

Bridge Culvert Inspection			
Bridge File Number	77515 -1 Bridge Culvert	Form Type	CUL1
Year Built	1985	Lot No.	2
Bridge or Town Name	RED EARTH CR	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO UTIKUMA RIVER, 8.10.18.22.4.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	88:06 C1 3.595	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-Jun-2012
Legal Land Location	SW SEC 16 TWP 82 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:20:50, 56:06:07	Data Entry Date	14-Oct-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA02	Review Date	08-Oct-2012
Clear Roadway/Skew	10 /	Dept. Reviewer Name	David Morrison
AADT/Year	760 / 2011 (A)	Dept. Review Date	10-Jan-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	300		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2610	2877	SPE	42.1	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	25m east from road cl	Gas		
Power	3 wire oh-25m East	Municipal		
Others		Problem (Y/N)	No	
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Long sag curve. Limited sight distance to south due to crest curve. No passing in South bound lane.
Vertical Alignment		6	6	
Roadway Width (m)	10.000			
Embankment		6	6	
Sideslope (:1)	4.0			
(Height of Cover(m) : 1.7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		4	4	Loss of fill for 2m beside bevel.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		4	4	Loss of fill for 2m beside bevel.
Beavers (Y/N)	Yes			Beaverdam @ u/s bevel.
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SPE)				
Barrel Last Accessible Date	04-Aug-2010			1m water in pipe - not accessible, viewed from ends - looks good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	
Measured Rise (mm)	2840			
Measured At Ring No.	5			
Sag (mm)	37			
Percent Sag	2			
Sidewall		7	N	Minor construction denting on south side ring 1.-04-Aug-2010
Measured Span (mm)	2667			
Measured At Ring No.	5			
Deflection (mm)	57			
Percent Deflection	3			
Floor		N	N	Water covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	N	
Separation (mm)	0			
Longitudinal Seams		7	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	Pitting rust bottom 1/2 of pipe.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	(93/02/22)
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	N	GR 7- 04-Aug-2010
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWN not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2012	Remove beaverdam @ u/s bevel.					
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) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	62.3/51.1	Est. Repl. Yr	2031	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor loss of fill at u/s bevel. Same in 2012 as in 2010.		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	Brian Pientsch		Previous Assistant's Name	Lisbeth Medina			
Next Inspection Date	11-Mar-2014		Previous Inspection Date	04-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							