				Brid	ae Culv	ert Inspectio	on						
Bridge File Nu	umber	01709	-1 Bridge Culv		S COUNTY	Form Type		CULM					
Year Built	G111001	1957	i Bridge Odit			Lot No.		1					
Bridge or Tow	vn Name	1337			Inspector Name			Owen Salava					
Located Over		TRIBU	ITARY TO PIP	ER CREEK, 3.8	113	Inspector C		BR CLS A					
Localed Over		WATE	RCRS-ST	ER ORLER, 5.5	,	Assistant N		DR OLO /					
Located On		42:08 (C1 9.884			Assistant C							
Water Body C	CI./Year					Inspection		26-Nov-2012					
Navigabil. Cl.	/Year					Data Entry		Marcia Chavez					
Legal Land Lo	ocation	NE SE	C 36 TWP 36	RGE 27 W4M		Data Entry	-		<u>-</u>				
Longitude, La	atitude	-113:4	3:41, 52:08:33			Reviewer N		John O'Brien	06-Dec-2012				
Road Authorit	ty	Alberta	a Transportation	n (AIT)		Review Date		03-Dec-2012					
Contract Main. Area CMA19								AS					
Clear Roadway/Skew 10.8 / 30 deg. (RHF)					Dept. Revie		Andrew Smikles 10-Dec-2012						
AADT/Year		2,020 /	/ 2011 (A)			Follow-Up I		10-Dec-2012					
Road Classifi	cation		11.8-110			rollow-op i	Бу						
Detour Length	h (km)												
Bridge Culve		nation											
Number of Cu			2										
Pipe #	Barrel			Rise (or Dia.)	Туре	Length		Corr. Profile	Pl./Slab	Shape			
1	NAAINI			1200	MP	28.7		69V12	Thickness	DOLIND			
<u>1</u>	MAIN		-	1200				68X13		ROUND			
2 Special Feetu	MAIN		-	1200	MP	28.	1	68X13		ROUND			
Special Featu Special Featu													
				U	tilities (Located at)							
Telephone		/l- N	<i>1</i>	U	tilities (Gas							
Telephone Power		e o/h N r	-/w.	U	tilities (Gas Municipal	(Al) No						
Telephone Power Others		e o/h N r	-/w.	U	tilities (Gas	//N) No						
Telephone Power Others		e o/h N r	-/w.			Gas Municipal Problem (Y	, ,						
Telephone Power Others		e o/h N r	r/w.	Approa	ach Roa	Gas Municipal Problem (Y	ment	ition					
Telephone Power Others Remarks	2 wire	e o/h N r	/w.	Approa Last	ach Roa	Gas Municipal Problem (Y	ment on of Cond						
Telephone Power Others Remarks	2 wire	e o/h N r	r/w.	Approa	Now	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan	ment on of Cond ated in a cu	rve with limited ssing EB.					
Telephone Power Others Remarks Horizontal Aligni	2 wire	e o/h N r		Approa Last	ach Roa	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva	ment on of Cond ated in a cu	rve with limited ssing EB.					
Telephone Power Others Remarks Horizontal Aligni	2 wire	e o/h N r	10.800	Approa Last	Now	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan	ment on of Cond ated in a cu	rve with limited ssing EB.					
Telephone Power Others Remarks Horizontal Aligner Vertical Aligner	2 wire	e o/h N r		Approa Last	Now	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan	ment on of Cond ated in a cu	rve with limited ssing EB.					
Telephone Power Others Remarks Horizontal Aligner Vertical Aligner	2 wire	o/h N r		Approx Last 6 8	Now 6 8	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan	ment on of Cond ated in a cu	rve with limited ssing EB.					
Telephone Power Others Remarks Horizontal Alignic Vertical Alignic Roadway Wick Embankment	2 wire		10.800	Approx Last 6 8	Now 6 8	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan	ment on of Cond ated in a cu	rve with limited ssing EB.					
Telephone Power Others Remarks Horizontal Alignic Vertical Alignic Roadway Wic Embankment Sideslope ((Height of C	gnment ment dth (m)		10.800	Approx Last 6 8	Now 6 8	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan	ment on of Cond ated in a cu	rve with limited ssing EB.					
(Height of C	gnment ment dth (m)	: 4.2)	10.800	Approx Last 6 8	Now 6 8	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan	ment on of Cond ated in a cu	rve with limited ssing EB.					
