

Bridge Inspection									
Bridge File Number	71352 -1 Bridge				Form Type	SG			
Year Built/Year Supstr	1986/1986				Lot No.	2			
Bridge or Town Name	ENTWISTLE				Inspector Name	Wade Nanninga			
Located Over	CNR				Inspector Class	BR CLS A			
Located On	16A:08 C1 13.442				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	10-Aug-2012			
Legal Land Location	SE SEC 20 TWP 53 RGE 7 W5M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-114:59:24, 53:35:28				Data Entry Date	21-Aug-2012			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA12				Review Date	21-Aug-2012			
Clear Roadway/Skew	14.7 / -13 deg. (LHF)				Dept. Reviewer Name	Brent Herrick			
AADT/Year	1,050 / 2011 (A)				Dept. Review Date	22-Aug-2012			
Road Classification	RAU-210-110				Follow-Up By				
Detour Length (km)	3								
Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member		
Design Loading:	MS300						----> Primary Span		

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)		No										
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)	No	Lane	WB	On Bridge (m)		In Advance (Y/N)	No
Remarks		Not required, railway crossing.										
Required Load Posting (t)		Single		Semi		Truck Train						
Posted Loading (t)		Single		Semi		Truck Train						
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
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)		Yes										
Remarks		No hazard marker @ SW corner, not required.										
Other Sign Types		Information, Warning.										

Utilities (Located at)									
Utility Attachments									
Telephone					Gas	Crosses highway 100m North.			
Power	Street lights.				Municipal				
Others	CN communication cable West & East r/w.				Problem (Y/N)	No			
Remarks									

Approach Road									
		Last		Now		Explanation of Condition			
Horizontal Alignment		6		6		100m north of Hwy 16 & 22 interchange on/off ramps, curve to North.			
Vertical Alignment		6		6		On downhill grade to North, crest curve to South, limited sight distance. Bridge widens to South.			
Roadway Width (m)		11.000				Bump on North side of bridge both lanes.			
Approach Bump		5		5					
Guardrail (Y/N)		Yes				Some dented sections - minor. Insufficient posts @ bridge.			
Guardrail		6		6		Not thrie beam transition.			
Length (m)		92.000							
Current Standard (Y/N)		No							
Termination Type		Turned Down							
Drainage		4		4		SE corner drains down along wingwall. 100 wide x 100 deep erosion gully along wall. Appears to be stable.			
Approach Road General Rating		6		6					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : WG, 1 Spans, Lengths(m): 22, A-Ident Number: A1053-01)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last						
Now						
Wearing Surface			8	7		
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 50)						
Deck Top			N	N		
Deck Rideability			7	7		
Deck Joints			3	3	North joint plates rattle with traffic, loose. 9 broken bolts North deck joint SBL. 3rd plate welded to 2nd and 4th plates - photo.	
Temperature (deg. C)		25				
(Expansion Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
38		North abutment				
55		South abutment				
Deck Drainage			7	7	On grade. Drains to North. No deck drains.	
Drains Clogged (Y/N)						
Curbs/Median			6	6	Small chip @ East & West @ north joint in curb. Recently sealed.	
(Curb Type : Standard)						
Scaling (Percent Area)		0				
Bridge Rail			8	8	30% of A/B insufficient thread.	
(Type : GALVANIZED STEEL BRIDGE TUBE)						
Bridge Rail Posts			4	4		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating			7	7		
(Type : GALVANIZED)						
Sidewalk			X	X		
Girder/Beam						
Cover Plate			X	X	Tops of girders jamed @ both backwalls.	
Flange			8	8		
Web			8	8		
Stiffeners			X	X		
Splice			X	X		
Weld			8	8		
Diaphragms/Cross Frame			7	7		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 1 Spans, Lengths(m): 22, A-Ident Number: A1053-01)				
Paint Condition		4	4	Ends of girders are scaling. Worst area is bottom flange over bearing. Weathering steel.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		3	3	Masonry plate at North end G2 pushed back 21mm worst case, others similar. Four anchor bolts are sheared off, others are bent. North side of shoe plate is flush or past with back of masonry plate - photo. Expansion @ S Fixed @ N
Temperature (deg. C)	25			
(Expansion Type : REINFORCED PAD BEARING)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	No			
Deck Underside		7	7	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			Typ skew pressures - AB @ N sheared off.
Horizontal (Y/N)	Yes			
Superstructure General Rating		3	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	
Wingwalls		7	7	
Piles		N	N	
Paint/Coating		6	6	Alligator cracking on the coating.
Abutment Stability		4	4	Reinforced earth retaining walls appear to be leaning in slightly.- 30mm
Scour/Erosion		X	7	
Piers/Bents				
(Type :)				
Bearing Seats/Caps		X	X	
(Type :)				
(Total Number of Bearing Piles :)				
Pier Shaft/Piles		X	X	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		X	X	
Scour		X	X	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	6	
Traffic Safety Features		X	X	
Type	None			
Slope Protection		X	X	
(Type :)				
Bank Stability		7	7	
Drainage		7	7	
Grade Separation General Rating		7	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	2012	Repair loose cover plates.					
RESET/ PAINT BEARINGS	2012	Reset bearings & replace sheared A/B's.					
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
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) (%)	38.9/38.9	Sufficiency Rating (Last/Now) (%)	56.7/55.4	Est. Repl. Yr	2043	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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	10-May-2014		Previous Inspection Date	05-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							