Bridge Culvert Inspection

Bridge File Number	00771 -1 Bridge Culvert	Form Type	CUL1
Year Built	1993	Lot No.	4
Bridge or Town Name	LEAVITT	Inspector Name	Jason Rusu
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	5:02 C1 24.031	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Oct-2011
Legal Land Location	NW SEC 26 TWP 2 RGE 27 W4M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-113:30:31, 49:09:19	Data Entry Date	21-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA25	Review Date	09-Nov-2011
Clear Roadway/Skew	12.6 /	Dept. Reviewer Name	Tim Davies
AADT/Year	1,290 / 2010 (A)	Dept. Review Date	25-Nov-2011
Road Classification	RAU-211.8-110	Follow-Up By	
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	-	2200	MP	38	75X25	2.8	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)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not req.										

Utilities (Located at)

Utility Attachments			
Telephone	South r/w	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	800 mm CSP 10 m west.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	800 m east of BF #516.
Vertical Alignment		6	6	E bound no passing - rises to the E
Roadway Width (m)	12.600			
Embankment		6	6	Berm on north side.
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1.3**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		NORTH END
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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	

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	28-Oct-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Upward.
Measured Rise (mm)	2260			
Measured At Ring No.				Est
Sag (mm)	60			
Percent Sag	3			
Sidewall		7	7	Minor const. dents
Measured Span (mm)	2140			
Measured At Ring No.	3			
Deflection (mm)	60			inward
Percent Deflection	3			
Floor		N	N	DIRT COVERED - 200 mm DP
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	MINOR DAMAGE @ ROOF @ S @ last seam
Separation (mm)	30			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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	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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		X	X	90 degree turn 5.0m north.
Roadway Surface		7	7	
(Type :)				
Icing (Y/N)	No			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		7	7	800 mm pipe takes local runoff.
Structure In Use (Y/N)	No			Fence around the south end gone
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) (%)**	**82.0/82.0**	Est. Repl. Yr	2033	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	Garry Roberts	Previous Assistant's Name			
Next Inspection Date	28-Jul-2013	Previous Inspection Date	18-Oct-2009		
Inspection Cycle (Default) (months)	21				
Comment					