

Bridge Culvert Inspection			
Bridge File Number	80700 -1 Bridge Culvert	Form Type	CUL1
Year Built	1986	Lot No.	2
Bridge or Town Name	GRANDE CACHE	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO SMOKY RIVER, 8.10.58.27, WATERCRS-ST	Inspector Class	BR CLS B
Located On	40:36 C1 31.564	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	23-Aug-2012
Legal Land Location	NE SEC 1 TWP 59 RGE 7 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:54:36, 54:04:45	Data Entry Date	25-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 / -15 deg. (LHF)	Dept. Reviewer Name	David Morrison
AADT/Year	1,220 / 2011 (A)	Dept. Review Date	10-Jan-2013
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	999		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2120	SP	124.4	152X51	4.0,4.0,5.0	ROUND
Special Features	FLOOR ABR PLATES							
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	6	6	Mild curve middle of slope.
Vertical Alignment	6	6	No passing.
Roadway Width (m)	10.200		Old erosion gullies near d/s end 150mm Deep. (3 - 300 x 400). D/SVegetated
Embankment	N	4	Old erosion gullies near d/s end 150mm Deep. (3 - 300 x 400). D/S.-Vegetated.
Sideslope (__:1)	1.5		
(Height of Cover(m) : 7.1)			Bermed once on d/s side with 3:1 sideslope at top.
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)	CONCRETE		
Headwall	6	6	
Collar	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls		6	6	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2120, Type: SP)				
Barrel Last Accessible Date	23-Aug-2012			
Special Features				
Special Feature		6	6	
(Type : FLOOR ABR PLATES)				
Special Feature				
(Type :)				
Roof		4	4	Roof flattening at R3 (Localized)
Measured Rise (mm)	1994			Estimated due to ice and abrasion plates.
Measured At Ring No.	3			
Sag (mm)	76			
Percent Sag	4			
Sidewall		6	6	200 x 200 dent pushed in 150mm at ring 23 - probably from installation.
Measured Span (mm)	2233			
Measured At Ring No.	3			
Deflection (mm)	113			
Percent Deflection	5			
Floor		N	N	Abrasion plates over floor
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				2N stagger
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2120, Type: SP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		3	3	Steep grade, deg. D/S.
Baffle		X	X	
(Type :)				
Waterway Adequacy		4	4	Can't handle icing- photo Solid ice to top of culvert.25-Feb-2009
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Honeycomb around top of the pipe.
Collar		X	X	
Wingwalls		6	6	Med. diag. cracks.
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1200			
Scour Protection		N	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Deg D/S (1.5m)
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		5	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							
OTHER ACTION	2013	Install de-icing line-Carry over 27-Feb-2009					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	36.8/38.1	Est. Repl. Yr	2031	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	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	23-May-2014		Previous Inspection Date	19-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							