

Bridge Culvert Inspection				
Bridge File Number	74483 -1 Bridge Culvert		Form Type	CUL1
Year Built	1955		Lot No.	4
Bridge or Town Name	NANTON		Inspector Name	Garry Roberts
Located Over	RICKMAN CREEK, 2.12.25.19, WATERCRS-ST		Inspector Class	BR CLS A
Located On	533:02 C1 8.287		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-May-2010
Legal Land Location	SE SEC 4 TWP 15 RGE 1 W5M		Data Entry By	Erin Roberts
Longitude, Latitude	-114:04:44, 50:13:28		Data Entry Date	15-Jul-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA27		Review Date	02-Jun-2010
Clear Roadway/Skew	11 / -30 deg. (LHF)		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	1,040 / 2009 (A)		Dept. Review Date	23-Jul-2010
Road Classification	RCU-209-110		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	1735	1920	SPE	55.5	152X51	2.8,2.8,2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	north ditch	Gas		
Power		Municipal		
Others	Fibre optic-south ditch	Problem (Y/N)	No	
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	7	
Vertical Alignment		7	7	
Roadway Width (m)	9.000			
Embankment		8	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 7.4)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		North invert
End Treatment (Concrete, Steel, Others, None)	STEEL			Bevel installed with a steep slope
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	5	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		6	6	Grassed In (piping along first 3 rings & leaking through bolt holes)
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1735, Rise (mm): 1920, Type: SPE)				
Barrel Last Accessible Date	16-May-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Rings are numbered incorrectly.
Measured Rise (mm)	1935			
Measured At Ring No.	9			Upward
Sag (mm)	15			
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	1770			
Measured At Ring No.	9			
Deflection (mm)	35			
Percent Deflection	2			
Floor		N	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	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)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	SOME SUPERFICIAL RUST
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): 1735, Rise (mm): 1920, Type: SPE)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
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
Direction		S		south
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			
Above/Below (mm)	300			
Scour Protection		5	5	Scour hole is armoured Grassed in
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		7	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		6	7	
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			In D/S channel
Beavers (Y/N)	Yes			
(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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	72.9/70.5	Est. Repl. Yr	2025	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	16-Aug-2013		Previous Inspection Date	16-Jan-2007			
Inspection Cycle (Default) (months)	39						
Comment							