

Bridge Culvert Inspection			
Bridge File Number	02321 -1 Bridge Culvert	Form Type	CUL1
Year Built	1979	Lot No.	4
Bridge or Town Name	RED EARTH CR	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO WABASCA RIVER, 8.10.18.5, WATERCRS-ST	Inspector Class	BR CLS A
Located On	88:12 C1 46.028	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Jun-2012
Legal Land Location	NE SEC 9 TWP 97 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:23:04, 57:24:14	Data Entry Date	19-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA02	Review Date	04-Nov-2012
Clear Roadway/Skew	11.5 / -32 deg. (LHF)	Dept. Reviewer Name	David Morrison
AADT/Year	180 / 2011 (A)	Dept. Review Date	11-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	-	5253	SP	56.1	152X51	5.0	ROUND
Special Features	SHOTCRETE BEAM							
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	Bottom of sag.
Vertical Alignment		7	7	
Roadway Width (m)	11.500			
Embankment		6	6	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 4)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		(Tag @ D/S end @ 11 o'clock on the outside. 05/05/14)
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		6	6	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		6	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): 5253, Type: SP)				
Barrel Last Accessible Date	07-Nov-2008			Water approx. 0.5m deep and flowing fast at the inlet. Viewed from ends.
Special Features				
Special Feature		8	8	On roof D/S. Viewed from d/s end.
(Type : SHOTCRETE BEAM)				
Special Feature				
(Type :)				
Roof		N	N	Crack @ 12:00 ring 1 (Photo)-07-Nov-2008
Measured Rise (mm)	5373			
Measured At Ring No.	6			Upward.--07-Nov-2008
Sag (mm)	120			
Percent Sag	2			
Sidewall		N	N	Inward.-07-Nov-2008
Measured Span (mm)	5139			
Measured At Ring No.	6			
Deflection (mm)	114			
Percent Deflection	2			
Floor		N	N	Water cover
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	(Missing 1 bolt @ 3:00 R5.) Cracks @ 12:00 ring 1 (Photo)-07-Nov-2008
Total No. of Cracked Rings	1			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				Too high to measure.-07-Nov-2008
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		7	N	Viewed from ends.
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): , Rise (mm): 5253, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		3	3	300mm drop at d/s end.
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	(Drift @ inlet)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		4	4	GR carried forward from 2008
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		6	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		4	4	Both sides of bevel pushing inward 300mm. South side of bevel.
Heaving (mm)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		5	5	BANK ERODING @ BEND 30m D/S
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			cuttings present d/s.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

Structure Usage				
		Last	Now	Explanation of Condition

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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	43.4/43.4	Est. Repl. Yr	2026	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor bevel sides @ d/s. Monitor u/s ring 1. 07--Nov-2008		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	12-Mar-2014		Previous Inspection Date	05-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							