

Bridge Culvert Inspection			
Bridge File Number	09840 -1 Bridge Culvert	Form Type	CUL1
Year Built	1963	Lot No.	2
Bridge or Town Name	LAC LA BICHE	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO LAC LA BICHE, 8.11.55.9.8, WATERCRS-ST	Inspector Class	BR CLS B
Located On	881:18 C1 12.095	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Sep-2010
Legal Land Location	NE SEC 6 TWP 67 RGE 12 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-111:49:15, 54:46:31	Data Entry Date	05-Oct-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA08	Review Date	20-Sep-2010
Clear Roadway/Skew	9.5 / 35 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,490 / 2009 (A)	Dept. Review Date	05-Oct-2010
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2019	2226	SPE	30.5	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	in South ditch.	Gas	
Power	3 lines OH 15 m North of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks	file tag installed AT South end.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	Pipe located in middle of curve. Limited sight distance. Roadway superelevated over pipe. No passing both directions.
Vertical Alignment	7	7	
Roadway Width (m)	9.500		
Embankment	8	8	
Sideslope (:1)	2.0		
(Height of Cover(m) : 1.8)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	5	5	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		South
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		5	5	Bevel bent.
Heaving (mm)	250			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		4	4	Sparce rock riprap.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		4	4	Scour around bevel
Beavers (Y/N)	Yes			Over inlet
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Barrel Last Accessible Date	10-Sep-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	5	
Measured Rise (mm)	2120			
Measured At Ring No.	3			
Sag (mm)	120			
Percent Sag	5			
Sidewall		6	6	
Measured Span (mm)	2085			
Measured At Ring No.	3			
Deflection (mm)	66			
Percent Deflection	3			
Floor		N	N	No bulges felt, under 0.6m water.
Bulge (mm)	0			
Measured At Ring No.				Rocks in barrel floor.
Abrasion (Y/N)				
Circumferential Seams		7	4	Missing 2 nuts at R5
Separation (mm)	0			
Longitudinal Seams		5	5	(1st longitudinal seam has 8 loose nuts @ 2 o'clock. 2000/10/17)
Total No. of Cracked Rings	0			First two sections on North end does not have longitudinal stagger the rest does.
Total No. of Rings with Two Cracked Seams				Lower 2 rows of bolts under water.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	5	Superficial rust / scaling lower 1/2.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Ponding (Y/N)	Yes			Est 400mm.
Fish Passage Adequacy		6	4	Beaver dam/heaving @ u/s end.
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		North
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		4	4	Erosion adjacent to bevel end. Bevel projects approx 2m from embankment, perched.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			Tree trunks in U/S channel.
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2010	Tighten/install missing 2 bolts.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	56.2/49.6	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor erosion on D/S end.		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				
Next Inspection Date	10-Dec-2013		Previous Inspection Date	12-Jun-2007			
Inspection Cycle (Default) (months)	39						
Comment							