

Bridge Culvert Inspection			
Bridge File Number	77842 -1 Bridge Culvert	Form Type	CUL1
Year Built	1974	Lot No.	4
Bridge or Town Name	COOKING LAKE	Inspector Name	Kris Bosters
Located Over	TRIBUTARY TO COOKING LAKE, 72.4, WATERCRS-ST	Inspector Class	BR CLS A
Located On	14:06 C1 10.530	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Jan-2013
Legal Land Location	SE SEC 13 TWP 51 RGE 22 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:06:35, 53:24:01	Data Entry Date	16-Jan-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA09	Review Date	09-Jan-2013
Clear Roadway/Skew	13.3 / 5 deg. (RHF)	Dept. Reviewer Name	Paul Catt
AADT/Year	5,840 / 2011 (A)	Dept. Review Date	18-Jan-2013
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	3		

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	56.8	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Curve East.-300m
Vertical Alignment		8	8	
Roadway Width (m)	13.300			
Embankment		8	8	5m berm North & South side.
Sideslope (__:1)	5.0			
(Height of Cover(m) : 2)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

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		6	N	Minor corrosion.-09-Feb-2011
Heaving (mm)	0			Snow covered
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		N	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	GR carried fwd.
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	08-Jan-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	(U/S-1877, ring 7-1872, D/S-1895. 17/Aug/2007) Visible sag at R7. 500mm water/silt covering floor, could not measure.
Measured Rise (mm)	1880			
Measured At Ring No.	3			
Sag (mm)	21			
Percent Sag	1			
Sidewall		6	6	
Measured Span (mm)	1775			
Measured At Ring No.	7			
Deflection (mm)	51			
Percent Deflection	3			
Floor		N	N	500 mm of water/ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	Loose bolts, insufficient thread.
Separation (mm)	0			
Longitudinal Seams		6	6	Several loose bolts.
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		4	4	Bottom 1/2 of pipe pitting rust & scaling.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			200mm due to camber.

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		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	300mm silt along floor.-May,2009
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		7	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		N	N	Settlement along edge of bevel 0.3m. Stable & grassed.-May, 2009
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	GR carried fwd.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	8	Swamp area D/S.
HWM (m below Top of Culvert)	0.9			Chalk mark U/S 1st barrel noted HWM as 0.9m.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	65.9/65.9	Est. Repl. Yr	2027	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor corrosion.		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	Todd Warshawski		Previous Assistant's Name				
Next Inspection Date	09-Oct-2014		Previous Inspection Date	09-Feb-2011			
Inspection Cycle (Default) (months)	21						
Comment							