Bridge Culvert Inspection

Bridge File Number	82296 -1 Bridge Culvert	Form Type	CUL1
Year Built	2000	Lot No.	2
Bridge or Town Name	WHITECOURT	Inspector Name	Kris Bosters
Located Over	WATERCOURSE, WATERCRS-NI	Inspector Class	BR CLS A
Located On	LOCAL ROAD	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	BR CLS B
Navigabil. Cl./Year		Inspection Date	18-Apr-2013
Legal Land Location	NW SEC 14 TWP 61 RGE 15 W5M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-116:09:00, 54:16:48	Data Entry Date	24-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	UNDEFINED CMA	Review Date	21-Apr-2013
Clear Roadway/Skew	8 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	100 / 2013 (E)	Dept. Review Date	01-May-2013
Road Classification	RLU-208G-60	Follow-Up By	
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	MAIN	-	2700	MP	37	125X26	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North r/w.	Gas	
Power	7 wires North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag installed @ top of South end roof.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	South service road. Curves each way.
Vertical Alignment		8	8	
Roadway Width (m)	8.000			
Embankment		8	8	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **2.1**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream 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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	And field stones.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP**)				
Barrel Last Accessible Date	21-May-2008			Ice and running water approx 1.2m deep
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	(Gravel on floor - est. - May 21.2008) Viewed from ends, shape looks good
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	10			
Percent Sag				
Sidewall		8	N	At c/l.
Measured Span (mm)	2700			
Measured At Ring No.				
Deflection (mm)	10			
Percent Deflection	0			
Floor		N	N	(Rocks & 0.7m deep water. - May 21/2008)
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	
Separation (mm)	25			
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)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP**)				
Fish Passage Adequacy		7	7	
Baffle		6	N	(Large boulders, groups of 2 - photo. - May 21/2008)
(Type : **LARGE BOULDER**)				
Waterway Adequacy		8	8	Approx 0.5 ice buildup, up to half barrel depth
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**N**	Last rated 8 on May 21/2008

Downstream 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 :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	8	And field stones.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	Gentle curve D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
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	2013	Update BF map to show proper location				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**88.9/55.6**	**Sufficiency Rating (Last/Now) (%)**	**88.8/73.0**	Est. Repl. Yr	2053	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	Not at proper location. Immediately d/s of 82504 E +W	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	Dave Lam	Previous Assistant's Name	
Next Inspection Date	18-Jan-2018	Previous Inspection Date	21-May-2008
Inspection Cycle (Default) (months)	57		
Comment			