Bridge Culvert Inspection

Bridge File Number	81710 -1 Bridge Culvert	Form Type	CUL1
Year Built	1991	Lot No.	4
Bridge or Town Name	NEVIS	Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	11:16 C1 32.058	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	13-Feb-2012
Legal Land Location	SW SEC 3 TWP 39 RGE 22 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:05:30, 52:19:21	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	16 / 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	32	68X13	3.5	ROUND
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)												
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		Gas	
Power		Municipal	
Others	Fibre optics crosses road to W.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	8	Uphill grade to West. No passing WB, passing lane WB.
Vertical Alignment		7	7	
Roadway Width (m)	16.000			
Embankment		6	6	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **1.7**)				
Guardrail (Y/N)	Yes			
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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		4	4	Roof of bevel torn by mower; no action required.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		X	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	7	
Beavers (Y/N)	No			
Upstream End General Rating		**4**	**4**	

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		8	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	50			Est. 2.3%
Percent Sag				
Sidewall		7	7	Span at S end=2133=67mm=3.0% Span at Midpipe=2142=58mm Span at N end=2148=52mm
Measured Span (mm)	2133			
Measured At Ring No.				
Deflection (mm)	67			
Percent Deflection	3			
Floor		N	N	Covered by gravel.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	60			
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		4	4	Culvert exterior corrosion visible at ends.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP**)				
Camber POS/ZERO/NEG	ZERO			
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		8	8	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		X	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	7	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**7**	

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			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Drainage		7	7	
Structure In Use (Y/N)	Yes			
Grade Separation 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) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**80.8/79.8**	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					