														
	_				Bridg	e Culve	ert Inspe							
Bridge File Nur	nber	77038 -1 Bridge Culvert					Form Type			CULE				
Year Built		1969					Lot No.			4				
Bridge or Town Name COCHRANE						Inspector Name			Garry Roberts					
Located Over TRAIL-ANIMAL, OVER SP						Inspect	or Class	BR CLS A	BR CLS A					
Located On 22:16 C1 8.056						Assistant Name								
Water Body Cl./Year						Assistant Class								
Navigabil. Cl./Y	'ear				Inspection			ion Date	22-May-2012	22-May-2012				
Legal Land Loc	ation	SE SEC	27 TWP 25 F	RGE 4 W5I	М		Data Entry By		Kelsey Robert	Kelsey Roberts				
Longitude, Lati	tude	-114:28:	11, 51:09:32				Data Entry Date		21-Jun-2012	21-Jun-2012				
Road Authority		Alberta 7	Transportation	ansportation (AIT)				er Name	Tom Carey	Tom Carey				
Contract Main.	Area	CMA28					Review Date		22-May-2012					
Clear Roadway	//Skew	12 /					Dept. R	Reviewer Nar	me Tim Davies					
AADT/Year		11,590 /	2011 (A)				Dept. R	Review Date	29-Jun-2012					
Road Classifica	ation	RAU-21	1.8-110				Follow-	Uр Ву						
Detour Length	(km)	7												
Bridge Culver	t Inform	ation												
Number of Cul	verts		1											
Pipe #	Barrel		Span	Rise (or	Dia.)	Туре	Length		Corr. Profile	PI./Slab Thickness	Shape			
1	U/S	-	•	2300		MP		6.3	125X26	2.8	ROUND			
1	MAIN		1740	2200		RPP		26.2	152X51	3.0	PIPE ARCH			
1	D/S	-	•	2300		MP		8	125X26	2.8	ROUND			
Special Feature	es													
Special Feature	es Comi	ment			De	otina l	of a rm ati	.						
Deguired Vert	Claarar	oo Dootin	a (m)		PC	sting ir	nformati	on						
Required Vert.														
Posted Vertica				La Aala		() (())	NI - I	ane SB	On Dridge (co)	La Aakaa	()//NI) NI-			
Posted: Lane			ridge (m)	In Adv	ance	(Y / IN) I	No La	ane SB	On Bridge (m)	III Auvai	nce (Y/N) No			
Remarks	Not re	ęq.			1.14	ilitico (l	acatad							
Utility Attachme	onte				Οι	ilities (L	ocated	al)						
Telephone	West	fonoo					Gas							
•	vvest	ierice						a d						
Power Others	Ctroot	liabta ba	th roug				Municip							
	Street	lights bo	un rows.				Probler	II (Y/IN) INC	1					
Remarks				Λ.	20400	ah Baar	d / Embe	n lem on t						
				А	Last	Now		ankment	adition					
Horizontal Aligi	nment				6	6		Explanation of Condition Recently paved over and widened on west end.						
Vertical Alignm					6	6			has a merge lane.	west end.				
Roadway Widtl			13.500		0									
Embankment					7	7								
Sideslope (:1) 3		3.0												
(Height of Co	ver(m)	1)												
Guardrail (Y/N) Yes														
Approach Roa	d / Eml	oankmen	t General Ra	ting	6	6								
						Upstre	am End							
Culvert Comp	onent				Last	Now	1	ation of Co	ndition					
Direction				E			East							
End Treatment Others, None)	End Treatment (Concrete, Steel, Others, None)		NONE											
Others, None)														

