

Bridge Culvert Inspection			
Bridge File Number	77482 -1 Bridge Culvert	Form Type	CUL1
Year Built	1973	Lot No.	2
Bridge or Town Name	KANANASKIS	Inspector Name	Garry Roberts
Located Over	PORCUPINE CREEK, 2.13.56.3, WATERCRS-ST	Inspector Class	BR CLS A
Located On	40:12 C1 33.609	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Mar-2013
Legal Land Location	NE SEC 20 TWP 23 RGE 8 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-115:04:58, 50:58:40	Data Entry Date	11-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA28	Review Date	10-Apr-2013
Clear Roadway/Skew	11.2 /	Dept. Reviewer Name	Tim Davies
AADT/Year	1,690 / 2012 (A)	Dept. Review Date	06-May-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	50		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4570	SP	65.8	152X51	5.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w & East r/w.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Built over a curve, limited sight distance.
Vertical Alignment	6	6	
Roadway Width (m)	11.200		
Embankment	7	7	4:1 @ West.
Sideslope (__:1)	3.0		
(Height of Cover(m) : 3.4)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	X	X	
Collar	5	4	Repaired but voids still remain that extend under collar and bevel.
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	Bevel is pushing 400mm.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		5	4	Voids under collar and both sides of bevel.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		5	4	
Beavers (Y/N)	No			
Upstream End General Rating		5	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4570, Type: SP)				
Barrel Last Accessible Date	27-Mar-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Not measured due to rock in barrel.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		5	5	Sidewalls have heavy corrosion to midpoint- worst at West side.
Measured Span (mm)	4395			
Measured At Ring No.	7			
Deflection (mm)	175			
Percent Deflection	4			
Floor		N	N	Rock covered average 460mm deep. Multiplate section laying in R7-not causing problems at present but should be removed? @ both sidewalls and haunches.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		6	6	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	Some pitting & scaling @ sidewalls. Soil corrosion at upper seams.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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): , Rise (mm): 4570, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		5	5	Rocks act as baffles.
(Type :)				
Waterway Adequacy		6	6	Rock and silt to 460mm.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Concrete with rock inlayed.
Collar		7	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	8	Some 1000mm rock D/S 6m.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	90 degree cut bank @ NW bank, vertical banks @ u/s.
HWM (m below Top of Culvert)				No visible HWM.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			@ U/S.
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	2014	Repair voids at U/S bevel and collar approx 5m3 grout.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2014	Remove plate section in R7.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	56.7/55.6	Est. Repl. Yr	2025	Maint. Req. (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	27-Dec-2014		Previous Inspection Date	25-May-2011			
Inspection Cycle (Default) (months)	21						
Comment							