				sriag	idge Culvert Inspection			CULM					
Bridge File Number 73578 -1 Bridge Culvert Year Built 1953			π			Form Type							
						Lot No.		Ion Davisa					
Bridge or Town Name GLEICHEN Located Over TRIBUTARY TO BOW RIVER, 2			DIVED 2	12 16	<u> </u>	Inspector Name			Jon Davies BR CLS B				
WATERCRS-ST				.13.16, Inspector Class Assistant Name			DK CLS B						
Located On 1:14 R1 35.218;1:14 L1 35.212				Assistant N									
Water Body Cl./Year							Inspection Date			11-Feb-2012			
Navigabil. Cl./	⁄ear						Data Entry By			Lauren Korte			
Legal Land Lo	cation	SE SEC	C 16 TWP 22 R	GE 22 W4N	Л		Data Entry			18-Mar-2012			
Longitude, Lati	itude	-112:59	:35, 50:51:49				Reviewer			Garry Roberts	.		
Road Authority	<u>'</u>	Alberta	Transportation	(AIT)				Review Date 27-Feb-2012					
Contract Main.	Area	CMA30	<u> </u>				Dept. Reviewer Name Tim Davies						
Clear Roadway/Skew 25 / 5 deg. (RHF)						Dept. Review Date		22-Mar-2012					
		['] 2010 (A)			Follow-Up By		22-1VId1-2012						
Road Classification RAD-41			2.4-120				- Silow op by						
Detour Length (km) 1													
Bridge Culvert Information													
Number of Cul		2			. , _								
Pipe #	Barrel	Span		Rise (or Dia.)		Туре	Le	ngth		Corr. Profile	Pl./Slab Thickness	Shape	
1	MAIN	_ 10		1219	219		66	.8		68X13	2.8	ROUND	
2	MAIN			1219		MP MP	66			68X13	2.8	ROUND	
Special Featur				1210		14.11	00.0		00/110	12.0	INCOME		
Special Featur		ment											
opena. r cata.													
					Uti	lities (L	Located at)						
Utility Attachm	ents												
Telephone South ROW.						Gas							
Power						Municipal							
Others Fibre optics North ROW.						Problem (Y/N)	No					
Remarks													
A							d / Embank		0!!				
Horizontal Alignment			L	. ast 8	Now 7	Intersection at West.							
Horizontal Alignment			8	8	_ intersection at west.								
Vertical Alignment		25.400		0	0								
Roadway Width (m)		20.400											
Embankment			8		8								
Sideslope (:1) 4.0													
(Height of Cover(m) : 2)													
Guardrail (Y/N)		No											
Approach Road / Embankment General Rating		ing	8	7									
Approach Road / Embankment General Rating													
							am End		0				
	on '					Marro				lian			
Culvert Comp		n. Dei	ury Coon)	L	.ast	Now	Explanation	on of	Conai	tion			
Culvert Comp (Pipe # : 1, Sp		e: Prima	nry Span)			Now			Conar	tion			
Culvert Comp (Pipe # : 1, Sp Direction End Treatment	an Typ			L		Now	West pipe		Condi	ion			
Culvert Comp (Pipe # : 1, Sp Direction	an Typ					Now			Condi	iion			
Culvert Comp (Pipe # : 1, Sp Direction End Treatment Others, None)	an Typ				N				Condi	iion			
Culvert Comp (Pipe # : 1, Sp Direction End Treatment Others, None) Headwall	an Typ				X	X			Condi	iion			

