

Bridge Culvert Inspection			
Bridge File Number	77483 -1 Bridge Culvert	Form Type	CULM
Year Built	1973	Lot No.	4
Bridge or Town Name	KANANASKIS	Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO KANANASKIS RIVER, 2.13.56.5, WATERCRS-ST	Inspector Class	BR CLS A
Located On	40:12 C1 30.932	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	01-Apr-2013
Legal Land Location	SW SEC 19 TWP 23 RGE 8 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-115:06:59, 50:58:01	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	11.7 / -45 deg. (LHF)	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	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1738	1920	SPE	61.6	152X51	3.0	ELLIPSE
2	MAIN	1738	1920	SPE	35.4	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Both ROW.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	Located in a curve - 300 m limited sight distance.
Vertical Alignment	7	7	
Roadway Width (m)	11.700		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 1)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	5	5	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	E		East end North pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
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): 1738, Rise (mm): 1920, Type: SPE)				
Barrel Last Accessible Date	01-Apr-2013			North pipe - 45 deg lhf.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Upward.
Measured Rise (mm)	1970			
Measured At Ring No.	5			
Sag (mm)	50			
Percent Sag	2			
Sidewall		6	5	Inward. Due to bolt tipping.
Measured Span (mm)	1660			
Measured At Ring No.	9			
Deflection (mm)	78			
Percent Deflection	4			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		5	5	May have been over torqued. Not causing problems at this time. Bolts are marked. Approx 46 scattered bolt heads on South sidewall seam are tipped and pulled into steel.
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		6	6	Some alkali at bolts at 1/5 L.
Corrosion By Soil (Y/N)	Yes			
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): 1738, Rise (mm): 1920, Type: SPE)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	Also used by wildlife.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	Dry.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		W		North pipe.
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/Below (mm)	0			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		E		South pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
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 # : 2, Secondary Span, Location Code: MAIN, Span (mm): 1738, Rise (mm): 1920, Type: SPE)				
Barrel Last Accessible Date	01-Apr-2013			South barrel.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Upward.
Measured Rise (mm)	1970			
Measured At Ring No.	5			
Sag (mm)	50			
Percent Sag	2			
Sidewall		7	7	Inward.
Measured Span (mm)	1670			
Measured At Ring No.	5			
Deflection (mm)	68			
Percent Deflection	3			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
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		6	6	Some alkali at bolts at 1/5 L. Minor superficial corrosion and storage stains.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 1738, Rise (mm): 1920, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	Also used by wildlife.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	Dry.
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
(Pipe # : 2, Span Type: Secondary Span)				
Direction		W		West end, South pipe.
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/Below (mm)	0			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		8	8	
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	No defined channel.
Bank Stability		8	8	
HWM (m below Top of Culvert)				Hwm not visible.
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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	63.3/63.2	Est. Repl. Yr	2031	Maint. Req. (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	01-Jan-2015		Previous Inspection Date	25-May-2011			
Inspection Cycle (Default) (months)	21						
Comment							