Special Feature (Type:) Special Feature (Type:) Roof 8 N P.R. 8 Measured Rise (mm) P.R. 8 Measured At Ring No. Sag (mm) Sag (mm) 15 Percent Sag 0 Sidewall 8 N P.R. 8 Measured Span (mm) 1665 Measured At Ring No. 8 Deflection (mm) Percent Deflection Percent Deflection 1 Floor 8 N P.R. 8 Bulge (mm) Measured At Ring No. Abrasion (Y/N) Abrasion (Y/N) Circumferential Seams 8 N P.R. 8				Heatus	on End
Collar	Culvert Component				
Collar					Explanation of Condition
Wingwalls	Tieadwaii				
Culoff Wall	Collar			X	
Sevel End	Wingwalls			Х	
Bevel End	(Shape:)				
Heaving (mm)	Cutoff Wall		Х	X	
Invert Above/Below (mm) 1500	Bevel End		Х	Х	
Above/Below (mm) 1500	Heaving (mm)	0			
Scour Protection 5	Invert Above/Below Stream Bed	BELOW			
(Type : RIP RAP)	Above/Below (mm)	1500			
Avg. Rock Size(mm) : 300 Scour/Erosion 5	Scour Protection		5	8	
Scour/Erosion S 8	(Type: RIP RAP)				
Beavers (Y/N)	(Avg. Rock Size(mm): 300)				
Upstream End General Rating 5 8	Scour/Erosion		5	8	
Bridge Culvert Barrel	Beavers (Y/N)	No			
Culvert Component Last (Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): Pise (mm): 2300, Type: MP) Explanation of Condition Barrel Last Accessible Date 24-Nov-2010 2300 CSP extentions - 6.3 m @ u/s and 8.0 m @ d/s. Water too deep to enter. Special Features Special Feature (Type:) Special Feature Roof 8 N Measured Rise (mm) Measured At Ring No. Sag (mm) 15 Percent Sag 0 Sidewall 8 N Measured Span (mm) 1665 Measured At Ring No. 8 Deflection (mm) 8 Percent Deflection 1 Bulge (mm) 8 Measured At Ring No. 8 Abrasion (Y/N) 8 Circumferential Seams 8 N P.R. 8	Upstream End General Rating		5	8	
Culvert Component Last (Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): Pise (mm): 2300, Type: MP) Explanation of Condition Barrel Last Accessible Date 24-Nov-2010 2300 CSP extentions - 6.3 m @ u/s and 8.0 m @ d/s. Water too deep to enter. Special Features Special Feature (Type:) Special Feature Roof 8 N Measured Rise (mm) Measured At Ring No. Sag (mm) 15 Percent Sag 0 Sidewall 8 N Measured Span (mm) 1665 Measured At Ring No. 8 Deflection (mm) 8 Percent Deflection 1 Bulge (mm) 8 Measured At Ring No. 8 Abrasion (Y/N) 8 Circumferential Seams 8 N P.R. 8			Brid	dae Cu	lvert Barrel
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm):	Culvert Component				
Barrel Last Accessible Date 24-Nov-2010 2300 CSP extentions - 6.3 m @ u/s and 8.0 m @ d/s. Water too deep to enter.		tion Code: U/S, Span			·
Special Feature	Barrel Last Accessible Date	24-Nov-2010			
Type : Special Feature S	Special Features				
Special Feature	Special Feature				
Type :)	(Type:)				
Roof 8	Special Feature				
Measured Rise (mm) Measured At Ring No. Sag (mm) 15 Percent Sag 0 Sidewall 8 N Measured Span (mm) 1665 Measured At Ring No. 8 Deflection (mm) Percent Deflection Percent Deflection 1 Floor 8 N Bulge (mm) P.R. 8 Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 N P.R. 8	(Type:)				
Measured At Ring No. Sag (mm) 15 Percent Sag 0 8 N Sidewall 8 N P.R. 8 Measured Span (mm) 1665 1665 Measured At Ring No. 8 1665 Deflection (mm) 1665 1665 Percent Deflection 1 1665 Bulge (mm) 8 N P.R. 8 Bulge (mm) Measured At Ring No. Abrasion (Y/N) P.R. 8 Circumferential Seams 8 N P.R. 8	Roof		8	N	P.R. 8
Sag (mm) 15 Percent Sag 0 Sidewall 8 N Measured Span (mm) 1665 Measured At Ring No. 8 Deflection (mm) Percent Deflection Percent Deflection 1 Floor 8 N Bulge (mm) P.R. 8 Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 N P.R. 8	Measured Rise (mm)				
Sag (mm) 15 Percent Sag 0 Sidewall 8 N Measured Span (mm) 1665 Measured At Ring No. 8 Deflection (mm) Percent Deflection Percent Deflection 1 Floor 8 N Bulge (mm) P.R. 8 Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 N P.R. 8					
Percent Sag	Sag (mm)	15			
Measured Span (mm) 1665 Measured At Ring No. 8 Deflection (mm) Percent Deflection 1 Floor 8 N P.R. 8 Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 N P.R. 8		0			
Measured Span (mm) 1665 Measured At Ring No. 8 Deflection (mm) Percent Deflection 1 Floor 8 N P.R. 8 Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 N P.R. 8			8	N	P.R. 8
Measured At Ring No. 8 Deflection (mm) Percent Deflection 1 Floor 8 N P.R. 8 Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 N P.R. 8	Measured Span (mm)	1665			
Deflection (mm) Percent Deflection 1 Floor 8 N P.R. 8 Bulge (mm) Measured At Ring No. Abrasion (Y/N) Abrasion (Y/N) Circumferential Seams 8 N P.R. 8		8			
Percent Deflection 1 Floor 8 N P.R. 8 Bulge (mm) Measured At Ring No. Abrasion (Y/N) P.R. 8					
Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 N P.R. 8	Percent Deflection	1			
Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 N P.R. 8	Floor		8	N	P.R. 8
Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 N P.R. 8					
Abrasion (Y/N) Circumferential Seams 8 N P.R. 8					
Circumferential Seams 8 N P.R. 8	-				
			8	N	P.R. 8
oparation (mill)	Separation (mm)				

