

Bridge Culvert Inspection				
Bridge File Number	71867 -1 Bridge Culvert		Form Type	CUL1
Year Built	1972		Lot No.	1
Bridge or Town Name	DERWENT		Inspector Name	Jason Saly
Located Over	SLAWA CREEK, 6.19, WATERCRS-ST		Inspector Class	BR CLS A
Located On	45:08 C1 49.932		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	22-Jan-2013
Legal Land Location	SE SEC 18 TWP 54 RGE 7 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-111:01:15, 53:39:35		Data Entry Date	25-Feb-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA15		Review Date	13-Feb-2013
Clear Roadway/Skew	9.2 /		Dept. Reviewer Name	Chris Black
AADT/Year	580 / 2011 (A)		Dept. Review Date	28-Mar-2013
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	3050	SP	32.3	152X51	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Fibre optics in North r/w.	Gas	
Power	3 wire OH 70m North.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Long horizontal superelevated curve around North end of Lac Cote. Blind crest curve in both directions.
Vertical Alignment		6	6	
Roadway Width (m)	9.200			
Embankment		7	N	(South side is 4:1. As measured at U/S (S) to shoulder, 2.6m at D/S (N) to shoulder. 07Jun2011) - Snow covered, but no signs of problems.
Sideslope (:1)	2.5			
(Height of Cover(m) : 1.7)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
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	Snow/ice covered.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	N	Some pitrun. Snow covered, but no signs of problems.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		6	N	GR was 6 from 07Sep2006.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3050, Type: SP)				
Barrel Last Accessible Date	22-Jan-2013			Ice within 1.1m of roof.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	5	Bevel ends heaved at both ends; makes it appear roof sagging. Estimated.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	200			(Sag estimated 1.6%. 03/03/25).
Percent Sag	2			
Sidewall		N	5	(Span @ S end=2890,160mm,5.2%. Span @ mid=3087,37mm,1.2% Span @ N end=2874,176mm,5.8%. 02Dec2004). Inwards (5.8%. 02Dec2004).
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	176			
Percent Deflection	6			
Floor		N	N	(Silt covered - photo. Approx 1.0m. 02/Dec/2004) - Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	6	
Separation (mm)	0			
Longitudinal Seams		N	6	
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	5	(Rusting on bottom. 93/10/01). Rating roof & sidewall only. (Silt covered, some soil side corrosion on roof. 02/Dec/2004).
Corrosion By Soil (Y/N)	Yes			
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): , Rise (mm): 3050, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	Equalizing pipe. (02/Dec/2004) Minor
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		N	5	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
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	(Potrudes from fill 1.0m. 07Jun2011) - Snow/ice covered.
Heaving (mm)	250			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)		400		
Scour Protection		N	N	Snow covered, but no signs of problems.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			(Old beaver debris @ SE embankment. 07Jun2011).
Downstream End General Rating		6	N	GR was 6 from 07Sep2006.

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	N	Snow covered, but no signs of problems.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading				Stable.
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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	Consider dewater & perform Level II barrel inspection. Confirm AT reviewed condition in 2009.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	61.6/59.7	Est. Repl. Yr	2029	Maint. Req. (Y/N)	Yes
Special Comments for Next 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	Jason Saly		Previous Assistant's Name				
Next Inspection Date	22-Oct-2014		Previous Inspection Date	07-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							