

Bridge Culvert Inspection				
Bridge File Number	76748 -1 Bridge Culvert		Form Type	CUL1
Year Built	1969		Lot No.	4
Bridge or Town Name	GRANDE CACHE		Inspector Name	Russel Vanderschaaf
Located Over	WASHY CREEK, 8.10.58.31.2.4, WATERCRS-ST		Inspector Class	BR CLS B
Located On	40:34 C1 22.163		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	22-Aug-2012
Legal Land Location	SE SEC 17 TWP 57 RGE 7 W6M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:59:58, 53:55:29		Data Entry Date	24-Sep-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05		Review Date	24-Sep-2012
Clear Roadway/Skew	8 /		Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,590 / 2011 (A)		Dept. Review Date	04-Jan-2013
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	400			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2019	2226	SPE	26.2	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	S. r/w		Gas	
Power	4 w o/h N r/w.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	On a curve, superelevated, limited sight distance. No passing both directions. Top of crest 100m west.
Vertical Alignment		7	7	
Roadway Width (m)	8.000			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1.5)				
Guardrail (Y/N)	No			
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		5	5	Tear on east side 400 x 100mm.
Heaving (mm)	350			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Barrel Last Accessible Date	22-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2166			
Measured At Ring No.	6			
Sag (mm)				
Percent Sag	3			
Sidewall		4	4	Water squirting between plates, 1st and 2nd ring. crack ring 7.
Measured Span (mm)	2086			
Measured At Ring No.	6			
Deflection (mm)	67			
Percent Deflection	3			
Floor		5	5	Light abrasion on u/s of corrugations.
Bulge (mm)	0			
Measured At Ring No.	5			
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		4	4	Ring 7 at 7 o'clock has 140 mm of steel left. - ONLY ONE BOLT HOLE HAS A CRACK.
Total No. of Cracked Rings	1			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)	140			1N stagger
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Bottom of pipe has scaling/rusting throughout.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Fish Passage Adequacy		4	4	1.5 DROP D/S
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	7	
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		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	Snow covered.
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1500			
Scour Protection		N	6	Rip-rapped to streambed - not a straight drop.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
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		8	8	
Bank Stability		7	7	some sloughing.
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Downstream only.
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) (%)	44.4/77.8	Sufficiency Rating (Last/Now) (%)	49.2/65.6	Est. Repl. Yr	2030	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor crack at ring 7.		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	22-May-2014		Previous Inspection Date	18-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							