Bridge Culvert Inspection

Bridge File Number	74335 -2 Bridge Culvert	Form Type	CUL1
Year Built	2000	Lot No.	4
Bridge or Town Name	MORNINGSIDE	Inspector Name	Jason Saly
Located Over	TRIBUTARY TO WOLF CK, 5.56.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	2A:22 C1 6.691	Assistant Class	
Water Body Cl./Year		Inspection Date	23-Nov-2011
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	SE SEC 14 TWP 42 RGE 26 W4M	Data Entry Date	21-Dec-2011
Longitude, Latitude	-113:37:31, 52:36:31	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	15-Dec-2011
Contract Main. Area	CMA17	Dept. Reviewer Name	Andrew Smikles
Clear Roadway/Skew	13.4 /	Dept. Review Date	09-Jan-2012
AADT/Year	4,840 / 2010 (A)	Follow-Up By	
Road Classification	RAU-213.4-110		
Detour Length (km)	4		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2000	MP	35.8	125X26	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East r/w.	Gas	50m North.
Power	6 wire 20m East.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 40m North.
Vertical Alignment		8	8	
Roadway Width (m)	13.000			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **1.8**)				
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 :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		N	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **350**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2000, Type: MP**)				
Barrel Last Accessible Date	23-Nov-2011			
Special Features				
Special Feature				2 grout pipes under roadway section of pipe.
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Unable to measure due to ice.
Measured Rise (mm)	1990			
Measured At Ring No.	3			
Sag (mm)	10			
Percent Sag	1			(0.5% - from unknown date).
Sidewall		8	8	Span at W end=2020=20mm Span at Midpipe=2020=20mm=1.0% Span at E end=2015=15mm
Measured Span (mm)	2020			
Measured At Ring No.				
Deflection (mm)	20			
Percent Deflection	1			
Floor		N	N	Ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	20			
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		6	6	Coating beginning to discolour below water.
Corrosion By Soil (Y/N)	No			
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): 2000, Type: MP**)				
Fish Passage Adequacy		7	7	
Baffle		7	N	Ice covered.
(Type : **WEIR**)				
Waterway Adequacy		8	8	
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**
Direction		E		
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)	500			
Scour Protection		N	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	Lines up with culvert under railway.
Bank Stability		8	8	
HWM (m below Top of Culvert)	1.0			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	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) (%)**	**87.3/86.1**	Est. Repl. Yr	2055	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	Owen Salava	Previous Assistant's Name			
Next Inspection Date	23-Aug-2013	Previous Inspection Date	02-Mar-2010		
Inspection Cycle (Default) (months)	21				
Comment					