

Bridge Culvert Inspection				
Bridge File Number	09176 -1 Bridge Culvert		Form Type	CUL1
Year Built	1996		Lot No.	4
Bridge or Town Name	ADEN		Inspector Name	Jason Rusu
Located Over	BREED CREEK, 1.4, WATERCRS-ST		Inspector Class	BR CLS A
Located On	880:02 C1 8.512		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	08-Jun-2012
Legal Land Location	SW SEC 27 TWP 1 RGE 10 W4M		Data Entry By	Erin Roberts
Longitude, Latitude	-111:16:26, 49:03:38		Data Entry Date	19-Jul-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA24		Review Date	10-Jul-2012
Clear Roadway/Skew	9 / 33 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	90 / 2011 (A)		Dept. Review Date	30-Jul-2012
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	3444	SP	81.7	152X51	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone			Gas
Power	200m South across road		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Curves North & South 100m Grade at both ends
Vertical Alignment		7	7	
Roadway Width (m)	9.800			
Embankment		9	9	
Sideslope (_ :1)	4.0			
(Height of Cover(m) : 6.4)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		8	8	
Beavers (Y/N)	Yes			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3444, Type: SP)				
Barrel Last Accessible Date	24-Jul-2009			Too much flow to enter.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	Viewed from ends- no change observed. PR 8
Measured Rise (mm)	3399			
Measured At Ring No.	7			Est.
Sag (mm)	45			
Percent Sag	1			
Sidewall		8	N	Inward PR 8
Measured Span (mm)	3437			
Measured At Ring No.	7			
Deflection (mm)	7			
Percent Deflection	0			
Floor		8	N	PR 8
Bulge (mm)	0			
Measured At Ring No.	7			
Abrasion (Y/N)	No			
Circumferential Seams		8	N	PR 8
Separation (mm)	0			
Longitudinal Seams		8	N	PR 8
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Some alkali staining around bolt holes. Some surface rust on lower sidewall
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			(Ring #5 north plate @ 9 o'clock, galvanized coating peeling off Some dents due to installation)24- JUL -2009
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): 3444, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	PR 8
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	900			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Subsidiary channel on U/S end 12m West of Pipe on North side.
Bank Stability		4	4	Erosion on the d/s end.
HWM (m below Top of Culvert)	0.0			HWM not visible.
Drift (Y/N)	No			(Ran full June/02) 9- Jul-2009
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

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) (%)	88.9/55.6	Sufficiency Rating (Last/Now) (%)	83.0/68.0	Est. Repl. Yr	2045	Maint. Req. (Y/N)	No
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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	08-Sep-2015		Previous Inspection Date	24-Jul-2009			
Inspection Cycle (Default) (months)	39						
Comment							