

Bridge Culvert Inspection			
Bridge File Number	77815 -1 Bridge Culvert	Form Type	CUL1
Year Built	1982	Lot No.	1
Bridge or Town Name	RED EARTH CR	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO SENEX CREEK, 8.10.18.3.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	88:14 C1 13.190	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Jun-2012
Legal Land Location	NE SEC 36 TWP 98 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:18:36, 57:33:06	Data Entry Date	05-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA02	Review Date	04-Nov-2012
Clear Roadway/Skew	12.5 / 30 deg. (RHF)	Dept. Reviewer Name	David Morrison
AADT/Year	180 / 2011 (A)	Dept. Review Date	14-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	2314	2552	SPE	42	152X51	3.0	ELLIPSE
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	8	8	
Vertical Alignment	8	8	
Roadway Width (m)	11.800		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 2)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	8	8	

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 :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	
Heaving (mm)	400			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	5	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	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): 2314, Rise (mm): 2552, Type: SPE)				
Barrel Last Accessible Date	16-Jan-2007			WATER 1.0 M. Shape looks adequate. VIEWED FROM ENDS, ABLE TO ENTER 3 RINGS U/S.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	N	Floor covered with silt, unable to measure rise. (00/01/12)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	35			
Percent Sag				
Sidewall		6	N	(Wall appears to be deflecting in at the 5:00 position - ring 5 to 8)
Measured Span (mm)	2341			
Measured At Ring No.	5			
Deflection (mm)	27			
Percent Deflection	1			
Floor		N	N	Water/silt cover
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	Has a 25 mm hole in barrel 950 cm from u/s end of barrel.
Separation (mm)	0			
Longitudinal Seams		N	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)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	Pitting rust lower 1/2-evident above water level.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			200 MM NEG. CAMBER IN PIPE

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2552, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	(Iced to within 150mm of roof96/04/23)
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		N	N	GR 6 - 16-Jun-2007
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		5	3	Multiple perforations both sides of bevel.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		4	4	Loss of fill on bevel sides 3m long, 0.8m deep, 1.0m wide.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Loss of fill on bevel sides 3m long x 1m wide x 0.8m deep
Beavers (Y/N)	No			
Downstream End General Rating		4	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		7	7	
HWM (m below Top of Culvert)				NO HWM VISIBLE
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
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							
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							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	51.8/50.9	Est. Repl. Yr	2021	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor scour and erosion d/s. Observe u/s bevel heaving. Monitor perforations in barrel-EDC04-Nov-2012 (Consider delaying L2 inspection-EDC-04-Nov-2012)		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							