

Bridge Culvert Inspection				
Bridge File Number	71623 -1 Bridge Culvert		Form Type	CUL1
Year Built	1972		Lot No.	4
Bridge or Town Name	HIGH RIVER		Inspector Name	Jon Davies
Located Over	TRIBUTARY TO TONGUE CREEK, 2.13.27.5.2, WATERCRS-ST		Inspector Class	BR CLS B
Located On	543:02 C1 20.405		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	24-Jan-2013
Legal Land Location	SW SEC 15 TWP 19 RGE 29 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-113:56:38, 50:36:04		Data Entry Date	21-Feb-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA27		Review Date	03-Feb-2013
Clear Roadway/Skew	8.1 /		Dept. Reviewer Name	Tim Davies
AADT/Year	2,520 / 2011 (A)		Dept. Review Date	04-Mar-2013
Road Classification	RCU-208-110		Follow-Up By	
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	1879	1754	MPE	29.3	68X13	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	South ditch	Gas		
Power	South ROW and crossing	Municipal		
Others	Fibre optic cable at north ROW	Problem (Y/N)	No	
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	S curves to West Hill to East
Vertical Alignment		6	6	
Roadway Width (m)	8.100			
Embankment		7	5	
Sideslope (__:1)	2.0			
(Height of Cover(m) : 2.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		South
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
Bevel End		5	4	Bevel end damaged. Moderate sloped edge deformation and tears.
Heaving (mm)	150			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	150			
Scour Protection		6	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		8	5	
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): 1879, Rise (mm): 1754, Type: MPE)				
Barrel Last Accessible Date	24-Jan-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	Horizontal and vertical misalignment of all barrel sections, possibly since construction.
Measured Rise (mm)	1763			
Measured At Ring No.	2			
Sag (mm)	9			
Percent Sag	1			
Sidewall		5	5	Bulging @ u/s and d/s sidewall. R2 sidewall bulge 600 mm is worst location.
Measured Span (mm)	1900			
Measured At Ring No.	2			
Deflection (mm)	21			
Percent Deflection	1			
Floor		5	5	Est. Accurate measurement difficult due to uneven floor.
Bulge (mm)	100			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	seam separation 200 mm at R3 to north bevel floor.
Separation (mm)	200			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		6	6	Superficial corrosion on floor
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1879, Rise (mm): 1754, Type: MPE)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	6	Minor drift ingrown at u/s invert.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	Large scour hole (5mx5m) filled with rock
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		8	7	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
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) (%)	60.7/56.9	Est. Repl. Yr	2020	Maint. Req'd. (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	24-Apr-2016		Previous Inspection Date	27-Nov-2009			
Inspection Cycle (Default) (months)	39						
Comment							