

Bridge Culvert Inspection			
Bridge File Number	77470 -1 Bridge Culvert	Form Type	CUL1
Year Built	1975	Lot No.	2
Bridge or Town Name	SLAVE LAKE	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO MARTEN CREEK, 8.11.80.34.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	88:02 C1 30.428	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Mar-2013
Legal Land Location	SW SEC 21 TWP 75 RGE 6 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:52:40, 55:30:22	Data Entry Date	16-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA06	Review Date	11-Apr-2013
Clear Roadway/Skew	9.4 / 30 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	2,640 / 2012 (A)	Dept. Review Date	23-Apr-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	15		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4095	4515	SPE	50.6	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West & East.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Park entrance 200 m south. No passing.
Vertical Alignment	7	7	
Roadway Width (m)	9.400		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 4.5)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	X	X	
Collar	4	N	Wide cracks approx every 1m in collar.Jan-2011
Wingwalls	N	N	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		5	4	Scour/erosion hole 5m x 1.5m deep @ SE corner - not affecting culverts yet.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		5	5	
Beavers (Y/N)	Yes			2m high beaver dam 5m from upstream end.
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): 4095, Rise (mm): 4515, Type: SPE)				
Barrel Last Accessible Date	27-Mar-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	6	est
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag	1			
Sidewall		N	6	
Measured Span (mm)	4130			
Measured At Ring No.	6			
Deflection (mm)	35			
Percent Deflection	15			
Floor		N	N	Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	
Total No. of Cracked Rings				
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		5	5	Superficial lower 1/2. Based on visible portions
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4095, Rise (mm): 4515, Type: SPE)				
Fish Passage Adequacy		7	7	
Baffle		N	N	(Iced over. 14/Dec/2007)
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		N	N	
Wingwalls		N	N	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	N	Bevel under water/ice
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		N	N	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	Yes			Dam 25m downstream
Downstream End General Rating		6	6	Gen rating carried over
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		4	4	Vertical cut bank @ NE.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			0.3m leg on inlet.
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

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	2013	Beaver dam removal.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/66.7	Sufficiency Rating (Last/Now) (%)	56.8/62.1	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor erosion at SE corner.		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	27-Dec-2014		Previous Inspection Date	09-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							