

Bridge Inspection									
Bridge File Number	75066 -1 Bridge				Form Type	PSR			
Year Built/Year Supstr	1980/1980				Lot No.				
Bridge or Town Name	LEDUC				Inspector Name	Wade Nanninga			
Located Over	2:32 L1 5.154;2:32 R1 5.172				Inspector Class	BR CLS A			
Located On	25108:02 L1 0.507;25108:02 R1 0.505				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	25-Apr-2013			
Legal Land Location	SW SEC 14 TWP 50 RGE 25 W4M				Data Entry By	Lisa Fairhurst			
Longitude, Latitude	-113:33:01, 53:18:31				Data Entry Date	03-May-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name				
Contract Main. Area	CMA11				Review Date				
Clear Roadway/Skew	18.9 /				Dept. Reviewer Name				
AADT/Year	1,000 / 2013 (E)				Dept. Review Date				
Road Classification	RAU-213.4-120				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:	MS230						----> Primary Span		

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 2 L1 5.4m, 2 R1 5.4m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)	5.4	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.5	In Advance (Y/N)	Yes
Remarks												
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)	No											
Remarks	Not required.											
Other Sign Types	Information, Warning.											

Utilities (Located at)										
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE									
Telephone	North.				Gas					
Power	3 wires O/H 60m North of bridge.				Municipal					
Others	Lighting.				Problem (Y/N)	No				
Remarks										

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Typical overpass merge and exit lanes. Crest curve over Hwy 2. 4 lanes.
Vertical Alignment		6	6	
Roadway Width (m)	20.100			No thrie beam
Approach Bump		4	6	
Guardrail (Y/N)	Yes			
Guardrail		5	5	
Length (m)	50.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		4	5	(Concrete drain trough @ SW corner pulled away 50mm allowing water to drain under approach slab - photo. - Jul/2011)
Approach Road General Rating		4	6	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PB, 4 Spans, Lengths(m): 45.1-45.1-45.1-45.1, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	80	
Now	0.0	0.0	0.0	0.0	
Wearing Surface			3	5	HDC deck. Peeling @ joints - photo. Approx 5m2
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			6	6	
Deck Joints			5	6	
Temperature (deg. C)		19			
(Expansion Type : FINGER PLATES)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
120		W. abutment			
135		E. abutment			
Deck Drainage			4	4	Corners of plumbing drain joint corroding, staining abutment - photo. NW corner is worst.-photo PVC plumbing @ SW corner removed.-photo Drip sheet corroded at all four corners. SE corner has hole in drain.-photo Concrete around drains has wide cracks at most corners.-photo
Drains Clogged (Y/N)		No			
Curbs/Median			4	4	Typical vertical narrow crack on exterior of curb. All posts with stains. 400mm long spall under curb above curtain wall @ SE corner(photo) several spalled areas on N curb-photo
(Curb Type : Standard)					
Scaling (Percent Area)		10			
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	6	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	0	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PB, 4 Spans, Lengths(m): 45.1-45.1-45.1-45.1, A-Ident Number:)				
Girders		5	5	High load damage. S1G4 ext over accel lane of Hwy 2 SB. S4G1 ext over Hwy 2 NB & travel lane, chips. Longitudinal narrow cracks on exterior fascia of curb girders only at end blocks and extending into girder approx 1.5 m from bolt.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
(Number Of Girders : 16)				
Diaphragms/Cross Frame		6	6	Diagonal cracks in end blocks @ East abutment, typical.
Bearings		5	5	Looks ok from ground using binoculars.
Temperature (deg. C)	5			
(Expansion Type : POT BEARING)				
(Fixed Type : POT BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Water staining on deck underside. Hairline transverse cracks every est 3.0m with leaching.
Stains (Percent Area)	2			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		5	5	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		6	5	Med map cracking.
Wingwalls		5	5	
Piles		N	N	
Paint/Coating		5	5	Peeling @ SE corner around plumbing.
Abutment Stability		8	8	
Scour/Erosion		4	4	Erosion along North side of West headslope undermining slope protection.- photo.
Piers/Bents				
(Type : PIER-SOLID)				Hairline random cracks at ends of caps.
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0)				2 shafts/pier. Small chips on corner of legs.
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		7	7	Beige.
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Debris (Y/N)	No			
Substructure General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	
Traffic Safety Features		7	7	
Type	Guardrail			
Slope Protection		4	4	East side pulled apart 230mm between 1 & 2 section at top - photo. Void under top slab. West side pulled apart 100mm between 1 & 2 sections at top.
(Type : CONCRETE; CONCRETE)				
Bank Stability		6	6	
Drainage		4	4	Water ponding at base of West & East headslope - photo.
Grade Separation General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Replace drainage plumbing spout @ NW, SW corners. Repair corroding plumbing @ SE corner.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2013	Repair broken/settled concrete slope protection at East headslope & fill/seal gap @ West headslope.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Regrade ditch @ base of West & East headslope to prevent ponding.					
OTHER ACTION	2013	Determine if posted vertical clearance should be lower than "required" noted, change signs as necessary.					
OTHER ACTION	2013	Fill gap between drain trough and approach slab @ SW corner - if not done.					
OTHER ACTION	2013	Repair erosion along West headslope.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	61.1/61.1	Sufficiency Rating (Last/Now) (%)	49.0/56.5	Est. Repl. Yr	2050	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Ladder required to inspect bearings.		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	Shane Hall	Previous Assistant's Name	
Next Inspection Date	25-Jan-2015	Previous Inspection Date	15-Jul-2011
Inspection Cycle (Default) (months)	21		
Comment			