Bridge Culvert Inspection

Bridge File Number	73576 -2 Bridge Culvert	Form Type	CULE
Year Built	2006	Lot No.	4
Bridge or Town Name	ARDROSSAN	Inspector Name	Eric Carcoux
Located Over	POINTE-AUX-PINS CREEK, 6.72, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	16:20 L1 8.289;16:20 R1 8.290	Assistant Class	
Water Body Cl./Year		Inspection Date	09-Aug-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NW SEC 12 TWP 53 RGE 22 W4M	Data Entry Date	09-Sep-2012
Longitude, Latitude	-113:07:16, 53:34:12	Reviewer Name	Stew Hagan
Road Authority	Alberta Transportation (AIT)	Review Date	05-Sep-2012
Contract Main. Area	CMA09	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	26 / 30 deg. (RHF)	Dept. Review Date	18-Sep-2012
AADT/Year	16,690 / 2011 (A)	Follow-Up By	
Road Classification	RAD-412.4-120		
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	-	2000	MP	8			ROUND
1	MAIN	-	1829	SSP	61.4			ROUND
1	D/S	-	2000	MP	8			ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South r/w.	Gas	
Power	3 wires North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersections East. Median crossing West. Crest curve 50m East and West.
Vertical Alignment		7	7	
Roadway Width (m)	23.300			
Embankment		8	7	Acceleration lane over culvert EBL only. Decel lane @ WBL.
Sideslope (__:1)	6.0			
(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**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **350**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2000, Type: MP**)				
Barrel Last Accessible Date	09-Aug-2010			
Special Features				
Special Feature				This section of the form rates the u/s and d/s CSP sections.
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2033			CL of South ext.
Measured At Ring No.				upward
Sag (mm)	33			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	1934			@ cl of South ext.
Measured At Ring No.				inward
Deflection (mm)	66			
Percent Deflection				
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	7	WSP/CSP connection rated.
Separation (mm)				
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		8	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2000, Type: MP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		**7**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SSP**)				
Barrel Last Accessible Date	09-Aug-2012			
Special Features				
Special Feature				Median skylight
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	10m South of skylight
Measured Rise (mm)	1806			
Measured At Ring No.				
Sag (mm)	23			
Percent Sag	1			
Sidewall		7	7	10m South of skylight inward
Measured Span (mm)	1794			
Measured At Ring No.				
Deflection (mm)	33			
Percent Deflection				
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	7	Welded seams
Separation (mm)				
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		X	6	
Corrosion By Soil (Y/N)	No			
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): 1829, Type: SSP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

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		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **350**)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**80.9/76.4**	Est. Repl. Yr	2050	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	09-May-2014	Previous Inspection Date	23-Sep-2010		
Inspection Cycle (Default) (months)	21				
Comment					