

Bridge Culvert Inspection			
Bridge File Number	02196 -1 Bridge Culvert	Form Type	CUL1
Year Built	1979	Lot No.	1
Bridge or Town Name	RED EARTH CR	Inspector Name	Brian Pientsch
Located Over	2ND ORDER TRIBUTARY TO WABASCA RIVER, 8.10.18.7.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	88:12 C1 35.399	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Jun-2012
Legal Land Location	SE SEC 10 TWP 96 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:21:26, 57:18:50	Data Entry Date	21-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA02	Review Date	04-Nov-2012
Clear Roadway/Skew	10.5 / -7 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	-	3000	SP	42.7	152X51	2.8	ROUND
Special Features								
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	Road intersection 50m south.
Vertical Alignment		7	7	
Roadway Width (m)	10.500			
Embankment		7	8	
Sideslope ( __:1)	5.0			
(Height of Cover(m) : 4)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		W		New conc. collar & bevel.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	9	
Collar		6	9	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		7	8	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>500</b> )				
Scour/Erosion		7	8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>8</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: SP)				
Barrel Last Accessible Date	16-Jun-2006			(Silt 1.2m deep. Matches s/b. Water and silt 1.4m deep and silt is too soft. 2005/05/14) Viewed from ends. Water approx 1.0m deep.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	N	Sag est.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	119			
Percent Sag	4			
Sidewall		6	N	
Measured Span (mm)	3119			
Measured At Ring No.	5			
Deflection (mm)	119			
Percent Deflection	4			
Floor		N	N	Water covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				(1N stagger. 07/Nov/2008)
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	N	Superficial rust on bottom half of pipe. 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): 3000, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	G.R. was "6" from 16/June/2006.
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	9	New bevel since 2010 inspection.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion		7	8	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>8</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	

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	2012	Unable to access barrel last 2 inspection cycles, recommend Level 2 inspection as per Bim Manual.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>64.6/66.7</b>	Est. Repl. Yr	2026	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	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							