

Bridge Inspection												
Bridge File Number	73794 W-4 Bridge					Form Type	CON					
Year Built/Year Supstr	1971/1971					Lot No.	1					
Bridge or Town Name	CALGARY - 16 AVENUE NORTH OVER DEERFOOT TRAIL					Inspector Name	Garry Roberts					
						Inspector Class	BR CLS A					
Located Over	2:15 R1 35.349;2:15 L1 35.453					Assistant Name						
Located On	1:09 L1 19.309					Assistant Class						
Water Body Cl./Year						Inspection Date	09-Jan-2013					
Navigabil. Cl./Year						Data Entry By	Lauren Korte					
Legal Land Location	SE SEC 26 TWP 24 RGE 1 W5M					Data Entry Date	23-Jan-2013					
Longitude, Latitude	-114:01:39, 51:04:03					Reviewer Name	Tom Carey					
Road Authority	Alberta Transportation (AIT)					Review Date	17-Jan-2013					
Contract Main. Area	DEERFOOT/STONEV					Dept. Reviewer Name	Tim Davies					
Clear Roadway/Skew	22 /					Dept. Review Date	25-Jan-2013					
AADT/Year	50,000 / 2007 (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)		In Advance (Y/N)		Lane	SB	On Bridge (m)	5.1	In Advance (Y/N)	No
Remarks	N/B posting is on 73907 E											
Required Load Posting (t)	Single				Semi				Truck Train			
Posted Loading (t)	Single		30.0		Semi		47.0		Truck Train		63.0	
Posted:	Lane	EB	At Junction (Y/N)		In Advance (Y/N)			At Bridge (Y/N)				
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)		No	At Bridge (Y/N)		Yes		
Remarks												
Hazard Marker At Bridge (Y/N)	No											
Remarks												
Other Sign Types	ROUTE, 50KM/HR, 50KM/HR RAMP											
Utilities (Located at)												
Utility Attachments	GAS UTILITIES-GAS LINE; POWER UTILITIES-POWER LINE											
Telephone	In area.					Gas	At South East.					
Power	6W to East.					Municipal	Manhole @ West approach & East.					
Others	Light standards.					Problem (Y/N)	No					
Remarks	Underside deck lighting.											
Approach Road												
				Last	Now	Explanation of Condition						
Horizontal Alignment				5	5	Ramps & controlled intersections East & West B2126.						
Vertical Alignment				5	5	Bridge on curve.						
Roadway Width (m)	22.000											
Approach Bump				6	6							
Guardrail (Y/N)	Yes					@ NW - 200mmx150mm HSS on round & I-beam posts.						
Guardrail				4	3	Continuous concrete parapets @ 3 other corners.						
Length (m)	82.000					Spalled at NE and SE approach parapets. All approach parapets are offset- 170mm at SW. 120 at SE, against traffic.						
Current Standard (Y/N)	Yes											
Termination Type	END OF HSS											
Drainage				6	7							
Approach Road General Rating				5	5							

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : CV, 2 Spans, Lengths(m): 46.3-49.1, A-Ident Number:)						
Special Features						
Special Feature			6	Overhead sign bridge over West span #191.		
(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			7	7		
(Material Type : POLYMER MODIFIED ACP)						
(Thickness(mm) : 50)						
Deck Top			N	N	Paved over.	
Deck Rideability			7	7		
Deck Joints			4	4	Cover plates @ parapets are missing bolts- 2 at NE and SE. Shallow spalls at East joint paring lip, otherwise joints rate 7.	
Temperature (deg. C)		-11				
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
90		E abut				
85		W abut				
Deck Drainage			6	6		
Drains Clogged (Y/N)		No				
Curbs/Median			5	3	Recently patched. Spalled areas at exterior bases over traffic at NE and several other spalled areas.	
(Curb Type : JERSEY/F SHAPE)						
Scaling (Percent Area)		5				
Bridge Rail			X	3	Not attached to parapet at NE.	
(Type : PLASTIC BRIDGE RAIL NON-STANDARD RAIL)						
Bridge Rail Posts			X	3		
(Type :)						
Bridge Rail/Posts Coating			X	X		
(Type :)						
Sidewalk			4	4	Retro Drain @ sidewalk. Sidewalk parapet is spalled at isolated locations.	
Girders			X	X	Voided slab.	
Diaphragms/Cross Frame			X	X		
Bearings			N	N	Recessed & unable to see because of expanded metal. Integral @ pier.	
Temperature (deg. C)		-11				
(Expansion Type : POT BEARING)						
(Fixed Type :)						
Coating Adequate (Y/N)						
Functioning (Y/N)		Yes				
Deck Underside			3	3	Corrosion @ deck exterior @ South & scaling over N/B and S/B lanes. Some cracks and efflorescence @ East span. Main deck U/S rates 7. Cracking at underside parapet at East span at North over shoulder.	
Stains (Percent Area)		2				

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CV, 2 Spans, Lengths(m): 46.3-49.1, A-Ident Number:)				
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		3	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats		7	7	
Backwalls/Breastwalls		7	7	Vertical cracks.
Wingwalls		7	7	
Piles		N	N	Buried.
Paint/Coating		5	4	Stained and peeling at SW and SE.
Abutment Stability		8	8	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-COLUMN)				Integral.
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Pier Shaft/Piles		7	7	Map cracking.
Nose Plate		X	X	
Paint/Coating		6	6	
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	Curves both sides.
Traffic Safety Features		5	5	Minor damage.
Type	GUARDRAIL			
Slope Protection		6	5	minor heave at East. Cracked but sealed.
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Repair loose rail at NE.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2013	Patch and seal parapets approximately 30m2. Seal parapets at gutterline.					
PATCH DECK	2013	Patch south deck exterior under side - is over N/B & S/B lanes of Hwy 2 and underside of parapet at East span at North -is over shoulder.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Install bolts @ parapet cover plates.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Repair and reset approach barriers.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	52.0/52.0	Est. Repl. Yr	2045	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	09-Oct-2014		Previous Inspection Date	12-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							