

Bridge Culvert Inspection			
Bridge File Number	80701 -1 Bridge Culvert	Form Type	CUL1
Year Built	1986	Lot No.	4
Bridge or Town Name	GRANDE CACHE	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO SMOKY RIVER, 8.10.58.26, WATERCRS-ST	Inspector Class	BR CLS B
Located On	40:36 C1 32.974	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	23-Aug-2012
Legal Land Location	SW SEC 7 TWP 59 RGE 6 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:53:20, 54:04:54	Data Entry Date	26-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05	Review Date	24-Sep-2012
Clear Roadway/Skew	10.2 / 0 deg.	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,220 / 2011 (A)	Dept. Review Date	07-Jan-2013
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	60		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1829	SP	114.6	152X51	4.0	ROUND
Special Features	FLOOR ABR PLATES, BARREL ELBOW							
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	On a curve with a crest curve 200 m south. No passing WB. Superelevated.
Vertical Alignment		6	6	
Roadway Width (m)	10.200			
Embankment		8	8	Rock drains u/s 5:1 at top. Bermed twice with 3:1 at top on d/s end. D/S
Sideslope (:1)	1.5			
(Height of Cover(m) : 14.6)				
Guardrail (Y/N)	Yes			South side only.
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		7	7	5 hairline cracks.
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	7	50% Sandstone
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 1829 , Type: SP)				
Barrel Last Accessible Date	23-Aug-2012			
Special Features				
Special Feature		7	7	Elbow @ Ring 13.
(Type : FLOOR ABR PLATES)				
Special Feature		7	7	
(Type : BARREL ELBOW)				
Roof		7	7	Sag estimated, Upward deflection
Measured Rise (mm)	1871			
Measured At Ring No.	19			
Sag (mm)	42			
Percent Sag	2			
Sidewall		7	7	Inward deflection
Measured Span (mm)	1790			
Measured At Ring No.	19			
Deflection (mm)	39			
Percent Deflection	2			
Floor		N	N	Abrasion plates.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2N STAGGER
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		3	3	Too Steep
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	27-Feb-2010
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		7	7	6 Hairline cracks.
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	7	Mostly overgrown.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		5	5	Vertical banks.
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Deg D/S
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	62.3/64.2	Est. Repl. Yr	2031	Maint. Req. (Y/N)	No
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	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	23-May-2014		Previous Inspection Date	19-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							