

Bridge Inspection											
Bridge File Number	78020 -1 Bridge					Form Type	PSR				
Year Built/Year Supstr	1986/1986					Lot No.	2				
Bridge or Town Name	ENTWISTLE					Inspector Name	Wade Nanninga				
Located Over	16:12 L1 0.074;16:12 R1 0.049;16:12 C1-1OR 0.023					Inspector Class	BR CLS A				
Located On	22:30 R1 55.387;22:30 L1 55.385					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	-114:59:16, 53:35:21					Data Entry Date	22-Aug-2012				
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux				
Contract Main. Area	CMA12					Review Date	21-Aug-2012				
Clear Roadway/Skew	17 / -42 deg. (LHF)					Dept. Reviewer Name	Brent Herrick				
AADT/Year	3,380 / 2011 (A)					Dept. Review Date	30-Aug-2012				
Road Classification	RAU-210-110					Follow-Up By					
Detour Length (km)	1										
Allowable Load (t):	Single	CS1 28			Semi		CS2 49		Train	CS3 62	
Design Loading:	MS300									----> Primary Span	

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 16 L1 5.5m, 16 R1 5.5m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	EB	On Bridge (m)	5.8	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.6	In Advance (Y/N)	Yes
Remarks		6.1m actual measured clearance on service road. 5.6m on service road. Posted clearance signs should not exceed "required" clearance.										

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		NW SE corner only. Not to standard height/location.					
Other Sign Types		Information, Warning, Traffic Control.					

Utilities (Located at)							
Utility Attachments							
Telephone				Gas			
Power	Street lights.			Municipal			
Others				Problem (Y/N)	No		
Remarks							

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	On/off ramps. Crest curve with limited sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	11.000			Insufficient posts, not thrie beam transition.
Approach Bump		7	7	
Guardrail (Y/N)	Yes			
Guardrail		7	7	
Length (m)	99.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		6	4	Sides spalled on SE down drain. Void forming (200mm) @ SE.
Approach Road General Rating		6	6	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PB, 3 Spans, Lengths(m): 38-38-38, 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					
Wearing Surface			6	6	ACP cracks sealed.
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 90)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			4	4	Joints allow runoff over top of trough @ NW & SE corners deteriorating wingwalls. Fingers aren't centered from skew pressure. Minor deterioration along paving lip. Fingers clogged with chipseal.
Temperature (deg. C)		24			
(Expansion Type : FINGER PLATES)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
90		N. abut			
110		S. abut			
Deck Drainage			4	4	Trough spillage deteriorating NW and SE wingwalls. On a crest curve. (Birdbath @ S2 gutter, West side near North abutment. 06/Dec/2008) Trough has scaling rust at abutments.
Drains Clogged (Y/N)		No			
Curbs/Median			5	5	Plow scrapes. Some transverse, longitudinal cracking on east curb, one spot spalled. Transverse wide cracking intermittent on median. Curbs, median covered in dirt. Median curb is spalled at a few locations.
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			8	8	Missing cap @ NW, 2nd post. Several posts with 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 Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Girders			5	5	Slight high load damage WBL, not serious. Minor high load damage above L.R. all girders.
Cracking (Y/N)		No			
Spalling (Percent Area)		0			
(Number Of Girders : 9)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PB, 3 Spans, Lengths(m): 38-38-38, A-Ident Number:)				
Diaphragms/Cross Frame		6	6	Diagonal medium cracks, probably because of skew.
Bearings		7	7	Difficult to view due to height of abutments.
Temperature (deg. C)	24			
(Expansion Type : POT BEARING)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	Narrow cracks between deck and end diaphragm with leaching stains.
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			Normal twist due to skew pressures.
Horizontal (Y/N)	Yes			
Superstructure General Rating		5	5	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	Hairline to narrow vertical cracks.
(Type : CONCRETE)				
Backwalls/Breastwalls		7	5	Breastwall visible only. Med crack with efflorescence staining @ NW.
Wingwalls		5	5	Wingwalls are cracking. NW wing is staining from water coming through the joint. NE wingwall bows outward. NW wing bows inward. MSE walls.
Piles		N	N	
Paint/Coating		5	5	Peeling @ wingwalls.
Abutment Stability		7	7	
Scour/Erosion		X	4	Void under NW SW panels.
Piers/Bents				
(Type : PIER-SOLID)				Both caps have narrow diagonal cracking from center bearing.
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		5	5	Peeling South pier. Grey.
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		6	6	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	8	
Traffic Safety Features		6	4	Lights attached to pier caps. 2 missing covers. Minor dents in flexbeams WBL, still functional.
Type	Guardrail/Lights			
Slope Protection		4	4	Void under NW & SE panels. Panels heaved due to abutment drainage. Typical NW & SE.
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		7	7	
Grade Separation General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Replace missing post top cover.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
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	Review if posted VC should be revised to match "required" VC.					
OTHER ACTION	2012	Replace light covers.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	61.1/61.1	Sufficiency Rating (Last/Now) (%)	58.8/58.6	Est. Repl. Yr	2040	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							