Bridge Culvert Inspection

Bridge File Number	86083 -1 Bridge Culvert	Form Type	CULM
Year Built/Lined	2003/2003	Lot No.	4
Bridge or Town Name	HYTHE	Inspector Name	Russel Vanderschaaf
Located Over	WATERCOURSE, WATERCRS-NI	Inspector Class	BR CLS B
Located On	672:04 C1 4.641	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-May-2010
Legal Land Location	SE SEC 16 TWP 73 RGE 9 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-119:18:42, 55:18:58	Data Entry Date	10-Jun-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA05	Review Date	07-Jun-2010
Clear Roadway/Skew	9.2 / 4 deg. (RHF)	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,030 / 2009 (A)	Dept. Review Date	18-Aug-2010
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	-	1524	SSP	29.5		2.7	ROUND
2	MAIN FULL LINER	-	762	SPP	28			ROUND

Special Features	BARREL ELBOW
Special Features Comment	

Utilities (Located at)

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

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		9	9	
Roadway Width (m)	9.200			
Embankment		8	4	2.3m l x0.7m w x 0.6m d scour NW ditch.
Sideslope (__:1)	3.0			
(Height of Cover(m) : **1.5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type: Primary Span**)				
Direction		S		(South)
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**
(Pipe # : **1, Span Type: Primary Span**)				
Cutoff Wall		X	X	
Bevel End		N	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	380			
Scour Protection		N	9	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	9	
Beavers (Y/N)	No			
Upstream End General Rating		**9**	**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: SSP**)				
Barrel Last Accessible Date	11-May-2010			(West pipe)
Special Features				
Special Feature		X	X	
(Type : **BARREL ELBOW**)				
Special Feature				
(Type :)				
Roof		8	8	9m from inlet
Measured Rise (mm)	1488			
Measured At Ring No.				
Sag (mm)	36			
Percent Sag	3			
Sidewall		8	8	9m from inlet
Measured Span (mm)	1503			
Measured At Ring No.				
Deflection (mm)	21			
Percent Deflection	2			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
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	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: SSP**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type: Primary Span**)				
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		N	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	380			
Scour Protection		N	9	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	9	
Beavers (Y/N)	No			
Downstream End General Rating		**9**	**9**	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	9	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	9	
Beavers (Y/N)	No			
Upstream End General Rating		**9**	**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 762, Type: SPP**)				
Barrel Last Accessible Date				Too small. Rated as viewed from ends.
Special Features				
Special Feature		9	9	East pipe.
(Type : **BARREL ELBOW**)				
Special Feature				
(Type :)				
Roof		9	9	Est defl.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		9	9	Est defl.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
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	8	
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 # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 762, Type: SPP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	Elbow
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**9**	**9**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	380			
Scour Protection		N	9	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	9	
Beavers (Y/N)	No			
Downstream End General Rating		**9**	**9**	

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)				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) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**93.3/93.3**	Est. Repl. Yr	2048	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	Laurie McCarron	Previous Assistant's Name	Russel Vanderschaaf
Next Inspection Date	11-Aug-2013	Previous Inspection Date	11-Feb-2009
Inspection Cycle (Default) (months)	39		
Comment			