Bridge Culvert Inspection

Bridge File Number	81256 -1 Bridge Culvert	Form Type	CUL1
Year Built	1989	Lot No.	3
Bridge or Town Name	BEISEKER	Inspector Name	Garry Roberts
Located Over	CROSSFIELD CREEK, 3.33.20, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	791:06 C1 0.203	Assistant Class	
Water Body Cl./Year		Inspection Date	17-Jul-2012
Navigabil. Cl./Year		Data Entry By	Kelsey Roberts
Legal Land Location	SE SEC 14 TWP 28 RGE 28 W4M	Data Entry Date	23-Aug-2012
Longitude, Latitude	-113:49:49, 51:23:20	Reviewer Name	Ash Morjaria
Road Authority	Alberta Transportation (AIT)	Review Date	28-Jul-2012
Contract Main. Area	CMA29	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	9.6 /	Dept. Review Date	24-Aug-2012
AADT/Year	550 / 2011 (A)	Follow-Up By	
Road Classification	RAU-209-110		
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	7903	5623	RPE	46.3	152X51	5.0,5.0,5.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	WEST SIDE	Gas	
Power	100M N-1 W & E	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	STOP SIGN AND INTERSECTION 200 M SOUTH
Vertical Alignment		7	6	HILL TO NORTH Located in curve
Roadway Width (m)	9.600			
Embankment		8	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **3.1**)				
Guardrail (Y/N)	Yes			Minor damage @ both sides. 3 split guardrail posts 10 m N. of pipe @ west
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		West
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	7	Minor spall at South collar, isolated transverse tracks.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Submerged

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **500**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 7903, Rise (mm): 5623, Type: RPE**)				
Barrel Last Accessible Date	01-Mar-2003			Barrel not accessible due to deep water.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	Viewed from ends - roof lines appear good. Too large to measure
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	150			
Percent Sag	2			
Sidewall		N	N	Viewed from ends - lines appear good.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	223			
Percent Deflection				
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	N	SOME MINOR ALKALI ON ROOF - BOLTS
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 7903, Rise (mm): 5623, Type: RPE**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**N**	**N**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		East
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		7	7	Minor spalls and map cracking at North
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Submerged
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	Settled along both collars
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

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	NONE			
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	2013	Replace - TT guardrail + 3 posts				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**67.8/66.6**	Est. Repl. Yr	2046	Maint. Reqd. (Y/N)	Yes

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	17-Oct-2015	Previous Inspection Date	17-May-2009
Inspection Cycle (Default) (months)	39		
Comment			