

Bridge Culvert Inspection				
Bridge File Number	73805 -1 Bridge Culvert		Form Type	CUL1
Year Built	1984		Lot No.	4
Bridge or Town Name	GLEICHEN		Inspector Name	Jon Davies
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS B
Located On	1:14 R1 28.526;1:14 L1 28.549		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Feb-2012
Legal Land Location	SE SEC 25 TWP 22 RGE 23 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-113:03:40, 50:53:52		Data Entry Date	18-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA30		Review Date	27-Feb-2012
Clear Roadway/Skew	25.4 / -15 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	5,940 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	61	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)	No										
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not required.										

Utilities (Located at)

Utility Attachments											
Telephone	South R/W.					Gas					
Power						Municipal					
Others	Fibre optic @ North R/W.					Problem (Y/N)	No				
Remarks											

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Crest curve to east.
Vertical Alignment		7	7	
Roadway Width (m)	25.400			
Embankment		8	8	4:1 @ South.
Sideslope (___:1)	3.0			Top of pipe exposed in median.
(Height of Cover(m) :)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		North.
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) :)		7	7	
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): , Rise (mm): 2400, Type: MP)				
Barrel Last Accessible Date	11-Feb-2012			1200mm CSP 10 m West with manhole riser @ median.
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		5	5	End of barrel on North bent on roof and West side. 200 mm.
Measured Rise (mm)	2430			
Measured At Ring No.	4			Estimate.
Sag (mm)	30			
Percent Sag	1			
Sidewall		5	5	One area has punched through and is patched from inside. End of Ring 2.
Measured Span (mm)	2455			
Measured At Ring No.	4			
Deflection (mm)	55			
Percent Deflection	2			
Floor		N	N	Dirt up to 300mm deep.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	First section to South does not fit properly with other sections - oakum used.
Separation (mm)	60			
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		4	4	Pitting @ midspan in roof. Moderate corrosion at exposed roof at ends and at lower sidewall.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	Also handles drainage.
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
Direction		S		South.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	
Roadway Surface		5	5	
(Type : SOIL)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	Yes			

Structure Usage				
		Last	Now	Explanation of Condition
Drainage		4	4	Grade of dirt in barrel will not allow drainage.
Structure In Use (Y/N)	No			Guide fencing broken @ North end. 2 posts leaning & 2 broken rails.
Grade Separation General Rating		4	4	

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) (%)	64.0/64.0	Est. Repl. Yr	2022	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	11-Nov-2013		Previous Inspection Date	20-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							