Bridge Culvert Inspection

Bridge File Number	73762 -1 Bridge Culvert	Form Type	CUL1
Year Built	1988	Lot No.	4
Bridge or Town Name	BEISEKER	Inspector Name	Jon Davies
Located Over	TRIBUTARY TO ROSEBUD RIVER, 3.33.17, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	9:02 C1 43.573	Assistant Class	
Water Body Cl./Year		Inspection Date	26-Nov-2011
Navigabil. Cl./Year		Data Entry By	Anne Roberts
Legal Land Location	NE SEC 12 TWP 28 RGE 26 W4M	Data Entry Date	21-Dec-2011
Longitude, Latitude	-113:31:35, 51:22:52	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	05-Dec-2011
Contract Main. Area	CMA29	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	10.1 / 0 deg.	Dept. Review Date	10-Jan-2012
AADT/Year	2,820 / 2010 (A)	Follow-Up By	
Road Classification	RAU-209-110		
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	8249	4124	RPA	23.7	152X51	5.0,5.0,4.0	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West R/W	Gas	
Power		Municipal	
Others	Fibre optic cable East ROW	Problem (Y/N)	No
Remarks	800 mm diameter water pipe running through culvert.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Gas station turnout 80 m south.
Vertical Alignment		7	7	
Roadway Width (m)	12.200			
Embankment		8	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **0.5**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	7	Conduit through headwall Minor shrinkage cracks & wide cracks @ S @ W end
Collar		7	6	
Wingwalls		8	7	
(Shape : **FLARE**)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		5	6	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		5	6	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 8249, Rise (mm): 4124, Type: RPA**)				
Barrel Last Accessible Date	26-Nov-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	7	Roof shape is good
Measured Rise (mm)	4124			
Measured At Ring No.				Estimate
Sag (mm)	0			
Percent Sag	0			
Sidewall		N	7	
Measured Span (mm)	8213			
Measured At Ring No.	3			Inward
Deflection (mm)	36			
Percent Deflection	0			
Floor		N	N	1200 mm of ice with silt through out.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				1N at sidewall and 3N at roof.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	6	Efflorescent staining on roof & side-wall at isolated areas.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 8249, Rise (mm): 4124, Type: RPA**)				
Fish Passage Adequacy		5	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**N**	**7**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	7	
Collar		7	7	Hariline cracks -shrinkage.
Wingwalls		8	7	
(Shape : **FLARE**)				
Cutoff Wall		N	N	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		5	6	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **350**)				
Scour/Erosion		5	6	
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel 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) (%)	**55.6/77.8**	**Sufficiency Rating (Last/Now) (%)**	**67.0/73.2**	Est. Repl. Yr	2046	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	Rex Davidson	Previous Assistant's Name	
Next Inspection Date	26-Aug-2013	Previous Inspection Date	25-May-2010
Inspection Cycle (Default) (months)	21		
Comment			