

Bridge Inspection									
Bridge File Number	78880 S-2 Bridge				Form Type	SG			
Year Built/Year Supstr	1978/1978				Lot No.	2			
Bridge or Town Name	CALGARY				Inspector Name	Garry Roberts			
Located Over	BOW RIVER, 2.13, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	2:15 L1 27.436				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	22-Jan-2013			
Legal Land Location	SW SEC 1 TWP 24 RGE 1 W5M				Data Entry By	Lauren Korte			
Longitude, Latitude	-114:01:14, 51:00:31				Data Entry Date	06-Feb-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Tom Carey			
Contract Main. Area	DEERFOOT/STONE Y				Review Date	29-Jan-2013			
Clear Roadway/Skew	14.3 /				Dept. Reviewer Name	Tim Davies			
AADT/Year	120,330 / 2011 (A)				Dept. Review Date	21-Feb-2013			
Road Classification	RFD-616.6-130				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:	HS25						----> Primary Span		

Posting Information										
Required Load Posting (t)	Single				Semi		Truck Train			
Posted Loading (t)	Single				Semi		Truck Train			
Posted:	Lane	NB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)			
Posted:	Lane	SB	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	Not required.									
Other Sign Types	Bump tab @ SW, surface sensor, River ID, Bridge ices.									

Utilities (Located at)									
Utility Attachments	POWER UTILITIES-POWER LINE								
Telephone	In area.				Gas				
Power	Multiple wires @ SE.				Municipal		Sewage outlet @ SW.		
Others	Light standards.				Problem (Y/N)		No		
Remarks	Conduits on abuts and piers.								

Approach Road									
		Last	Now	Explanation of Condition					
Horizontal Alignment		5	5	Curves-both ends. Grade up to North. Bridge on double curve. B3117B					
Vertical Alignment		6	6						
Roadway Width (m)		15.000		Parapets.					
Approach Bump		5	6						
Guardrail (Y/N)		Yes							
Guardrail		5	5						
Length (m)		60.000							
Current Standard (Y/N)		Yes							
Termination Type		TURNDOWN							
Drainage		6	6						
Approach Road General Rating		5	5						

Superstructure							
Bridge Component		Last	Now	Explanation of Condition			
(Primary Span : WG, 5 Spans, Lengths(m): 30-51.5-61-51.5-30, 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	20.0	0.0	0.0	0.0			
Wearing Surface			8	8	RWIS sensor at inside lane of Sp. 2. Viewed from 4 corners due to high traffic volumes. No visible problems.		
(Material Type : CONCRETE)							
(Thickness(mm) : 50)							
Deck Top			N	N			
Deck Rideability			8	8			
Deck Joints			5	4	All finger welds and joint spalls repaired April 20, 2011. Viewed from 4 corners. Inspect and measure during full closure of Deerfoot in Spring 2013. Backwall drain troughs are detached at A1-NW and most of A2- leak onto bearings.		
Temperature (deg. C)		-6					
(Expansion Type :)							
(Fixed Type : FINGER PLATES)							
Gap Size (mm)		Gap Location					
80		N abut					
70		S abut					
Deck Drainage			4	3	Neoprene backwall drain at NW and majority of East abut corner is detached and leaking onto SW bearing at A1 and SE at A2.		
Drains Clogged (Y/N)		No					
Curbs/Median			7	7	Viewed from 4 corners. No visible spalling. 20% snow/ice covered.		
(Curb Type : JERSEY/F SHAPE)							
Scaling (Percent Area)		0					
Bridge Rail			X	X			
(Type :)							
Bridge Rail Posts			X	X			
(Type :)							
Bridge Rail/Posts Coating			X	X			
(Type :)							
Sidewalk			X	X			
Girder/Beam							
Cover Plate			X	X	Center spans viewed with binoculars . Catwalks at exterior bays.		
Flange			7	7			
Web			7	7			
Stiffeners			7	7			
Splice			6	6			
Weld			6	6			
Diaphragms/Cross Frame			7	7			

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : WG, 5 Spans, Lengths(m): 30-51.5-61-51.5-30, A-Ident Number:)					
Paint Condition		X	X	Scaling at bottom flange and bottom of web. Weathering steel.	
(Colour Description :)					
(Colour Code :)					
Touchup Required (Y/N)	No				
Bearings		5	5	South Abut West bearing . Stainless steel distorted and teflon guides displaced - still functional. 50% corrosion @ NW bearing from backwall drainage.	
Temperature (deg. C)	-6				
(Expansion Type :)					
(Fixed Type : POT BEARING)					
Coating Adequate (Y/N)	No				
Functioning (Y/N)	Yes				
Deck Underside		5	5	Corrosion & efflorescence @ deck exterior @ parapet joints. Full depth forms left in place. Isolated cracks with efflorescence. Corrosion & spall @ spans 1&2.	
Stains (Percent Area)	1				
Span Alignment Problems					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
Superstructure General Rating		5	5		
Substructure					
Bridge Component		Last	Now	Explanation of Condition	
Abutments					
Bearing Seats/Caps		7	7		
(Type : CONCRETE)					
Backwalls/Breastwalls		7	7		
Wingwalls		6	6		
Piles		N	N	Buried.	
Paint/Coating		5	5	Graffiti covered.	
Abutment Stability		8	8		
Scour/Erosion		7	7		
Piers/Bents					
(Type : PIER-SOLID)					
Bearing Seats/Caps		7	7		
(Type : CONCRETE)					
(Total Number of Bearing Piles : 0:0:0:0)					
Pier Shaft/Piles		7	7		
Bracing/Struts/Sheathing		X	X		
Nose Plate		X	X		
Paint/Coating		6	5	Graffiti covered at P1 and P4.	
(Colour Description :)					
(Colour Code :)					
Pier Stability		7	7		
Scour		N	N	Too deep at piers 2 and 3.	
Debris (Y/N)	No				
Substructure General Rating		7	7		

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		5	6	Cut bank at toe at South.
HWM (m below Top of Curb)				No visible HWM.
Drift (Y/N)	No			
Slope Protection		6	6	Rock @ headslope. Natural @ toe.
(Type : RIP RAP; RIP RAP)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	6	

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							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS	2013	Blast and recoat NW and SE abut bearing.					
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Repair NW backwall through drain 1.5m or replace with new one. Replace East abut trough.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	54.4/56.1	Est. Repl. Yr	2056	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	22-Oct-2014		Previous Inspection Date	19-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							