Telephone Power Others Remarks Horizontal Aligner Vertical Aligner Roadway Wick Embankment Sideslope ((Height of C) Guardrail (Y/N)	gnment ment dth (m)	: 4.2)	10.800 2.0 No	Approx Last 6 8	Now 6 8 7	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan	ment on of Cond ated in a cu	rve with limited ssing EB.					
Telephone Power Others Remarks Horizontal Aligni Vertical Aligni Roadway Wice Embankment Sideslope ((Height of C) Guardrail (Y/N	gnment ment dth (m) Cover(m) N)	: 4.2)	10.800 2.0 No	Approx Last 6 8	Now 6 8	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan Approach 3	ment on of Cond ated in a cu nce. No pas 30m East o	rve with limited ssing EB. f culverts.					
Telephone Power Others Remarks Horizontal Aligner Vertical Aligner Roadway Wick Embankment Sideslope ((Height of C) Guardrail (Y/N) Approach Ro	gnment ment dth (m) Cover(m) N) poad / Eml	: 4.2) bankme	10.800 2.0 No ent General R	Approx Last 6 8 7	Now 6 8	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan Approach 3	ment on of Cond ated in a cu nce. No pas 30m East o	rve with limited ssing EB. f culverts.					
Telephone Power Others Remarks Horizontal Aligner Vertical Aligner Roadway Wice Embankment Sideslope ((Height of C Guardrail (Y/N Approach Ro	gnment ment dth (m) Cover(m) N) poad / Eml	: 4.2) bankme	10.800 2.0 No ent General R	Approx Last 6 8 7	Now 6 8	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan Approach 3	ment on of Cond ated in a cu nce. No pas 30m East o	rve with limited ssing EB. f culverts.					
Telephone Power Others Remarks Horizontal Alignet Vertical Alignet Roadway Wice Embankment Sideslope ((Height of C Guardrail (Y/N Approach Ro Culvert Com (Pipe # : 1, S Direction End Treatmer Others, None	2 wire gnment ment dth (m):1) Cover(m) N) pad / Eml ponent Span Type	: 4.2) bankme	10.800 2.0 No ent General R ary Span)	Approx Last 6 8 7	Now 6 8 7 Upstre	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan Approach 3	ment on of Cond ated in a cu nce. No pas 30m East o	rve with limited ssing EB. f culverts.					
Telephone Power Others Remarks Horizontal Alignet Vertical Alignet Roadway Wice Embankment Sideslope ((Height of C Guardrail (Y/N Approach Ro Culvert Com (Pipe # : 1, S Direction End Treatmer Others, None	2 wire gnment ment dth (m):1) Cover(m) N) pad / Eml ponent Span Type	: 4.2) bankme	10.800 2.0 No ent General R ary Span)	Approa Last 6 8 7 ating 6 Last	Now 6 8	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan Approach 3	ment on of Cond ated in a cu nce. No pas 30m East o	rve with limited ssing EB. f culverts.					
Telephone Power Others Remarks Horizontal Align Vertical Align Roadway Wice Embankment Sideslope ((Height of C Guardrail (Y/N Approach Ro Culvert Com (Pipe # : 1, S Direction End Treatmen	2 wire gnment ment dth (m):1) Cover(m) N) pad / Eml ponent Span Type	: 4.2) bankme	10.800 2.0 No ent General R ary Span)	Approx Last 6 8 7	Now 6 8 7 Upstre	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan Approach 3	ment on of Cond ated in a cu nce. No pas 30m East o	rve with limited ssing EB. f culverts.					
Telephone Power Others Remarks Horizontal Align Vertical Align Roadway Wid Embankment Sideslope ((Height of C Guardrail (Y/N Approach Ro Culvert Com (Pipe # : 1, S Direction End Treatmer Others, None Headwall	2 wire gnment ment dth (m):1) Cover(m) N) pad / Eml ponent Span Type	: 4.2) bankme	10.800 2.0 No ent General R ary Span)	Approx Last 6 8 7 7 S S X	Ch Roa Now 6 8 7 Upstre Now	Gas Municipal Problem (Y d / Embankr Explanatio Supereleva sight distan Approach 3	ment on of Cond ated in a cu nce. No pas 30m East o	rve with limited ssing EB. f culverts.					

