

Bridge Inspection													
Bridge File Number	76407 -1 Bridge					Form Type	PSR						
Year Built/Year Supstr	1974/1974					Lot No.	2						
Bridge or Town Name	BOWDEN					Inspector Name	Owen Salava						
Located Over	CPR					Inspector Class	BR CLS A						
Located On	587:02 C1 43.101					Assistant Name							
Water Body Cl./Year						Assistant Class							
Navigabil. Cl./Year						Inspection Date	25-Oct-2011						
Legal Land Location	NW SEC 23 TWP 34 RGE 1 W5M					Data Entry By	Marcia Chavez						
Longitude, Latitude	-114:02:24, 51:56:22					Data Entry Date	30-Nov-2011						
Road Authority	Alberta Transportation (AIT)					Reviewer Name	John O'Brien						
Contract Main. Area	CMA19					Review Date	14-Nov-2011						
Clear Roadway/Skew	9.1 / 21 deg. (RHF)					Dept. Reviewer Name	Andrew Smikles						
AADT/Year	1,230 / 2010 (A)					Dept. Review Date	02-Dec-2011						
Road Classification	RCU-209-110					Follow-Up By							
Detour Length (km)	6												
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 Vert. Clearance Posting (m)													
Posted Vertical Clearance (Y/N)		No											
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)		
Remarks		Not required.											
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	At Bridge (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	At Bridge (Y/N)	No	At Bridge (Y/N)	No	
Remarks		Not required.											
Hazard Marker At Bridge (Y/N)		No											
Remarks		Not required.											
Other Sign Types													
Utilities (Located at)													
Utility Attachments													
Telephone	South r/w.					Gas							
Power	3 wire 10m East crossing hwy.					Municipal							
Others						Problem (Y/N)	No						
Remarks													
Approach Road													
				Last	Now	Explanation of Condition							
Horizontal Alignment				7	7	No passing.							
Vertical Alignment				7	7								
Roadway Width (m)		9.000				Local ACP failure in WBL East approach (photo). Typical wide transverse cracking - both ends.							
Approach Bump				4	4								
Guardrail (Y/N)		Yes				Missing transition rail bolts at NW & SE corners (photo). Lowest height @ NW is 450mm - OK to leave as is for now.							
Guardrail				7	4								
Length (m)		99.000											
Current Standard (Y/N)		Yes											
Termination Type		TURNED DOWN											
Drainage				7	7								
Approach Road General Rating				7	7								

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : RD, 3 Spans, Lengths(m): 15.2-16.8-15.2, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	10	0	0	0	
Now	0.0	0.0	0.0	0.0	
Wearing Surface		5	5	(FRC overlay - various local scaling - photo. 27May2005). Chip seal delam along centreline (photo).	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N		
Deck Rideability		7	7		
Deck Joints		7	7		
Temperature (deg. C)	1				
(Expansion Type :)					
(Fixed Type :)					
Gap Size (mm)	Gap Location				
60	W. ABUT				
70	W. PIER				
72	E. PIER				
64	E. ABUT				
Deck Drainage		7	7	No deck drains.	
Drains Clogged (Y/N)					
Curbs/Median		4	4	Previously sealed - dirty. Spalled SE corner.	
(Curb Type : Standard)					
Scaling (Percent Area)	1				
Bridge Rail		8	8		
(Type : BRIDGE TUBE)					
Bridge Rail Posts		8	8		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		7	7		
(Type :)					
Sidewalk		X	X		
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Girders		4	4	Spall at end of girder NW corner - photo. S2 dirty from train exhaust.	
Cracking (Y/N)	Yes				
Spalling (Percent Area)	1				
(Number Of Girders : 24)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RD, 3 Spans, Lengths(m): 15.2-16.8-15.2, A-Ident Number:)				
Diaphragms/Cross Frame		X	X	
Bearings		8	8	
Temperature (deg. C)	1			
(Expansion Type : REINFORCED PAD BEARING)				
(Fixed Type : REINFORCED PAD BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	
Stains (Percent Area)	0			
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/Caps		8	8	
(Type : CONCRETE)				
Backwalls/Breastwalls		8	8	
Wingwalls		8	8	
Piles		N	N	
Paint/Coating		7	7	
Abutment Stability		8	8	
Scour/Erosion		8	8	
Piers/Bents				
(Type : PIER-COLUMN)				
Bearing Seats/Caps		8	8	Pipe 16" Have been painted.
(Type : CONCRETE)				
(Total Number of Bearing Piles : 6:6)				
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		4	4	Some peeling of paint/pitting of piles - photo. Some of the paint has been removed by vandals - graffiti.
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		8	8	
Debris (Y/N)	No			
Substructure General Rating		8	8	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	
Traffic Safety Features		X	X	
Type				
Slope Protection		6	6	W abut pulled away 150mm - 300mm deep. E abut pulled away 150mm - 300mm deep. Filled with asphalt - both sides.
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		7	7	
Grade Separation General Rating		6	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2012	Patch spalled SE curb corner.					
PATCH DECK	2015	Redo chipseal.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Patch spalled NW girder end.					
OTHER ACTION	2012	Patch local ACP failure @ East approach WBL & seal ACP cracks both ends.					
OTHER ACTION	2012	Install 4 bolts to connect SE & NW transition rail.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	65.5/64.9	Est. Repl. Yr	2038	Maint. Req'd. (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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	25-Jan-2015		Previous Inspection Date	07-Dec-2010			
Inspection Cycle (Default) (months)	39						
Comment							