

Bridge Inspection											
Bridge File Number	02145 -1 Bridge				Form Type	PCS					
Year Built/Year Supstr	1993/1993				Lot No.	2					
Bridge or Town Name	LEGAL				Inspector Name	Melanie Johnson					
Located Over	TRIBUTARY TO REDWATER RIVER, 6.63.13, WATERCRS-ST				Inspector Class	BR CLS B					
Located On	651:04 C1 3.746				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	05-Jul-2011					
Legal Land Location	SW SEC 25 TWP 57 RGE 25 W4M				Data Entry By	Theresa Lacusta					
Longitude, Latitude	-113:35:16, 53:56:57				Data Entry Date	20-Jul-2011					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Arnold Assenheimer					
Contract Main. Area	CMA09				Review Date	07-Jul-2011					
Clear Roadway/Skew	9.2 /				Dept. Reviewer Name	Brent Herrick					
AADT/Year	980 / 2010 (A)				Dept. Review Date	26-Jul-2011					
Road Classification	RCU-209-110				Follow-Up By						
Detour Length (km)	5										
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	CS750									----> 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	Not required.								
Hazard Marker At Bridge (Y/N)	Yes								
Remarks	Not standard height.								
Other Sign Types									

Utilities (Located at)									
Utility Attachments									
Telephone	7.5 m north c/l OH.				Gas				
Power	9 lines OH 7.5 m north c/l.				Municipal	Under bridge about 200 mm line.			
Others	Street lighting.				Problem (Y/N)	No			
Remarks									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			8	7	2 culverts drain into stream from west side (1-600 mm csp) (1-300 mm csp). In town of Legal, speed limit 50km/hr.  Wide longitudinal crack in SE approach roadway, sealed.				
Vertical Alignment			8	7					
Roadway Width (m)			9.800		Turn down guardrails on East end of bridge only.				
Approach Bump			8	7					
Guardrail (Y/N)			Yes						
Guardrail			7	7					
Length (m)			7.600						
Current Standard (Y/N)			No						
Termination Type			Turned Down						
Drainage			8	7					
<b>Approach Road General Rating</b>			<b>8</b>	<b>7</b>					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : <b>SC, 1 Spans, Lengths(m): 6, A-Ident Number: )</b>					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>					
<b>Now</b>					
Wearing Surface			X	X	
(Material Type : )					
(Thickness(mm) : )					
Lateral Connection Problem (Y/N)		No			
Deck Top			5	5	Edges of girders worn.
Deck Rideability			8	8	
Deck Joints			8	7	Buffer angles.
Bump (Y/N)		No			
Deck Drainage			8	7	Water drains to gutters located west of bridge.
Drains Clogged (Y/N)		No			
Curbs/Median			6	5	Damage at SE corner. 0.3x0.1x0.05m spall
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		2			
Bridge Rail			7	4	Missing one 2 nuts and one bolts.
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )					
Bridge Rail Posts			7	7	
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			7	7	
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	Sidewalk is a separate structure. Has been replaced. Not inspected.
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>					
<b>Now</b>					
Girders			7	7	
Last Complete Inspection Date					
Cracking (Y/N)		No			
Spalling (Percent Area)		0			
Lift or Connector Pocket Grouted (Y/N)					
(Number Of Girders : <b>9</b> )					
<b>Span Alignment Problems</b>					
Vertical (Y/N)		No			
Horizontal (Y/N)		No			
<b>Superstructure General Rating</b>			<b>7</b>	<b>7</b>	

Substructure								
Bridge Component		Last	Now	Explanation of Condition				
<b>Abutments</b>								
(Extended Backwall Piles (Y/N) : Y)				North end ext piles not full height of backwall, probably to accommodate old timber cap. H iron piles c/w HP caps, not anchored. Old timber abutment piles left in place.  (Streambed takes dip underneath bridge. Aug/21/04) Approx 1m ice.				
(Extended Backwall Piles Spacing(mm) : 1200)								
(Total Number of Caps/Corbels : 1:1)								
Bearing Seats/Caps/Corbels Detail Ratings								
	N (count)	1 (count)	2 (count)				3 (count)	
<b>Last</b>								
<b>Now</b>								
Bearing Seats/Caps/Corbels							5	5
(Type : STEEL)								
(Depth(mm) : 310)								
(Width(mm) : 310)								
Backwalls/Breastwalls				5	5	Both backwalls settling. Backwall planks leaning, struts installed.		
Greatest Height (m)		3.00						
Wingwalls				5	5	Wings are not anchored. SW is pulling away from pile		
<b>(Total Number of Bearing Piles : 7:7)</b>								
Piles Detail Ratings								
	N (count)	1 (count)	2 (count)	3 (count)		Several timber piles twisted or leaning. Timber piles are not carrying load.		
<b>Last</b>								
<b>Now</b>								
Piles				7	7			
Paint/Coating				4	4		Scaling rust.	
Abutment Stability				5	5			
Scour/Erosion				N	7			
<b>Piers/Bents</b>								
(Type : )								
(Total Number of Caps/Corbels : )								
Bearing Seats/Caps/Corbels Detail Ratings								
	N (count)	1 (count)	2 (count)	3 (count)				
<b>Last</b>								
<b>Now</b>								
Bearing Seats/Caps/Corbels				X	X			
(Type : )								
(Depth(mm) : )								
(Width(mm) : )								
<b>(Total Number of Bearing Piles : )</b>								
Piles Detail Ratings								
	N (count)	1 (count)	2 (count)	3 (count)				
<b>Last</b>								
<b>Now</b>								
Pier Shaft/Piles				X	X			
Greatest Height (m)								
Bracing/Struts/Sheathing				3	3	Struts are attached to old timber piles & not to steel piles. Missing one strut @ North end ext piles.		
Nose Plate				X	X			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Paint/Coating		X	X	
(Colour Description : )				
(Colour Code : )				
Pier Stability		X	X	
Scour		X	X	
Debris (Y/N)	Yes			Old piles left in place under bridge.
<b>Substructure General Rating</b>		<b>5</b>	<b>5</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : )				
(D/S Direction : )				
Alignment		7	7	
Bank Stability		5	5	Vertical banks U/S.
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	Yes			
Slope Protection		5	5	
(Type : <b>NATURAL</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>5</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2011	Install missing nut/bolts.					
SEAL CURBS							
PATCH DECK							
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS	2011	Replace missing strut.					
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL STRUTS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>66.7/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>64.9/64.8</b>	Est. Repl. Yr	2019	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	Dave Lam		Previous Assistant's Name	Bryce Clayton			
Next Inspection Date	05-Oct-2014		Previous Inspection Date	12-Mar-2008			
Inspection Cycle (Default) (months)	39						
Comment							