Bridge Culvert Inspection

Bridge File Number	79063 -1 Bridge Culvert	Form Type	CUL1
Year Built	1978	Lot No.	4
Bridge or Town Name	CALAHOO	Inspector Name	Melanie Johnson
Located Over	TRIBUTARY TO STURGEON RIVER, 6.58.16, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	37:02 C1 20.856	Assistant Class	
Water Body Cl./Year		Inspection Date	08-Nov-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 4 TWP 55 RGE 27 W4M	Data Entry Date	19-Nov-2011
Longitude, Latitude	-113:57:42, 53:42:57	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	12-Nov-2011
Contract Main. Area	CMA09	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	8.1 / 13 deg. (RHF)	Dept. Review Date	15-Dec-2011
AADT/Year	2,580 / 2010 (A)	Follow-Up By	
Road Classification	RAU-209-110		
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1429	1575	SPE	28	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South row	Gas	
Power	North row	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	On curve, limited sight distance, no passing WB. Entrances to Calahoo both ways.
Vertical Alignment		7	7	
Roadway Width (m)	8.100			
Embankment		6	6	
Sideslope (__:1)	2.0			
(Height of Cover(m) : **4.5**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream 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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		5	5	
Heaving (mm)	150			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	6	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 1429, Rise (mm): 1575, Type: SPE**)				
Barrel Last Accessible Date	18-Sep-2006			Could only access first 5 rings due to thin ice. Shape appears good as viewed from ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	7	Estimated sag - 3.8%.
Measured Rise (mm)				
Measured At Ring No.				(Est 3.2%. 18/Sept/2006)
Sag (mm)				
Percent Sag				
Sidewall		N	7	Could not get to ring 8.
Measured Span (mm)	1390			
Measured At Ring No.	8			
Deflection (mm)	39			(2.7%. 18/Sept/2006)
Percent Deflection	3			
Floor		N	N	Ice
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
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)	Yes			
Coating		4	4	Pitting flaking rust bottom 1/2.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 1429, Rise (mm): 1575, Type: SPE**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	(Ice level - 400 mm below crown. 96/11/18)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		**N**	**N**	Previous rating was "7" on 18/Sept/2006.

Downstream 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	
Bevel End		6	6	
Heaving (mm)	200			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		5	5	Grassed.
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	5	Grassed and appears stable.
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**5**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	Enters at an slight angle.
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM not visible. (Drift to 400mm above crown-likely due to drift blockage.-23-Mar-2010)
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**56.6/56.5**	Est. Repl. Yr	2024	Maint. Reqd. (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	Shane Hall	Previous Assistant's Name	
Next Inspection Date	08-Aug-2013	Previous Inspection Date	23-Mar-2010
Inspection Cycle (Default) (months)	21		
Comment			