01709 -1 Bridge Culvert

			Unetro	am End
Culvert Component				Explanation of Condition
(Pipe # : 1, Span Type: Primary	/ Span)	Last	14044	Explanation of Condition
Cutoff Wall	, opan,	Х	Х	
Cuton vvan				
Bevel End		7	6	Inlet has page wire fence around it.
Heaving (mm)	0			Minor roof bend.
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	0			
Scour Protection		6	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)		1		
Scour/Erosion		6	N	Snow covered.
Beavers (Y/N)	No			
Douroid (Titty				
Upstream End General Rating		6	6	
		Brid	dae Cu	lvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN. Spa			, Rise (mm): 1200, Type: MP)
Barrel Last Accessible Date	20-Feb-2003		/	West pipe.
				Barrel not viewable due to ice/snow.
Special Features				Ice 0.3m from roof.
Special Features Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		N	N	
Measured Rise (mm)	1060	111	111	
Measured At Ring No.	1000			(11.7%.19Oct06)
Sag (mm)	140			
Percent Sag	11			
Sidewall		N	N	
Measured Span (mm)	1350			
Measured At Ring No.				
Deflection (mm)	150			(12.5%.19Oct06)
Percent Deflection	12			
Floor		N	N	
Bulge (mm)	0		-	1
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	40			
Longitudinal Seams		N	N	Rivetted.
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating	1	N	N	(Superficial rust. 20Feb2003).
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

		Brid	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Primary Span, Loca	tion Code: MAIN, Spa	n (mm) :	, Rise (mm): 1200, Type: MP)
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		Х	Х	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating			3	General rating carried forward since 20Feb2003.
				ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary	/ Span)	1		
Direction		N		600mmx6m CSP sitting in bevel end (photo).
End Treatment (Concrete, Steel, Others, None)	STEEL		1	
Headwall		X	X	
Collar			X	
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		Х	X	
Bevel End		N	N	(Come apart at top of crown 1st joint 0.5m from end. 18Nov2009). Snow covered.
Heaving (mm)	0			U.SIII IIOIII elia. Tonov2009). Silow coverea.
Invert Above/Below Stream Bed				
Above/Below (mm)	200			
Scour Protection		N	N	(Some small rock 150mm from c/l. 18Nov2009). Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)		1		
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	4	4	GR carried forward from 18Nov2009.
			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)	1		
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		Х	X	
Collar		Х	X	
Wingwalls		Х	X	
(Shape:)				
Cutoff Wall		X	X	

			Unstre	eam End
Culvert Component				Explanation of Condition
(Pipe # : 2, Span Type: Second	lary Span)	1_0.00	1.10.11	
Bevel End	,	4	4	Crown has a minor dent.
Heaving (mm)	0			
Invert Above/Below Stream Bed				Overflow pipe.
Above/Below (mm)	1000			
Scour Protection		5	N	Snow covered.
(Type: NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		5	N	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
		Brid	dge Cu	Ilvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN	, Span (r	nm):	, Rise (mm): 1200, Type: MP)
Barrel Last Accessible Date	26-Nov-2012			East pipe.
Special Features				
Special Feature				
(Type:)		<u> </u>		
Special Feature				
(Type:)		<u> </u>		
Roof		3	3	Unable to measure due to ice.
Measured Rise (mm)	1060			At c/l.
Measured At Ring No.				At Oil.
Sag (mm)	140			11.7%
Percent Sag	11			
Sidewall		3	3	
Measured Span (mm)	1340			At c/l.
Measured At Ring No.				The offi
Deflection (mm)	140			11.7%.
Percent Deflection	11			1 73.
Floor		N	N	Silt/ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	45			
Longitudinal Seams		6	6	Rivetted
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		5	5	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

