

Bridge Culvert Inspection			
Bridge File Number	00664 -1 Bridge Culvert	Form Type	CULM
Year Built	2001	Lot No.	4
Bridge or Town Name	MORINVILLE	Inspector Name	Melanie Johnson
Located Over	LITTLE EGG CREEK, 6.65.5, WATERCRS-ST	Inspector Class	BR CLS B
Located On	642:04 C1 17.051	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	05-Jul-2011
Legal Land Location	SW SEC 1 TWP 56 RGE 25 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:35:08, 53:48:13	Data Entry Date	19-Jul-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA09	Review Date	07-Jul-2011
Clear Roadway/Skew	9 / 20 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	2,620 / 2010 (A)	Dept. Review Date	26-Jul-2011
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4300	SP	50.6	152X51	3.0	ROUND
2	MAIN	-	4300	SP	50.6	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South r/w.	Gas	North & South r/w approx 50m west.
Power		Municipal	
Others	Fibre optic (AB supernet) North r/w.	Problem (Y/N)	No
Remarks	BF tag installed on top of West pipe concrete headwall.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Resident access 20m West.
Vertical Alignment		8	8	Benched then 3:1.
Roadway Width (m)	9.000			
Embankment		N	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : 0.7)				
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		N		West pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	8	
Beavers (Y/N)	No			
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): 4300, Type: SP)				
Barrel Last Accessible Date	10-Mar-2008			Water too deep, pipe viewed from ends, shape and condition look good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	Not measured, floor iced over.-10-Mar-2008
Measured Rise (mm)				
Measured At Ring No.				Est.
Sag (mm)	0			
Percent Sag				
Sidewall		8	N	
Measured Span (mm)	4293			
Measured At Ring No.	6			Inwards.-10-Mar-2008
Deflection (mm)	7			
Percent Deflection	0			
Floor		N	N	Iced over.10-Mar-2008
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	
Separation (mm)	0			
Longitudinal Seams		8	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2N
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		8	8	No corrosion.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4300, Type: SP)				
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		N	N	Iced over.
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	GR 8 was from 10-Mar-2008
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		West pipe.
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)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	5	Fill settled along West side of pipe, ~400mm slump on West side, appears stable & grassed.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		East pipe.
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
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4300, Type: SP)				
Barrel Last Accessible Date	10-Mar-2008			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	Rise not measured due to ice on floor.-10-Mar-2008
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				Est.
Sidewall		8	N	
Measured Span (mm)	4327			
Measured At Ring No.	6			
Deflection (mm)	27			<1%
Percent Deflection	1			
Floor		N	N	Iced over.-10-Mar-2008
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	
Separation (mm)	0			
Longitudinal Seams		8	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2N
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		8	8	No corrosion.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	POS			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4300, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		N	N	Iced over.
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	GR was 8 from 10-Mar-2008

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		East pipe.
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)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	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		5	5	80 degree bend U/S & bend on D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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) (%)	81.6/64.3	Est. Repl. Yr	2049	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	Dave Lam		Previous Assistant's Name	Bryce Clayton			
Next Inspection Date	05-Oct-2014		Previous Inspection Date	10-Mar-2008			
Inspection Cycle (Default) (months)	39						
Comment							