Bridge Culvert Inspection

Bridge File Number	08442 -2 Bridge Culvert	Form Type	CUL1
Year Built	2009	Lot No.	4
Bridge or Town Name	HYTHE	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO BEAVERLODGE RIVER, 8.10.58.18.8.1.11, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	672:02 C1 14.707	Assistant Class	
Water Body Cl./Year		Inspection Date	11-May-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 18 TWP 73 RGE 10 W6M	Data Entry Date	07-Jun-2010
Longitude, Latitude	-119:32:15, 55:18:58	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	07-Jun-2010
Contract Main. Area	CMA05	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	9 /	Dept. Review Date	19-Aug-2010
AADT/Year	960 / 2009 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3360	SP	35.97	152X51	4.2	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South R/W.	Gas	
Power	3 wire North R/W 20m from Cl	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Rge rd 110, 50m West
Vertical Alignment		9	9	
Roadway Width (m)	9.000			
Embankment		9	9	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **0.9**)				
Guardrail (Y/N)				
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	
Collar		9	9	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		9	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		9	9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		9	9	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion		9	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): 3360, Type: SP**)				
Barrel Last Accessible Date	11-Aug-2009			
Special Features				
Special Feature				Waater 2m from crown, could not access pipe, shape looks good from ends.
(Type :)				
Special Feature				
(Type :)				
Roof		9	N	carried over 11-Aug-2009
Measured Rise (mm)	3399			
Measured At Ring No.	2			
Sag (mm)	39			
Percent Sag	1			
Sidewall		9	N	carried over 11-Aug-2009
Measured Span (mm)	3329			
Measured At Ring No.	2			
Deflection (mm)	31			
Percent Deflection	1			
Floor		9	N	
Bulge (mm)				
Measured At Ring No.	2			
Abrasion (Y/N)	No			
Circumferential Seams		9	N	
Separation (mm)				
Longitudinal Seams		9	N	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				1N
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		9	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3360, Type: SP**)				
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		**9**	**N**	GR 9- 11-Aug-2009

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		9	9	
Collar		9	9	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		9	N	
Bevel End		9	9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1400			
Scour Protection		9	9	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion		9	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		9	9	
Bank Stability		9	9	
HWM (m below Top of Culvert)				No HWM 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		**9**	**9**	

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) (%)	**100.0/55.6**	**Sufficiency Rating (Last/Now) (%)**	**100.0/77.1**	Est. Repl. Yr	2054	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	Brian Pientsch	Previous Assistant's Name	Russel Vanderschaaf		
Next Inspection Date	11-Aug-2013	Previous Inspection Date	11-Aug-2009		
Inspection Cycle (Default) (months)	39				
Comment					