77038 -1 Bridge Culvert

Bridge Culvert Barrel									
Culvert Component		Last	Now	Explanation of Condition					
(Pipe # : 1, Primary Span, Locat	tion Code: U/S, Span	(mm):	, F	Rise (mm): 2300, Type: MP)					
Longitudinal Seams		X	N						
Total No. of Cracked Rings									
Pipe #: 1, Primary Span, Location Code: U/S, S Longitudinal Seams 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 Corrosion By Soil (Y/N) Corrosion By Water (Y/N) No Camber POS/ZERO/NEG ZERO Ponding (Y/N) No Fish Passage Adequacy Baffle (Type:) Waterway Adequacy Icing (Y/N) Silting (Y/N) No Drift (Y/N) No Barrel Extension General Rating Culvert Component (Pipe #: 1, Primary Span, Location Code: MAIN, Barrel Last Accessible Date Special Feature (Type:) Special Feature (Type:) Special Feature (Type:) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Deflection (mm) Percent Deflection 1									
Min. Remaining Steel Between Cracks (mm)									
Proper Lap (Y/N)									
Longitudinal Stagger (Y/N)									
Coating		8	N						
Corrosion By Soil (Y/N)	No								
Corrosion By Water (Y/N)	No								
Camber POS/ZERO/NEG	ZERO								
Ponding (Y/N)	No								
Fish Passage Adequacy		5	5						
Baffle		Χ	Х						
		7	7						
*									
Barrel Extension General Ratin	g	8	N						
		Brid	dge Cul	llvert Barrel					
Culvert Component				Explanation of Condition					
	ion Code: MAIN, Spa	Last	Now	Explanation of Condition					
		Last	Now	Explanation of Condition					
(Pipe # : 1, Primary Span, Locat		Last	Now	Explanation of Condition					
(Pipe # : 1, Primary Span, Locat Barrel Last Accessible Date		Last	Now	Explanation of Condition					
(Pipe # : 1, Primary Span, Locat Barrel Last Accessible Date Special Features		Last	Now	Explanation of Condition					
(Pipe # : 1, Primary Span, Locate Barrel Last Accessible Date Special Features Special Feature		Last	Now	Explanation of Condition					
(Pipe # : 1, Primary Span, Locat Barrel Last Accessible Date Special Features Special Feature (Type :)		Last	Now	Explanation of Condition					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature		Last	Now	Explanation of Condition Do Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.)					
(Pipe # : 1, Primary Span, Locate Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof		Last n (mm	Now): 1740	Explanation of Condition D, Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.) Est roof					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm)		Last n (mm	Now): 1740	Explanation of Condition Do Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.)					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No.	24-Nov-2010	Last n (mm	Now): 1740	Explanation of Condition D, Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.)					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm)	24-Nov-2010	Last n (mm	Now): 1740	Explanation of Condition D, Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.)					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm)	24-Nov-2010	Last n (mm	Now): 1740	Explanation of Condition D, Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.)					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall	24-Nov-2010 15 0	Last n (mm	Now): 1740	(50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm)	24-Nov-2010 15 0	Last n (mm	Now): 1740	(50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured At Ring No.	24-Nov-2010 15 0	Last n (mm	Now): 1740	(50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured At Ring No. Deflection (mm)	24-Nov-2010 15 0 1665 8	Last n (mm	Now): 1740	(50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured At Ring No. Deflection (mm)	24-Nov-2010 15 0 1665 8	Last n (mm	Now): 1740	Explanation of Condition D, Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6 P.R. 7 (Avg 600mm deep. Ice on floor based on 2200mm design.					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection	24-Nov-2010 15 0 1665 8	6	Now): 1740	Explanation of Condition D, Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6 P.R. 7					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection Floor	24-Nov-2010 15 0 1665 8	6	Now): 1740	Explanation of Condition D, Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6 P.R. 7 (Avg 600mm deep. Ice on floor based on 2200mm design.					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection Floor Bulge (mm)	24-Nov-2010 15 0 1665 8	6	Now): 1740	Explanation of Condition D, Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6 P.R. 7 (Avg 600mm deep. Ice on floor based on 2200mm design.					
(Pipe # : 1, Primary Span, Local Barrel Last Accessible Date Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection Floor Bulge (mm) Measured At Ring No.	24-Nov-2010 15 0 1665 8	6	Now): 1740	Explanation of Condition D, Rise (mm): 2200, Type: RPP) (50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6 P.R. 7 (Avg 600mm deep. Ice on floor based on 2200mm design.					

