Bridge Culvert Inspection

Bridge File Number	75043 -1 Bridge Culvert	Form Type	CUL1
Year Built	1976	Lot No.	4
Bridge or Town Name	DEBOLT	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO DEBOLT CREEK, 8.10.58.17.2.1.1.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	736:02 C1 6.155	Assistant Class	
Water Body Cl./Year		Inspection Date	16-Sep-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NW SEC 25 TWP 72 RGE 1 W6M	Data Entry Date	29-Sep-2010
Longitude, Latitude	-118:01:33, 55:16:08	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	29-Sep-2010
Contract Main. Area	CMA05	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	8.5 /	Dept. Review Date	18-Nov-2010
AADT/Year	140 / 2009 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	12		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2100	SP	31.7	152X51	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West side	Gas	100 m north
Power	2 WIRE OH/15ME. OF C/L	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 300m S.
Vertical Alignment		8	8	
Roadway Width (m)	8.500			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **4**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		Water 1.65m below crown - no evident problems.
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)	45			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		5	5	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		5	5	
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): , Rise (mm): 2100, Type: SP**)				
Barrel Last Accessible Date	01-Mar-2004			Water 1.65 below crown- Shape looks good from ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	10			
Percent Sag				
Sidewall		7	7	(@ c/l, span 2130mm - 2004/03/01)
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	10			
Percent Deflection				
Floor		N	N	
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)	No			
Coating		N	N	(Some pitting bottom 1/3 & soil - 2004/03/01)
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			1m deep ponding.

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2100, Type: SP**)				
Fish Passage Adequacy		5	5	
Baffle		N	N	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**N**	GR 7 -01-Mar-2004

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		Water 1.55m below crown. No evident problems.
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)	45			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		5	5	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**5**	

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 Dam 15m D/S
Beavers (Y/N)	Yes			
(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) (%)	**77.8/55.6**	**Sufficiency Rating (Last/Now) (%)**	**70.5/60.7**	Est. Repl. Yr	2019	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	Eric Carcoux	Previous Assistant's Name	
Next Inspection Date	16-Dec-2013	Previous Inspection Date	27-May-2007
Inspection Cycle (Default) (months)	39		
Comment			