Bridge Culvert Inspection

Bridge File Number	81571 -1 Bridge Culvert	Form Type	CUL1
Year Built	1991	Lot No.	4
Bridge or Town Name	ALIX	Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	11:16 C1 28.940	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	13-Feb-2012
Legal Land Location	SE SEC 8 TWP 39 RGE 22 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:07:57, 52:19:56	Data Entry Date	08-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA20	Review Date	29-Feb-2012
Clear Roadway/Skew	12.2 / 0 deg.	Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,420 / 2010 (A)	Dept. Review Date	09-Mar-2012
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	26	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)		No									
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Not required.										

Utilities (Located at)

Utility Attachments			
Telephone	South r/w.	Gas	
Power	3 wires 30m north r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	No passing eastbound.
Vertical Alignment		7	7	
Roadway Width (m)	12.200			Transverse crack in ACP 6m West of pipe.
Embankment		5	5	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1.3**)				
Guardrail (Y/N)	Yes			Minor accident damage to SW guardrail/post, no action. Last splice @ NW & SE corners improper lap.
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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	5	Mower damage to roof at bevel.
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		X	6	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	6	
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): 2200, Type: MP**)				
Barrel Last Accessible Date	13-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Could not measure rise due to gravel along the floor.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	10			0.5% roof sag estimated.
Percent Sag	1			
Sidewall		7	7	Span at S end=2208=8mm Span at Midpipe=2220=20mm=0.9% Span at N end=2215=15mm
Measured Span (mm)	2220			
Measured At Ring No.				
Deflection (mm)	20			0.9%
Percent Deflection	1			
Floor		N	N	Covered by gravel.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Minor infiltration West wall of South seam.
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)				

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP**)				
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

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		5	5	Mower damage top edge.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		X	6	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	6	
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**5**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		8	8	
Roadway Surface		8	8	
(Type : **GRAVEL**)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type	None			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Lighting		X	X	
Barrel Leakage (Y/N)	Yes			Minor infiltration near South end, West wall South seam.
Drainage		3	4	Low spot @ S end, (previous ponding noted - photo. 29Mar2010).
Structure In Use (Y/N)	Yes			
Grade Separation General Rating		**3**	**4**	

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) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**75.4/76.1**	Est. Repl. Yr	2039	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)	N
Proposed Action	2007.05.21 Revisit site again in two years to determine continued usage. Brownlee & Associates

Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
Next Inspection Date	13-Nov-2013	Previous Inspection Date	29-Mar-2010
Inspection Cycle (Default) (months)	21		
Comment			