

Bridge Culvert Inspection			
Bridge File Number	09643 -1 Bridge Culvert	Form Type	CULM
Year Built	1989	Lot No.	4
Bridge or Town Name	SANDY LAKE	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO WABASCA RIVER, 8.10.18.31, WATERCRS-ST	Inspector Class	BR CLS B
Located On	813:08 C1 31.176	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	07-Jan-2011
Legal Land Location	NE SEC 36 TWP 78 RGE 23 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:25:43, 55:48:12	Data Entry Date	02-Feb-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA06	Review Date	12-Jan-2011
Clear Roadway/Skew	12 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	520 / 2009 (A)	Dept. Review Date	02-Feb-2011
Road Classification	RCU-210-110	Follow-Up By	
Detour Length (km)	240		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4610	SP	33.5	152X51	3.0	ROUND
2	MAIN	-	4610	SP	33.5	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag installed on top of South pipe, West headwall.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	In curve, limited sight distance both directions. No passing.
Vertical Alignment		8	8	
Roadway Width (m)	12.000			
Embankment		8	8	
Sideslope (_ :1)	2.0			
(Height of Cover(m) : 1.8)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		W		South culvert.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		7	N	Ice 1.5m from crown.
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	N	Vegetation covering rock riprap.-09-Aug-2007 SNow covered.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	GR carried fwd.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4610, Type: SP)				
Barrel Last Accessible Date	07-Jan-2010			Ice 1.5m from crown.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	4	
Measured Rise (mm)				est
Measured At Ring No.				
Sag (mm)	400			
Percent Sag	9			
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	
Total No. of Cracked Rings				Only 1/3 visible
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				3N stagger.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4610, Type: SP)				
Coating		5	4	Pitting rust at ice level.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Approx. 1m.
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	4	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
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	N	Ice/snow covered.
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	N	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	GR carried fwd.
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		W		North culvert.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		7	N	Snow/ice covered.
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	N	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	GR carried fwd.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4610, Type: SP)				
Barrel Last Accessible Date	07-Jan-2010			Ice 1.5m from crown.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				est
Sag (mm)				
Percent Sag	7			
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	
Total No. of Cracked Rings				Only 1/3 visible
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				3N stagger.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4610, Type: SP)					
Coating		5	4	Pitting rust at ice level.	
Corrosion By Soil (Y/N)					
Corrosion By Water (Y/N)	Yes				
Camber POS/ZERO/NEG	NEG				
Ponding (Y/N)	Yes			Approx. 1m.	
Fish Passage Adequacy		8	8		
Baffle		N	N		
(Type :)					
Waterway Adequacy		7	7		
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	No				
Barrel General Rating		N	5		
Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 2, Span Type: Secondary Span)					
Direction		E		North culvert.	
End Treatment (Concrete, Steel, Others, None)	NONE				
Headwall		X	X		
Collar		X	X		
Wingwalls		X	X		
(Shape :)					
Cutoff Wall		X	X		
Bevel End		7	N	Ice/snow covered.	
Heaving (mm)	50				
Invert Above/Below Stream Bed	BELOW				
Above/Below (mm)	1000				
Scour Protection		7	N		
(Type :)					
(Avg. Rock Size(mm) :)					
Scour/Erosion		7	N		
Beavers (Y/N)	No				
Downstream End General Rating		7	7	GR carried fwd.	
Structure Usage					
		Last	Now	Explanation of Condition	
Channel (U/S and D/S)					
Alignment		7	7		
Bank Stability		8	8		
HWM (m below Top of Culvert)				HWM not visible.	
Drift (Y/N)	No				

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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) (%)	55.6/44.4	Sufficiency Rating (Last/Now) (%)	64.5/58.6	Est. Repl. Yr	2029	Maint. Req'd. (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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	07-Apr-2014		Previous Inspection Date	09-Aug-2007			
Inspection Cycle (Default) (months)	39						
Comment							