

Bridge Culvert Inspection			
Bridge File Number	13996 -1 Bridge Culvert	Form Type	CUL1
Year Built	1984	Lot No.	2
Bridge or Town Name	BROWNVALE	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO CARDINAL CREEK, 8.10.48.3.3, WATERCRS-ST	Inspector Class	BR CLS A
Located On	737:02 C1 18.699	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	BR CLS B
Navigabil. Cl./Year		Inspection Date	25-Mar-2013
Legal Land Location	NW SEC 16 TWP 84 RGE 25 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:54:01, 56:17:19	Data Entry Date	05-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA04	Review Date	03-Apr-2013
Clear Roadway/Skew	9.1 /	Dept. Reviewer Name	
AADT/Year	320 / 2012 (A)	Dept. Review Date	
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3670	SP	33.5	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	12m West	Gas	
Power	15m East - 2 wire	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	In sag curve, no passing southbound.
Vertical Alignment	6	6	
Roadway Width (m)	9.100		
Embankment	7	7	
Sideslope (__:1)	4.0		
(Height of Cover(m) : 1.7)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	X	X	
Collar	7	N	Snow covered
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	N	Cannot view due to beaver dam & snow.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1200			
Scour Protection		N	N	Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	(Scour hole 6 x 4 x 1m. - 2003-06-06) Snow covered
Beavers (Y/N)	Yes			Dam across bevel. WL is the same u/s & d/s of the dam.
Upstream End General Rating		4	4	G.R. carried forward.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3670, Type: SP)				
Barrel Last Accessible Date	25-Mar-2013			1257mm ice to crown
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	6	1st ring from d/s end has a hole Damaged during installation. Patched with a piece of plastic.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	40			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	
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		N	5	Some pitting rust above waterline.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
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): 3670, Type: SP)				
Ponding (Y/N)	Yes			About 1m.
Fish Passage Adequacy		4	4	Dam at u/s end impedes passage.
Baffle		N	N	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		N	6	
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	N	Snow covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	2000			
Scour Protection		7	N	Snow covered.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	Snow covered.
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		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)	1.0			
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	NONE			Accross bevel u/s.
Beavers (Y/N)	Yes			
(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							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Remove beaver dam @ u/s bevel.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/66.7	Sufficiency Rating (Last/Now) (%)	52.2/57.5	Est. Repl. Yr	2029	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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	25-Jun-2016		Previous Inspection Date	08-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							