

Bridge Culvert Inspection			
Bridge File Number	77366 -1 Bridge Culvert	Form Type	CULM
Year Built	1993	Lot No.	4
Bridge or Town Name	RED EARTH CR	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO LOON RIVER, 8.10.18.12.10, WATERCRS-ST	Inspector Class	BR CLS A
Located On	88:10 C1 11.821	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-Jun-2012
Legal Land Location	SW SEC 1 TWP 89 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:18:14, 56:41:04	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	14.5 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	370 / 2011 (A)	Dept. Review Date	07-Jan-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	200		

Bridge Culvert Information

Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	38	125X26	2.8	ROUND
2	MAIN	-	2400	MP	38	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	20m East from road.
Power	3 wire oh - 25m East from road.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Land access 120m north.
Vertical Alignment		8	8	
Roadway Width (m)	12.000			
Embankment		7	7	
Sideslope (__:1)	5.0			
(Height of Cover(m) : 1.7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		W		South pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			Water 700mm below crown.
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		5	N	(HEAVING FROM FIRST CIRCUMFERENTIAL SEAM. 05/05/15) Culvert not accessible.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			Water 700mm below crown.
Above/Below (mm)	600			
Scour Protection		4	4	erosion along sides of bevel.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Erosion 1m wide x 0.5m deep x 8m long at each side of bevel.
Beavers (Y/N)	No			
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): , Rise (mm): 2400, Type: MP)				
Barrel Last Accessible Date	15-Jan-2000			Water 700mm from crown Shape looks good as viewed from the ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	N	(0.6% DEFLECTION - 00/01/15). (Span 2384 @ c/l - confirmed-00/01/15)
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	16			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	40			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Approx 1.7m ponding
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	(1994/02/16)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	GR 8-15-Jan-2000
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		E		South pipe
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	N	Water 700mm from crown
Heaving (mm)	75			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		4	4	Sloughing banks around side of bevel. Erosion at each side of bevel.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Erosion 1m deep x 0.5m wide x 1m long at each side of bevel.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		W		NORTH PIPE Water to 650mm below crown.
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
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		5	N	Water 650mm below crown.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		4	4	Erosion along sides of bevel.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Erosion 1.5m wide x 0.8m deep x 1.8m long along sides of bevel.
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Barrel Last Accessible Date	15-Jan-2000			Water 650mm from crown. Shape looks good as viewed from the ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	N	(20- 00/01/15) @ c/l Inward-Jan-15, 2000
Measured Span (mm)	2384			
Measured At Ring No.				
Deflection (mm)	16			
Percent Deflection	1			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	40			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	
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 # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Ponding (Y/N)	Yes			Approx 1.750m
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	(1994/02/16)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	GR 8-15-Jan-2000

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		E		North pipe Water 650mm from crown.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	N	
Heaving (mm)	75			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		4	4	Sloughing banks around bevel. Erosion at each side of bevel.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Erosion 1m deep x 0.5m wide x 1m long at each side of bevel.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
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)				

Structure Usage				
		Last	Now	Explanation of Condition
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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	58.1/58.1	Est. Repl. Yr	2048	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor erosion along sides of u/s and d/s bevel ends.		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							