

Bridge Inspection									
Bridge File Number	13832 -1 Bridge				Form Type	SG PCS			
Year Built/Year Supstr	1961/1961				Lot No.	2			
Bridge or Town Name	COLINTON				Inspector Name	Randy Bredo			
Located Over	TAWATINAW RIVER, 8.11.68, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	663:04 C1 5.124				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	29-Jun-2012			
Legal Land Location	SW SEC 15 TWP 65 RGE 22 W4M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-113:15:24, 54:37:11				Data Entry Date	09-Oct-2012			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA10				Review Date	08-Oct-2012			
Clear Roadway/Skew	9 / 0 deg.				Dept. Reviewer Name	Brent Herrick			
AADT/Year	720 / 2011 (A)				Dept. Review Date	10-Oct-2012			
Road Classification	RCU-209-110				Follow-Up By				
Detour Length (km)	14								
Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	----> 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	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Posted:	Lane	NB	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	Curve signs.								
Utilities (Located at)									
Utility Attachments									
Telephone	10m West r/w.				Gas				
Power	Power crosses road 200m South of bridge.				Municipal				
Others	Trans. benchmark @ SW				Problem (Y/N)	No			
Remarks									
Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			4	4	Limited sight distance. 50 km posted speed.				
Vertical Alignment			5	6					
Roadway Width (m)	9.000								
Approach Bump			7	7					
Guardrail (Y/N)	Yes				1 section NE and 1 section SW have tears in bottom half from plow. Thrie beam transition.				
Guardrail			7	4					
Length (m)	18.000								
Current Standard (Y/N)	Yes								
Termination Type	Turned Down								
Drainage			8	7					
Approach Road General Rating			4	4					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : RB, 3 Spans, Lengths(m): 9.4-24.4-9.4, A-Ident Number: A0999-74)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last						
Now						
Wearing Surface			7	7		
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 150)						
Deck Top			N	N		
Deck Rideability			7	7		
Deck Joints			7	7		
Temperature (deg. C)		25				
(Expansion Type : GLAND (SILICON SEAL))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
61			Pier #1 - South			
60			Pier #2 - North			
Deck Drainage			7	5	North and South deck drains drip onto headslope eroding holes, 300mm deep.	
Drains Clogged (Y/N)		No				
Curbs/Median			7	7		
(Curb Type : Standard)						
Scaling (Percent Area)		1				
Bridge Rail			7	4	PL 1 railing. 2 loose splice bolts between P12E & P13F. Minor rust @ washers. Dirty	
(Type : GALVANIZED STEEL BRIDGE TUBE)						
Bridge Rail Posts			7	7		
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating			7	7		
(Type : GALVANIZED)						
Sidewalk			X	X		
Girder/Beam						
Cover Plate			3	3	G1 North end has 2 terminated stitch welds on abandoned coverplate. G2 South has 18mm live crack. G3 South has 10mm live crack. G3 cracked weld @ end of cover plate. G2 kinked @ South end due to butt weld; no concern. G4 North has terminated cracked stitch weld. G5 South has 55mm live crack in end of plate 1.	
Flange			7	7		
Web			7	7		
Stiffeners			X	X		
Splice			X	X		
Weld			3	3		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : RB, 3 Spans, Lengths(m): 9.4-24.4-9.4, A-Ident Number: A0999-74)					
Diaphragms/Cross Frame		3	3	G5-1 has 2 terminated cracked stitch welds and 2 non terminated cracked stitch welds, 15mm & 34mm. G5D2 has 1 cracked stitch weld that has terminated.	
Paint Condition		6	6	Chipped top coat bottom flanges, primer intact. Green.	
(Colour Description : GREEN)					
(Colour Code : 14090)					
Touchup Required (Y/N)	No				
Bearings		4	4	Girder 2 North end missing anchor bolt. Bearings are jammed. Bearing area rusting.	
Temperature (deg. C)	10				
(Expansion Type : SLIDING PLATE)					
(Fixed Type : PINNED BEARING)					
Coating Adequate (Y/N)	No				
Functioning (Y/N)	No				
Deck Underside		4	4	Spall @ G3G4 bay 1 and 3 & G1G2 bay 1, exposed rebar. Transverse cracks @ 3.0m o/c, 5% scaling.	
Stains (Percent Area)	1				
Span Alignment Problems					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
Superstructure General Rating		3	3		
Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Secondary Span : SCC)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now					
Wearing Surface		7	7	See main span comments.	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 150)					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N		
Deck Rideability		7	7		
Deck Joints		7	7	Buffer angles.	
Bump (Y/N)	No				
Deck Drainage		X	X	No drains, flow to South.	
Drains Clogged (Y/N)	No				
Curbs/Median		7	7		
(Curb Type : Standard)					
Scaling (Percent Area)	1				

