

Bridge Culvert Inspection				
Bridge File Number	00254 -1 Bridge Culvert		Form Type	CUL1
Year Built	1988		Lot No.	3
Bridge or Town Name	JOFFRE		Inspector Name	Jason Saly
Located Over	JONES CREEK, 3.71, WATERCRS-ST		Inspector Class	BR CLS A
Located On	11:16 C1 1.335		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	13-Feb-2012
Legal Land Location	SE SEC 28 TWP 38 RGE 25 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:30:43, 52:17:19		Data Entry Date	08-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA19		Review Date	28-Feb-2012
Clear Roadway/Skew	11.8 / 0 deg.		Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,420 / 2010 (A)		Dept. Review Date	09-Mar-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	4920	SP	46.9	152X51	4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North r/w.	Gas	
Power	2 line crossing 350m East.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Field access 60m East & West. Sharp curve 100m West.
Vertical Alignment	7	7	
Roadway Width (m)	13.100		Wide transverse ACP crack over pipe, sealed.
Embankment	5	5	Split post on SW corner.
Sideslope (_ :1)	3.0		
(Height of Cover(m) : 1.4)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	4	4	Stream face @ NE corner honeycomb with exposed rebar due to low cover & poor consolidation. Minor cracking.
Collar	7	7	Cracks.
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		5	5	Embankment settled @ 0.7m with respect to collar.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	
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): 4920 , Type: SP)				
Barrel Last Accessible Date	13-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	7	Could not measure rise due to ice.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	77			(Est. 1.6% sag. 30/11/03).
Percent Sag	2			
Sidewall		N	7	Could not measure span accurately due to dia. of pipe.
Measured Span (mm)	4997			
Measured At Ring No.				
Deflection (mm)	77			(1.6% deflection. 30/11/03).
Percent Deflection	2			
Floor		N	N	Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	6	(Leaking through lower seam bolt holes with some rust staining. 30/11/03)
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)	Yes			
				1N
Coating		7	6	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4920, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Honeycomb on South face, minor.
Collar		7	6	Cracking every 1 to 1.2m.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		6	6	Some settlement next to collars.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		5	5	U/S bank eroding approx 50m U/S.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Unknown.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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	2012	Replace split guardrail post @ SW corner.					
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/66.7	Sufficiency Rating (Last/Now) (%)	64.8/69.9	Est. Repl. Yr	2039	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	13-Nov-2013		Previous Inspection Date	29-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							