

Bridge Inspection									
Bridge File Number	08584 -1 Bridge				Form Type	PCS			
Year Built/Year Supstr	1968/1968				Lot No.	1			
Bridge or Town Name	DRUMHELLER				Inspector Name	Owen Salava			
Located Over	MICHICHI CREEK, 3.35, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	838:02 C1 0.312				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	11-May-2011			
Legal Land Location	NW SEC 11 TWP 29 RGE 20 W4M				Data Entry By	Marcia Chavez			
Longitude, Latitude	-112:43:00, 51:28:17				Data Entry Date	19-May-2011			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien			
Contract Main. Area	CMA21				Review Date	17-May-2011			
Clear Roadway/Skew	8.2 /				Dept. Reviewer Name	Chris Black			
AADT/Year	290 / 2010 (A)				Dept. Review Date	01-Jun-2011			
Road Classification					Follow-Up By				
Detour Length (km)									
Allowable Load (t):	Single	CS1 30 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 70 GIRDER	----> On Critical Spans ---->Critical Member		
Design Loading:	HS20						----> Primary Span		
Posting Information									
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									
Hazard Marker At Bridge (Y/N)	Yes								
Remarks	Flashing yellow hazard light @ SW & NE corners.								
Other Sign Types									
Utilities (Located at)									
Utility Attachments									
Telephone	South ditch.				Gas	Crosses road @ East abutment.			
Power	8 wires 11m North.				Municipal				
Others	Street lights.				Problem (Y/N)	Yes			
Remarks	Telus conduit, disconnecting NW.								
Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	On North Dinosaur Trail 0.31km West of Hwy 9. Many approaches near bridge.				
Vertical Alignment			8	8					
Roadway Width (m)	13.500				Minor rutting at NE.				
Approach Bump			5	5					
Guardrail (Y/N)	Yes				None West, 72m of jersey barrier @ SW approach protects pedestrian walkway. Terminal ends not continuous with bridgerail. Not thrie beam.				
Guardrail			5	5					
Length (m)	15.000								
Current Standard (Y/N)	No								
Termination Type	Standard ends								
Drainage			4	4	Storm sewer outlet. Minor erosion @ NW headslope from road drainage.				
Approach Road General Rating			6	6					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : HC, 3 Spans, Lengths(m): 10.1-10.1-10.1, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now	0.0	0.0	0.0	0.0	
Wearing Surface			6	6	Asphalt wearing surface. Some longitudinal cracks & transverse cracks @ piers. All sealed.
(Material Type : ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	ACP covered.
Deck Rideability			7	7	
Deck Joints			N	N	ACP covered.
Bump (Y/N)		No			
Deck Drainage			6	6	
Drains Clogged (Y/N)		No			
Curbs/Median			3	3	70% of curbs are scaling. Span 2 North curb face is delaminated for 60% length.
(Curb Type : Standard)					
Scaling (Percent Area)		70			
Bridge Rail			4	4	Single layer. S1SW has 1 missing splice bolt plus SE curb has improper splice & 3 missing splice bolts. SW post has no anchor bolt nuts. S1 SW curb has 8 missing A/B nuts. Moderate corrosion on pedestrian rail.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			3	3	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			4	4	
(Type : GALVANIZED)					
Sidewalk			6	6	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	25/36 have wide longitudinal cracking and/or spalling in both legs in AZ.
Last				25	
Now	0	0	0	25	
Girders			3	3	
Last Complete Inspection Date		11-May-2011			G4, span 1 hairline shear crack @ ends. 6 lift pockets not grouted at North curbs.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		10			
Lift or Connector Pocket Grouted (Y/N)		No			
(Number Of Girders : 36)					
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						
(Extended Backwall Piles (Y/N) : N)				E abut has tight access.		
(Extended Backwall Piles Spacing(mm) :)						
(Total Number of Caps/Corbels : 3:3)				Caps and subcaps cored May 13, 2010. A1 subcap is rotted with voids and approximately 15mm bulging. A1 top caps cored, beginning rot.		
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last				1		
Now	0	0	0	1		
Bearing Seats/Caps/Corbels				3	3	
(Type : TREATED TIMBER)						
(Depth(mm) : 350)						
(Width(mm) : 300)						
Backwalls/Breastwalls			N	N		
Greatest Height (m)		1.10				
Wingwalls			X	X		
(Total Number of Bearing Piles : 9:9)				Piles cored May 13, 2010. 10 of 18 piles are buried. Top 200-300 of piles visible on others.		
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	10					
Now	10	0	0	0		
Piles				5	5	
Paint/Coating				X	X	
Abutment Stability				5	5	
Scour/Erosion				4	4	
Minor erosion @ NW hslp.						
Piers/Bents						
(Type : PIER-COLUMN)						
(Total Number of Caps/Corbels : 1:1)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last				2		
Now	0	0	0	2		
Bearing Seats/Caps/Corbels				3	3	
(Type : CONCRETE)						
(Depth(mm) : 850)						
(Width(mm) : 460)						
(Total Number of Bearing Piles : 6:6)				300mm steel pipe piles.		
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Pier Shaft/Piles				7	7	
Greatest Height (m)		3.80				
Bracing/Struts/Sheathing				X	X	
Nose Plate				X	X	
Paint/Coating				4	4	
Paint gone from bottom of piles. Blue.						
(Colour Description :)						
(Colour Code :)						

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		7	7	
Scour		4	4	Minor scour at NE.
Debris (Y/N)	No			
Substructure General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : N)				
(D/S Direction : S)				
Alignment		6	6	
Bank Stability		5	5	Cut banks U/S & D/S and under bridge.
HWM (m below Top of Curb)				No visible high water.
Drift (Y/N)	No			
Slope Protection (Type : RIP RAP; RIP RAP)		4	4	Class II @ West about 1/2 way up. Erosion @ both headslopes.
Guidebank/Spurs		6	6	Retaining wall along East bank.
Adequacy of Opening		6	6	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2011	Install 8 bridge post anchors, nuts & anchor assembly at SW post.					
SEAL CURBS	2011	Lift pocket 0.1m(3) NH grout x 6. Patch curb spalls, approx 3m2.					
PATCH DECK							
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS	2011	Excavate, core piles at E abut.					
REPAIR/REPLACE TIMBER CAPS	2011	All caps/subcaps.					
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP	2011	20 cu m Class I @ East @ 5m(3) @ West.					
REMOVE DRIFT ACCUMULATION							
INSTALL STRUTS							
OTHER ACTION	2011	Repair splice at span 1 SE curb, add 3 splice bolts at SE & 1 at SW curbs.					
OTHER ACTION	2011	Patch pier caps 0.2m(3) OH-V.					
OTHER ACTION	2011	Advise Telus of broken conduit at NW.					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	43.8/43.8	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Consider replacing all timber caps with new TT with ERL of 15yrs. See NTF of 13May2010. Move S3G4 under sidewalk. Girders rated 3, no action required.		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	11-Aug-2014		Previous Inspection Date	13-May-2010			
Inspection Cycle (Default) (months)	39						
Comment							