73578 -1 Bridge Culvert

Culvert Component
Cluf Vall
Cutoff Wall
Bevel End
Heaving (mm)
Invert Above/Below Stream Bed
Above/Below (mm) 200
Scour Protection
(Type : RIP RAP)
Cavg. Rock Size(mm) : 200
Scour/Erosion 7 7 Beavers (Y/N) No Upstream End General Rating 7 7 Bridge Culvert Barrel Culvert Component
Beavers (Y/N) No Upstream End General Rating 7 7 End ge Culvert Barrel Culvert Component Explanation of Condition (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): Rise (mm): 1219, Type: MP) Barrel Last Accessible Date 11-Jul-2012 Not bridge size. Special Features Special Feature (Type :) Special Feature (Type :) Roof 6 6 6 Measured Rise (mm) 1156 Measured At Ring No. 3 Sag (mm) 63 Percent Sag 5 Sidewall 6 5 D/S has minor horizontal misalignment. Measured At Ring No. 3 Sidewall 1263 Measured At Ring No. 3 Estimate. Estimate. Estimate.
Upstream End General Rating Tolda
Bridge Culvert Barrel Culvert Component (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): Rise (mm): 1219, Type: MP) Barrel Last Accessible Date 11-Jul-2012 Not bridge size. Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Fercent Sag Sidewall Measured Span (mm) Measured Span (mm) Measured Span (mm) Measured Span (mm) 1263 Measured At Ring No. Measured At Ring No. Sidewall Measured Span (mm) Measured Span (mm) Measured At Ring No. Bridge Culvert Barrel Explanation of Condition Explanation of Condition Mex (mm): 1219, Type: MP) Not bridge size. West pipe- 50% accessible from North. CSP with good general shape. D/S 1/2 not accessible due to ice. Estimate. Estimate.
Culvert ComponentLastNowExplanation of Condition(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm):, Rise (mm): 1219, Type: MP)Barrel Last Accessible Date11-Jul-2012Not bridge size.Special FeaturesSpecial Feature(Type :)Special Feature(Type :)Roof66West pipe- 50% accessible from North. CSP with good general shape. D/S 1/2 not accessible due to ice.Measured Rise (mm)1156D/S 1/2 not accessible due to ice.Measured At Ring No.3Estimate. Shape D/S is adequate.Sidewall65Measured Span (mm)1263D/S has minor horizontal misalignment.Measured At Ring No.3Estimate.
Culvert ComponentLastNowExplanation of Condition(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm):, Rise (mm): 1219, Type: MP)Barrel Last Accessible Date11-Jul-2012Not bridge size.Special FeaturesSpecial Feature(Type :)Special Feature(Type :)Roof66West pipe- 50% accessible from North. CSP with good general shape. D/S 1/2 not accessible due to ice.Measured Rise (mm)1156D/S 1/2 not accessible due to ice.Measured At Ring No.3Estimate. Shape D/S is adequate.Sidewall65Measured Span (mm)1263D/S has minor horizontal misalignment.Measured At Ring No.3Estimate.
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1219, Type: MP) Barrel Last Accessible Date
Barrel Last Accessible Date 11-Jul-2012 Not bridge size. Special Features Special Feature (Type:) Special Feature (Type:) Roof 6 6 6 West pipe- 50% accessible from North. CSP with good general shape. D/S 1/2 not accessible due to ice. Estimate. Shape D/S is adequate. Sidewall 6 5 D/S has minor horizontal misalignment. Measured At Ring No. 3 Sidewall 1263 Measured At Ring No. 3 Estimate.
Special Feature (Type:) Special Feature (Type:) Roof 6 6 West pipe- 50% accessible from North. CSP with good general shape. D/S 1/2 not accessible due to ice. Measured At Ring No. 3 Sag (mm) 63 Percent Sag 5 Sidewall 6 5 D/S has minor horizontal misalignment. Measured At Ring No. 3 Estimate. Estimate.
Special Feature (Type:) Special Feature (Type:) Roof 6 6 6 Measured Rise (mm) 1156 Measured At Ring No. 3 Sag (mm) Percent Sag Sidewall Measured Span (mm) 1263 Measured At Ring No. 3 Estimate. D/S has minor horizontal misalignment. Estimate. Estimate.
(Type:) Special Feature (Type:) Roof 6 6 West pipe- 50% accessible from North. CSP with good general shape. D/S 1/2 not accessible due to ice. Estimate. Shape D/S is adequate. Sidewall Measured Span (mm) 1263 Measured At Ring No. 3 Estimate. D/S has minor horizontal misalignment. Estimate.
Special Feature (Type:) Roof 6 6 West pipe- 50% accessible from North. CSP with good general shape. D/S 1/2 not accessible due to ice. Measured At Ring No. 3 Sag (mm) 63 Percent Sag 5 Sidewall 6 5 D/S has minor horizontal misalignment. Measured Span (mm) 1263 Measured At Ring No. 3 Estimate.
Roof 6 6 6 West pipe- 50% accessible from North. CSP with good general shape. D/S 1/2 not accessible due to ice.
Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured At Ring No. Measured At Ring No. Measured Span (mm) Sidewall Measured Span (mm) Measured Span (mm) Measured Span (mm) Sidewall Measured Span (mm) Sidewall Measured Span (mm) Sidewall Measured Span (mm) Sidewall Sidewall Measured Span (mm) Sidewall Sidew
Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured Span (mm) Measured At Ring No. Sidewall Measured At Ring No. Sidewall Measured Span (mm) Measured At Ring No. Shape. D/S 1/2 not accessible due to ice. Estimate. Shape D/S is adequate. D/S has minor horizontal misalignment. Estimate.
Measured At Ring No. 3 Sag (mm) 63 Percent Sag 5 Sidewall 6 5 Measured Span (mm) 1263 Measured At Ring No. 3 Estimate. Shape D/S is adequate.
Sag (mm) 63 Percent Sag 5 Sidewall Measured Span (mm) 1263 Measured At Ring No. Estimate. Shape D/S is adequate. D/S has minor horizontal misalignment. Estimate.
Percent Sag 5 Sidewall 6 5 D/S has minor horizontal misalignment. Measured Span (mm) 1263 Measured At Ring No. 3 Estimate.
Sidewall Measured Span (mm) Measured At Ring No. Sidewall 6 5 D/S has minor horizontal misalignment. Estimate.
Measured Span (mm) 1263 Measured At Ring No. 3 Estimate.
Measured At Ring No. 3 Estimate.
Deflection (mm) 44
Percent Deflection 4
Floor 6 6 U/S CSP only. D/S 1/2 ice covered.
Bulge (mm) 0
Measured At Ring No.
Abrasion (Y/N) No
Circumferential Seams 5 5
Separation (mm) 90
Longitudinal Seams 6 N Rivetted seams at South original half. P.R 6.
Total No. of Cracked Rings 0 North CSP.
Total No. of Rings with Two Cracked Seams
Min. Remaining Steel Between Cracks (mm)
Proper Lap (Y/N) Yes
Longitudinal Stagger (Y/N)
Coating 5 5 Minor superficial at floor.
Coating 5 5 Minor superficial at floor. Corrosion By Soil (Y/N) No