		Brid	dae Cu	lvert Barrel
Culvert Component		1		Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN. Spa			
Longitudinal Seams	, - , - , - , - , - , - , - , - , - , -	7	N	P.R. 7
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N) No				
Longitudinal Stagger (Y/N)	No			
Coating		5	N	(Corrosion @ lower haunch and @ North sidewall @ D/S end)
Corrosion By Soil (Y/N)	Yes			P.R. 5
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		Х	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		7	7	200 mm silt.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating	,	6	N	
Darron Contorum Hadding				
				eam End
Culvert Component		Last	Now	Explanation of Condition West side.
Direction	NONE	W		west side. Large pond located 10m D/S extends along ditch to the South.
End Treatment (Concrete, Steel, Others, None)	NONE		1	5 .
Headwall		Х	X	
Collar		Х	Х	
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		Х	Х	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300		1	
Scour Protection		5	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	8	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	5	8	

Structure Usage									
			Now	Explanation of Condition					
Grade Separation			_						
Road Alignment		X	X	Culvert drains water from ditch @ East to slough at West.					
Roadway Surface		6	N						
(Type : CONCRETE)									
Icing (Y/N)	No								
Traffic Safety Features		X	X						
Туре									
Lighting		X	X						
Barrel Leakage (Y/N) No									
Drainage		5	5						
Structure In Use (Y/N) Yes									
Grade Separation General Rating			5						

77038 -1 Bridge Culvert

		Mainta	December detions						
la anna da Cara	V		nance Recommendations		-4-		Tanast Vasa	F-4 O4	0-1
Inspector Recommendations	Year	Inspector Comments	Departmen	t Commer	าเร		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS									_
PLACE ADDITIONAL RIP RAP									-
REMOVE DRIFT ACCUMULATION	_								_
INSTALL CONCRETE/STEEL LINING	j								_
INSTALL STRUTS	055								_
INSTALL CONCRETE COLLAR/CUT	OFF								_
REPAIR SEAMS									_
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
Structural Condition Rating (Last/N (%)	low) 66.7/5	5.6 Sufficiency Ratir (%)	ng (Last/Now) 62.5/63.3	Es	st. Repl. Yr	2030	Maint. Re	qd. (Y/N)	No
Special Comments for Next Inspection			Departmen Comments	t					
Maintenance Reviewed By			Date			E	stimated Tota	1 0	
Proposed Long-Term Strategy									
On 3-Year Program (Y/N)									
Proposed Action									
Previous Inspector's Name	Garry Roberts		Previous Assistant's N	ame					
Next Inspection Date	22-Feb-2014		Previous Inspection Da	ate	24-Nov-2010)			
Inspection Cycle (Default) (months)	21								
Comment									