Bridge Culvert Inspection

Bridge File Number	82037 -1 Bridge Culvert	Form Type	CUL1
Year Built	1995	Lot No.	4
Bridge or Town Name		Inspector Name	Garry Roberts
Located Over	RAMP 3133-1 A	Inspector Class	BR CLS A
Located On	1A:06 C1 15.808	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	06-Sep-2012
Legal Land Location	NE SEC 2 TWP 26 RGE 4 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-114:27:07, 51:11:28	Data Entry Date	03-Oct-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Joel Wozney
Contract Main. Area	CMA28	Review Date	21-Sep-2012
Clear Roadway/Skew	18 / 45 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	14,680 / 2011 (A)	Dept. Review Date	11-Oct-2012
Road Classification	RFD-412.4-130	Follow-Up By	
Detour Length (km)			

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	6000	5500	BP	12			RECTANGLE
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)				Yes								
Posted:	Lane	NB	On Bridge (m)	5.5	In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Carries N/B traffic only											

Utilities (Located at)

Utility Attachments			
Telephone	In area.	Gas	
Power		Municipal	Light standards.
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Downhill Grade to Cochrane.
Vertical Alignment		7	7	
Roadway Width (m)	18.000			
Embankment		7	7	
Sideslope (__:1)	10.0			
(Height of Cover(m) : **3**)				
Guardrail (Y/N)	Yes			Concrete parapets and bridge rail outside of guardrail.
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		South.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Wingwalls		6	7	M.S.E Walls. 3 panels at SW with minor cracks at bottom corners.
(Shape : **FLARE**)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		X	X	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 6000, Rise (mm): 5500, Type: BP**)				
Barrel Last Accessible Date	06-Sep-2012			
Special Features				
Special Feature				Safety rail.
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Minor cracks and efflorescence @ mid span. Construction joint @ roof and sidewalls @ midspan.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		7	7	Isolated vertical cracking.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		8	8	Asphalt.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	2 construction joints.
Separation (mm)	4			
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		7	7	
Corrosion By Soil (Y/N)	No			
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): 6000, Rise (mm): 5500, Type: BP**)				
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		N		North.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		8	8	M.S.E. Walls
(Shape : **FLARE**)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	Class 1 @ NE @ entire slope where it is concave and prone to erosion.
(Type :)				
(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		5	5	Curves @ both ends
Roadway Surface		7	7	6m road through structure @ oneway N/B
(Type : **ACP**)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		4	7	Lights not working.
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Drainage		8	8	
Structure In Use (Y/N)	Yes			
Grade Separation General Rating		**5**	**5**	

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) (%)**	**76.8/77.9**	Est. Repl. Yr	2062	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	06-Jun-2014	Previous Inspection Date	24-Nov-2010
Inspection Cycle (Default) (months)	21		
Comment			