Bridge Culvert Barrel									
Culvert Component		Last	Now	Explanation of Condition					
(Pipe # : 1, Primary Span, Locat	tion Code: MAIN, Spa	ın (mm) :	, Rise (mm): 1219, Type: MP)					
Camber POS/ZERO/NEG	ZERO								
Ponding (Y/N)	No								
Fish Passage Adequacy		5	5						
Baffle		Х	Х						
(Type:)									
Waterway Adequacy		7	7						
Icing (Y/N)	No								
Silting (Y/N)	No								
Drift (Y/N)	No								
Barrel General Rating		6	5						
		D	ownstr	eam End					
Culvert Component		Last	Now	Explanation of Condition					
(Pipe #: 1, Span Type: Primary	/ Span)	1							
Direction		S							
End Treatment (Concrete, Steel, Others, None)	STEEL								
Headwall		Х	X						
Collar		Х	Х						
Wingwalls		X	X						
(Shape:)		1	_						
Cutoff Wall		Х	X						
Bevel End		7	6						
Heaving (mm)	0								
Invert Above/Below Stream Bed	BELOW								
Above/Below (mm)	200		_						
Scour Protection		6	6						
(Type : NATURAL)									
(Avg. Rock Size(mm):)		1							
Scour/Erosion		6	6						
Beavers (Y/N)	No								
Downstream End General Ratio	ng	6	6						
		1		am End					
Culvert Component	_ `	Last	Now	Explanation of Condition					
(Pipe # : 2, Span Type: Second	ary Span)	1		T					
Direction		N		East pipe.					
End Treatment (Concrete, Steel, Others, None)	STEEL								
Headwall		Х	Х						
Collar		Х	X						
Wingwalls		X	X						
(Shape:)									
Cutoff Wall		X	X						

