Bridge Culvert Inspection

Bridge File Number	71817 -2 Bridge Culvert	Form Type	CUL1
Year Built	2006	Lot No.	2
Bridge or Town Name	DIXONVILLE	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO BEATON CK, 8.10.48.5.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Clem Guenette
Located On	689:02 C1 17.535	Assistant Class	BR CLS B
Water Body Cl./Year		Inspection Date	19-Mar-2013
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 16 TWP 87 RGE 24 W5M	Data Entry Date	05-Apr-2013
Longitude, Latitude	-117:45:23, 56:32:14	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	03-Apr-2013
Contract Main. Area	CMA04	Dept. Reviewer Name	
Clear Roadway/Skew	9.5 / -14 deg. (LHF)	Dept. Review Date	
AADT/Year	220 / 2012 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)			

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2000	MP	34	75X25	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South R/W	Gas	
Power	2 wire North R/W	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Field approach 5m east. Hill to the West.
Vertical Alignment		7	7	
Roadway Width (m)	9.500			
Embankment		8	8	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1.1**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

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

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		8	N	Snow covered.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	N	
Beavers (Y/N)	Yes			Dam in inlet.
Upstream End General Rating		**8**	**8**	GR carried fwd.

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2000, Type: MP**)				
Barrel Last Accessible Date	19-Mar-2013			1762mm ice to crown
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	8	2054mm-16-Oct-2006
Measured Rise (mm)	2054			
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	8	
Measured Span (mm)	2004			@ CL
Measured At Ring No.				
Deflection (mm)	4			
Percent Deflection	0			
Floor		N	N	Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	8	
Separation (mm)	25			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2000, Type: MP**)				
Fish Passage Adequacy		7	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		4	4	Barrel capacity reduced by beaverdam & u/s end barrel.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		**N**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	N	West side bent up to 100mm, angle iron bolted on backside.-21-Oct-2009 Snow covered
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	350			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	N	Snow covered
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	GR carried fwd.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	Stable
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				Cuttings and beavers present. Dam at inlet.
Beavers (Y/N)	Yes			
(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	2013	Remove dam at u/s end pipe.				
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) (%)	**55.6/88.9**	**Sufficiency Rating (Last/Now) (%)**	**56.5/71.8**	Est. Repl. Yr	2051	Maint. Reqd. (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	Eric Carcoux	Previous Assistant's Name			
Next Inspection Date	19-Jun-2016	Previous Inspection Date	21-Oct-2009		
Inspection Cycle (Default) (months)	39				
Comment					