Bridge Culvert Inspection

Bridge File Number	80673 -1 Bridge Culvert	Form Type	CUL1
Year Built	1983	Lot No.	4
Bridge or Town Name	WAPITI	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO BALD MOUNTAIN CREEK, 8.10.58.18.3.2.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	40:42 C1 7.347	Assistant Class	
Water Body Cl./Year		Inspection Date	21-Aug-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 25 TWP 68 RGE 6 W6M	Data Entry Date	24-Sep-2012
Longitude, Latitude	-118:46:39, 54:54:39	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	23-Sep-2012
Contract Main. Area	CMA05	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	11.8 / 23 deg. (RHF)	Dept. Review Date	07-Jan-2013
AADT/Year	2,640 / 2011 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
Detour Length (km)	300		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1600	MP	45	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	At end of curve to the north, 4% grade to the south, good sight distance.
Vertical Alignment		7	7	
Roadway Width (m)	11.800			
Embankment		N	4	Scour at toe of west side slope from S. to invert for a length of 40 m, 1.0 m width, 0.5 m depth. Scour on the SE side invert 20 m by 1 m wide and 0.6 m deep. All appear stable. vegetated
Sideslope (__:1)	3.0			
(Height of Cover(m) : **2.4**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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		N	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		N	6	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP**)				
Barrel Last Accessible Date	21-Aug-2012			Accessed to CL only due to water height.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)	1521			near cl
Measured At Ring No.				
Sag (mm)	79			
Percent Sag	5			
Sidewall		6	6	
Measured Span (mm)	1670			near cl
Measured At Ring No.				
Deflection (mm)	70			
Percent Deflection	5			
Floor		N	N	Water/silt covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	U/S seam.
Separation (mm)	64			
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	4	Pitting rust visible first 20% of pipe.
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): 1600, Type: MP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**6**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		Water 0.7m from crown
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	900			
Scour Protection		N	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable
Beavers (Y/N)	No			
(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						
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) (%)	**66.7/66.7**	**Sufficiency Rating (Last/Now) (%)**	**67.5/67.4**	Est. Repl. Yr	2022	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	Russel Vanderschaaf	Previous Assistant's Name			
Next Inspection Date	21-May-2014	Previous Inspection Date	24-Nov-2010		
Inspection Cycle (Default) (months)	21				
Comment					