Superstructure							
Bridge Component		Last	Now	Explanation of Condition			
(Secondary Span : SCC)							
Bridge Rail		7	7				
(Type : GALVANIZED STEEL BRIDGE TUBE)							
Bridge Rail Posts		7	7				
(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	6	Longitudinal hair line cracks @ all soffits, 200mm efflorescence. No staining. Narrow longitudinal cracks along bottom of girders. All girders North & South spans. Narrow cracks along exterior fascia between CIP and prestressed girder on both West fascias. Coating peeling @ SE.			
Last Complete Inspection Date		29-Jun-2012					
Cracking (Y/N)		Yes					
Spalling (Percent Area)		0					
Lift or Connector Pocket Grouted (Y/N)		Yes					
(Number Of Girders : 16)							
Span Alignment Problems							
Vertical (Y/N)		No					
Horizontal (Y/N)		No					
Superstructure General Rating		5	6				
Substructure							
Bridge Component		Last	Now	Explanation of Condition			
Abutments							
(Extended Backwall Piles (Y/N) : N)							
(Extended Backwall Piles Spacing(mm) :)							
(Total Number of Caps/Corbels : 1:1)							
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)	Abuts only		
Last							
Now							
Bearing Seats/Caps/Corbels		8	8				
(Type : CONCRETE)							
(Depth(mm) : 800)							
(Width(mm) : 600)							
Backwalls/Breastwalls		8	8				
Greatest Height (m)		1.50					
Wingwalls		8	8				
(Total Number of Bearing Piles : 0:0)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	100	0	0	0			
Now	100						
Piles		N	N				
Paint/Coating		8	8				
Abutment Stability		8	8				

Substructure						
Bridge Component				Last	Now	Explanation of Condition
Scour/Erosion				7	7	
Piers/Bents						
(Type : PIER-SOLID)						
(Total Number of Caps/Corbels : 1:1)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)	Small spall on pier 1 cap - 600 x 300 under S1G4 (photo).	
Last						
Now						
Bearing Seats/Caps/Corbels				8	4	
(Type : CONCRETE)						
(Depth(mm) :)						
(Width(mm) :)						
(Total Number of Bearing Piles : 0:0)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)	Narrow map cracking with 10% efflorescence.	
Last	100	0	0	0		
Now						
Pier Shaft/Piles				7	7	
Bracing/Struts/Sheathing				X	X	
Nose Plate				X	X	
Paint/Coating				6	6	Grey. Minor flaking/cracking.
(Colour Description :)						
(Colour Code :)						
Pier Stability				8	8	
Scour				5	6	
Debris (Y/N)	No					
Substructure General Rating				7	4	
Structure Usage						
				Last	Now	Explanation of Condition
Channel						
(U/S Direction : E)						
(D/S Direction : W)						
Alignment				5	5	Meandering stream.
Bank Stability				5	5	
HWM (m below Top of Curb)						HWM not visible.
Drift (Y/N)	No					
Slope Protection				6	6	Bank has slid North side at East corner - (photo).
(Type : NONE; NONE)						
Guidebank/Spurs				X	X	
Adequacy of Opening				7	7	
(Fish Compensation Measure 1 : NONE)						
(Fish Compensation Measure 2 : NONE)						
Channel General Rating				5	5	

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	2013	Seal all curb faces.					
PATCH DECK	2013	Repair u/s deck spalls at next rehab.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Remove old abandoned coverplate material from bottom flange,					
OTHER ACTION	2013	Grind out cracks G4PL1N, G4PL2H and G5PL1S					
OTHER ACTION	2013	Repair 5 cracked stitch welds on diaphragms.					
OTHER ACTION	2013	Patch side of pier under S1G4.					
Structural Condition Rating (Last/Now) (%)	55.6/38.9	Sufficiency Rating (Last/Now) (%)	56.5/46.6	Est. Repl. Yr	2045	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	Randy Bredo		Previous Assistant's Name				
Next Inspection Date	29-Sep-2015		Previous Inspection Date	29-Jul-2010			
Inspection Cycle (Default) (months)	39						
Comment							