

Bridge Culvert Inspection				
Bridge File Number	77749 -1 Bridge Culvert		Form Type	CUL1
Year Built	1974		Lot No.	2
Bridge or Town Name	SLAVE LAKE		Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO UTIKUMA RIVER, 8.10.18.22.4.3, WATERCRS-ST		Inspector Class	BR CLS A
Located On	88:04 C1 51.758		Assistant Name	Clem Guenette
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Jun-2012
Legal Land Location	SW SEC 10 TWP 80 RGE 8 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:09:46, 55:54:50		Data Entry Date	14-Oct-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA02		Review Date	08-Oct-2012
Clear Roadway/Skew	10.4 /		Dept. Reviewer Name	David Morrison
AADT/Year	890 / 2011 (A)		Dept. Review Date	10-Jan-2013
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	210			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	SPE	30.5	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments							
Telephone	15m along East ditch			Gas	Buried line 7m East-AGT		
Power				Municipal			
Others				Problem (Y/N)	No		
Remarks							

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Access roads N. & S.
Vertical Alignment		9	9	
Roadway Width (m)	10.400			
Embankment		4	4	Erosion 0.6m deepx 2m x 3m-6m West from road shoulder.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1.1)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			Could flow either way Equilizer culvert. Water 0.7m from crown.
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	3	(No floor on bevel from invert 700mm in. 05/05/15) South side of bevel folded in. Water covered.
Heaving (mm)	100			
Invert Above/Below Stream Bed				Water covered.
Above/Below (mm)	0			
Scour Protection (Type : <b>NONE</b> ) (Avg. Rock Size(mm) : )		4	4	(Water piping beside bevel-01/10/31) Scoured 0.5 wide, 0.9m deep & 1.3m back from bevel. Water covered.
Scour/Erosion		4	4	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>3</b>	<b>3</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Barrel Last Accessible Date	12-Aug-2003			Viewed from ends, shape and condition appear good. Water 0.6m from crown.
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		N	N	(Rise est - covered with rocks & silt. 03/08/12)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)	1741			
Measured At Ring No.				
Deflection (mm)	16			
Percent Deflection	1			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		N	N	(Scaling & pitting rust lower third.03/08/12)
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			1.2m ponding.

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)					
Fish Passage Adequacy		8	8		
Baffle		X	X		
(Type : )					
Waterway Adequacy		5	5		
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	Yes				
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	GR 7-12-Aug-2003	
Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
Direction		W		Water 0.6m from crown.	
End Treatment (Concrete, Steel, Others, None)	STEEL				
Headwall		X	X		
Collar		X	X		
Wingwalls (Shape : )		X	X		
Cutoff Wall		X	X		
Bevel End		N	N	(Floor of bevel end has holes - 2003/08/12). Water covered. Only 5% visible	
Heaving (mm)	50				
Invert Above/Below Stream Bed					
Above/Below (mm)	0				
Scour Protection (Type : <b>NONE</b> ) (Avg. Rock Size(mm) : )		4	4	Scoured 1.5m deep, 0.6m wide and 2.3m back from bevel, (water piping beside bevel 05/05/15) Water covered.	
Scour/Erosion		4	4	Scour along sides of bevel.	
Beavers (Y/N)	No				
<b>Downstream End General Rating</b>		<b>3</b>	<b>3</b>	GR carried forward.	
Structure Usage					
		Last	Now	Explanation of Condition	
Channel (U/S and D/S)					
Alignment		7	7		
Bank Stability		6	6		
HWM (m below Top of Culvert)				HWM not visible.	
Drift (Y/N)	No				
Channel Bottom Degrading/Aggrading				House 100m 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>7</b>	<b>7</b>		

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	2012	Repair u/s bevel.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>48.7/48.6</b>	Est. Repl. Yr	2013	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor rust in bottom 1/3 and bevel ends.-05-Nov-2008 Monitor scour u/s and d/s.		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	Brian Pientsch		Previous Assistant's Name	Lisbeth Medina			
Next Inspection Date	11-Mar-2014		Previous Inspection Date	04-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							