		Brid	dge Cu	Ivert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	ocation Code: MAIN, S	Span (r	nm):	, Rise (mm): 1200, Type: MP)
Ponding (Y/N)	No			
Fish Passage Adequacy		Х	Х	
Baffle			Х	
(Type:)				
Waterway Adequacy		3	5	Overflow pipe.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	3	
Culvent Common on ant				ream End
Culvert Component	lam, Casa)	Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	iary Span)	١		
Direction	0.7551	N		
End Treatment (Concrete, Steel, Others, None)	STEEL		1	
Headwall		X	X	
Collar			Х	
Wingwalls			Х	
(Shape:)		Х		
Cutoff Wall			X	
Bevel End		4	N	(Small tear on top of culvert 0.3 m
Heaving (mm)	0			from end. 12Apr2011) - Snow covered.
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		5	N	Snow covered.
(Type: NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		5	N	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	4	4	GR carried forward from 12Apr2011.
		9	Structu	re Usage
			Now	Explanation of Condition
Channel (U/S and D/S)			111011	
Alignment		5	5	70 deg LH bend at U/S end.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			Drift in stream U/S.
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 :	NONE)			
(Fish Compensation Measure 2 :	NONE)			
Channel General Rating		5	5	

Alberta Transportation

		Maintenance Recommendations	endations				
Inspector Recommendations	Year	Inspector Comments	Department Comments	ıments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF)FF						
REPAIR SEAMS							
OTHER ACTION	2013	Remove old culvert in W pipe.					
OTHER ACTION	2013	Jack out inlet dents.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	ow) 33.3/33.3	3.3 Sufficiency Rating (Last/Now) (%)	34.2/40.4	Est. Repl. Yr 2020		Maint. Reqd. (Y/N)	Yes
Special Monitor culvert dimensions. Comments for Next Inspection	ensions.		Department Comments				
Maintenance Reviewed By			Date		Estimated Total	0 الا	
Proposed Long-Term Strategy	Carry Overlay 2003.03.18 R	Carry Overlay across the culverts without doing any work to them. RW 2003.03.18 Replace in 2020 or when road Widening/improvement takes place.	them. RW ement takes place.				
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	26-Aug-2014	Previ	Previous Inspection Date	12-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							

				М	aintenance l	Recommen	dations								
Inspector Recomi		Year	Inspecto	or Comments	S		Department 0	Comn	nents		Target Ye	ear	Est. Cost	Cat #	
SHOTCRETE RE	PAIRS														
PLACE ADDITIO	NAL RIP RAP														
REMOVE DRIFT ACCUMULATION															
INSTALL CONCRETE/STEEL LINING															
INSTALL STRUTS															
INSTALL CONCRETE COLLAR/CUTOF		OFF													
REPAIR SEAMS															
OTHER ACTION		2013 Remove old culvert in W pipe.					Defer until rep	2017							
OTHER ACTION			2013	Jack out	t inlet dents.			Defer until replacement							
OTHER ACTION															
OTHER ACTION															
OTHER ACTION															
Structural Condition Rating (Last/Now (%)			33.3/33	.3	Sufficiency (%)	y Rating (La	st/Now)	34.2/40.4		Est. Repl. Yr	2020	Maint	. Re	qd. (Y/N)	Yes
Special Comments for Next Inspection	nents for						Department Comments	Cur	rently scheduled	I in PMA	for replacer	nent	in 2017. D	A	
Maintenance Reviewed By Darr			n Ahlsted	lt				Date	04-1	Mar-2013		Estimated :	Tota	1 0	
Proposed Long-Term Strategy C		Carry (2003.0	Overlay a 3.18 Re	across the place in 2	e culverts with 2020 or wher	thout doing a n road Widen	ny work to t ng/improve		e.						
On 3-Year Program (Y/N)															
Proposed Action															
Previous Inspecto	r's Name	Owen Salava Previous A					Assistant's Name								
Next Inspection D	ate	26-Aug	g-2014				Previous	is Inspection Date 12-Apr-2011							
· ·	(Default) (months)	21					1								
Comment															