73578 -1 Bridge Culvert

			Upstre	am End
Culvert Component		Last		Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			
Bevel End		7	7	
Heaving (mm)	0			
	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
		Bri	dae Cu	lvert Barrel
Culvert Component		Last		Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN.			, Rise (mm): 1219, Type: MP)
Barrel Last Accessible Date	11-Feb-2012			Not bridge size.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		6	6	50% accessible from U/S. CSP with good general shape.
Measured Rise (mm)	1162			D/S 1/2 not accessible due to ice.
Measured At Ring No.	5			Estimate. D/S shape is adequate.
Sag (mm)	57			1
Percent Sag	4			
Sidewall		6	6	
Measured Span (mm)	1285			Estimate.
Measured At Ring No.	5			Estimate.
Deflection (mm)	66			
Percent Deflection	5			
Floor		6	6	U/S CSP only. D/S 1/2 is ice covered.
Bulge (mm)	0			1
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	Minor soil infiltration at Ring 1.
Separation (mm)	75			
Longitudinal Seams		6	N	Rivetted seams at South original pipe.
Total No. of Cracked Rings	0			Rivetted seams at South original pipe. North 1/2 is CSP. P.R 6.
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)				
Coating		6	6	Minor corrosion at floor.
Corrosion By Soil (Y/N)	No	3	J J	Thin is someonial at hoor.
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

		Bric	Ivert Barrel	
Culvert Component				Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, S			nm):	, Rise (mm): 1219, Type: MP)
Ponding (Y/N) No				
Fish Passage Adequacy			5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N) No				
Barrel General Rating		6	6	
Ü			ownetr	ream End
Culvert Component				Explanation of Condition
	lary Snan)	Lasi	INOW	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span) Direction		s		East pipe.
End Treatment (Concrete, Steel,	QTEE!	3		East pipe.
Others, None)	SIEEL		1	
Headwall		X	X	
Collar			Х	
Wingwalls		Х	Х	
(Shape:)				
Cutoff Wall		Х	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed BELOW				
Above/Below (mm) 200				
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		6	6	
Beavers (Y/N) No				
Downstream End General Rating			6	
S			truotu	re Usage
		Last		Explanation of Condition
Channel (U/S and D/S)		Luot	11011	Explanation of condition
Alignment		6	6	
Bank Stability			7	
HWM (m below Top of Culvert)				No visible HWM.
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		6	6	

		Maintenance	e Recommenda	ations					
Inspector Recommendations	Year	Inspector Comments	- Rooominena	Department Com	ments		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS				-1			J J		
PLACE ADDITIONAL RIP RAP									
REMOVE DRIFT ACCUMULATION									
INSTALL CONCRETE/STEEL LINING	i								
INSTALL STRUTS									
INSTALL CONCRETE COLLAR/CUTO	OFF								
REPAIR SEAMS									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
Structural Condition Rating (Last/No. (%)	ow) 66.7/55	.6 Sufficiency Rating (La	ast/Now) 6	9.2/64.2	Est. Repl. Yr	2025	Maint. Re	qd. (Y/N)	No
Special Comments for Next Inspection				Department Comments					
Maintenance Reviewed By				Date		ı	Estimated Tota	I 0	
Proposed Long-Term Strategy									
On 3-Year Program (Y/N)									
Proposed Action									
Previous Inspector's Name	Garry Roberts		Previous A	Assistant's Name					
Next Inspection Date	11-Nov-2013		Previous I	nspection Date	20-Jul-2010				
Inspection Cycle (Default) (months)	21								
Comment									