (Percent Area)		2			
Bridge Rail		7	7		
(Type : BRIDGE TUBE)					
Bridge Rail Posts		7	7	Paint on galvanizing. Paint 10% peeled-galvanizing good.	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		6	6		
(Type : PAINT)					
Sidewalk		X	X		
Girder/Beam					
Cover Plate		X	X	High load repair at Sp.1 - G3 over SBL.	
Flange		3	7		
Web		7	7	Longitudinal stiffeners.	
Stiffeners		7	7		
Splice		7	7		
Weld		7	7		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 2 Spans, Lengths(m): 57.9-57.9, A-Ident Number:)				
Diaphragms/Cross Frame		7	7	
Paint Condition		3	3	Corrosion @ bottom flange.
(Colour Description : YELLOW)				
(Colour Code : 13538)				
Touchup Required (Y/N)	Yes			
Bearings		5	5	Only seen @ piers and partially at West abut. Too high to see & covered with wire. 20% Corrosions @ ones seen. Piles of pigeon crap covering bearings.
Temperature (deg. C)	-6			
(Expansion Type : POT BEARING)				
(Fixed Type : POT BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Worst area has surface spall @ SE over lanes of HWY 2 Wide spread cracks & efflorescence at exteriors.
Stains (Percent Area)	20			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		3	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	Abut seats are covered in pigeon crap and several dead pigeons.
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	6	Stained at SE from joint leakage.
Piles		N	N	Buried.
Paint/Coating		5	5	
Abutment Stability		8	8	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-COLUMN)				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 3)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		7	7	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		X	X	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	Retaining walls @ both abutments.
Traffic Safety Features		7	7	
Type	Guardrail			
Slope Protection		7	7	
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		6	7	
Grade Separation General Rating		7	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK	2013	Blast and seal deck underside exterior - worst is @ SE - over Hwy 2 lanes. Blast and coat wings.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE	2013	Touch up girder bottoms.					
STRAIGHTEN/REPLACE MEMBERS							
WASHING	2013	Wash abut seats - remove dead birds and crap.					
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/61.1	Sufficiency Rating (Last/Now) (%)	53.9/57.2	Est. Repl. Yr	2030	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	07-Oct-2014		Previous Inspection Date	10-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							