

Bridge Culvert Inspection			
Bridge File Number	78336 -1 Bridge Culvert	Form Type	CUL1
Year Built	1978	Lot No.	1
Bridge or Town Name	LAC LA BICHE	Inspector Name	Eric Carcoux
Located Over	GULL CREEK, 8.11.55.9.6.2.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	663:10 C1 23.102	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	30-Mar-2010
Legal Land Location	NW SEC 31 TWP 67 RGE 11 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-111:40:37, 54:50:47	Data Entry Date	19-Apr-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA08	Review Date	15-Apr-2010
Clear Roadway/Skew	7.5 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	80 / 2009 (A)	Dept. Review Date	27-Apr-2010
Road Classification	RLU-209G-90	Follow-Up By	
Detour Length (km)	999		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1524	MP	49.4	68X13	3.5	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	In sag curve.
Vertical Alignment		4	4	
Roadway Width (m)	7.500			
Embankment		5	5	
Sideslope ( __:1)	3.5			
(Height of Cover(m) : 5)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>4</b>	<b>4</b>	

**Upstream End**

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	N	Bevel completely buried under drift - photo.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		2	2	
(Type : <b>NONE</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		2	2	Blocked opening causing severe scour / erosion of embankment - photo. 6m back of bevel, 5m wide.-photo Pipe susceptible to uplift.
Beavers (Y/N)	Yes			
<b>Upstream End General Rating</b>		<b>2</b>	<b>2</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Barrel Last Accessible Date				Inlet covered with drift. Outlet water backed up from beaver pond.
Special Features				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	(3rd ring from U/S end. 2000/06/22)
Separation (mm)	140			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		3	N	Scaling & section loss from what's visible.-15-Nov-2006
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		2	3	U/S end blocked by heavy drift.
Baffle		N	N	
(Type : )				
Waterway Adequacy		3	3	(08/Oct/2003) Medium / large drift. U/S end blocked by heavy drift.
Icing (Y/N)	Yes			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>3</b>	<b>3</b>	General rating carried forward.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		Water/ice to crown 300mm.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		4	N	Heavy scaling & corrosion, loss of section.-15-Nov-2006
Heaving (mm)				
Invert Above/Below Stream Bed				Not visible.
Above/Below (mm)				
Scour Protection		3	N	
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		3	N	Evidence of erosion / scour in embankment around pipe - photo.-15-Nov-2006
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>3</b>	<b>3</b>	G.R. carried over.
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	
Bank Stability		4	4	Some bank erosion along channel U/S and D/S.
HWM (m below Top of Culvert)				HWM not visible. Drift accumulating on inlet.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			Dam 10m d/s.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>4</b>	<b>4</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2010						
REMOVE DRIFT ACCUMULATION	2010						
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2010	Dewater pipe & Level II inspection.					
OTHER ACTION	2010	Repair embankment erosion @ both sides.					
OTHER ACTION	2010	Perform assessment.					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>33.3/33.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>10.9/13.4</b>	Est. Repl. Yr	2015	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	(Monitor seam separation at 3rd ring from u/s end. Inspect barrel if accessible.-94-01-26  Pipe inaccessible after 2 inspections. Do Level II 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				
Next Inspection Date	30-Jun-2013		Previous Inspection Date	15-Nov-2006			
Inspection Cycle (Default) (months)	39						
Comment							