Bridge Culvert Inspection														
Bridge File Nur	Bridge File Number 13694 -2 Bridge Culvert					Form Type				CULM				
Year Built		2001					Lot No.			4				
Bridge or Town	Name	LUNDE	BRECK				Inspect	or Name		Garry Roberts				
Located Over	COW CREEK, 2cated On22:06 C1 11.64ater Body CI./Year22:06 C1 11.64ater Body CI./Year3gal Land LocationSW SEC 35 TMngitude, Latitude-114:10:54, 49:4bad AuthorityAlberta Transportbad AuthorityAlberta Transportbad AuthorityAlberta Transportbad AuthorityAlberta Transportbad AuthorityAlberta Transportbad AuthorityAlberta Transportbad ClassificationRAU-211.8-110bad ClassificationRAU-211.8-110bad ClassificationRAU-211.8-110bad ClassificationRAU-211.8-110bad ClassificationRAU-211.8-110bad ClassificationRAU-211.8-110bad ClassificationSpanidige Culvert Information3bad MAIN5400MAIN-bad MAIN-baccial FeaturesSpanbaccial FeaturesInvire 20m West, 1 without East r/w, fibre optic East marksbarrel1 wire 20m West, 1 without East.hers-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel-barrel- <t< td=""><td>REEK, 2.12.37</td><td>.3.1, WAT</td><td>TERCR</td><td>RS-ST</td><td>Inspect</td><td>or Class</td><td></td><td colspan="4">BR CLS A</td></t<>		REEK, 2.12.37	.3.1, WAT	TERCR	RS-ST	Inspect	or Class		BR CLS A				
Located On		22:06 0	21 11.646				Assistant Name							
Water Body Cl.	/Year						Assista	nt Class						
Navigabil. CI./Year Legal Land Location SW SEC 35 Longitude, Latitude -114:10:54, 4 Road Authority Alberta Trans Contract Main. Area CMA26 Clear Roadway/Skew 13.7 / -30 deg AADT/Year 2,360 / 2011 Road Classification RAU-211.8-1 Detour Length (km) 10 Bridge Culvert Information 3 Number of Culverts 3 Pipe # Barrel Span 1 MAIN 5400 2 MAIN - Special Features Special Features Special Features							Inspect	ion Date		16-Jun-2012				
Legal Land Loc	ation	SW SE	C 35 TWP 8 RG	GE 2 W5N	Л		Data Entry By			Erin Roberts				
Longitude, Lati	tude	-114:10):54, 49:41:29				Data E	Data Entry Date 16-Jul-2012						
Road Authority		Alberta	Transportation	(AIT)			Review	Reviewer Name Joel Wozney						
Contract Main. Area CMA26 Clear Roadway/Skew 13.7 / -30 deg. (LHF) ADT/Year 2 360 / 2011 (A)						Review	Date		27-Jun-2012					
Clear Roadway	Clear Roadway/Skew 13.7 / -30 deg. (LHF) AADT/Year 2 360 / 2011 (A)						Dept. F	Reviewer	Name	Tim Davies				
ADT/Year 2,360 / 2011 (A)						Dept. F	Review Da	ate	17-Jul-2012					
Road Classifica	Road Classification RAU-211.8-110						Follow-	Up By						
Detour Length	Detour Length (km) 10													
Bridge Culvert Information														
Number of Culverts 3														
Pipe #	Barrel		Span Rise (or Dia.) Type				Length		Corr. Profile	PI./Slab Thickness	Shape			
1	MAIN		5400	3000		SCA		19.6		400X150	5.0	ARCH		
2	MAIN		-	3300		MPB		19.6		125X26	2.8	ROUND		
3	MAIN		-	3300		MPB		19.6		125X26	2.8	ROUND		
Special Features														
Special Feature	es Comr	nent												
				DUDNE	Uti	lities (L	ocated	at)						
Utility Attachme	ents II	ELEPHONE UTILITIES-PHONE LINE; POWER UTILITIES-POWER LINE												
Telephone	East r	r/w, fibre optic East r/w.					Gas		vvest	Row				
Power	East.	20m West, 1 wire 20m North & 2 wi				IUUM	IVIUNICI		N					
Others							Probler							
Remarks														
				Α	pproac	h Road	l / Emba	ankment						
					Last	Now	Explanation of Condition							
Horizontal Aligr	nment				8	8	Road access @ SW - farm access @ NE.							
Vertical Alignm	ent				8	8								
Roadway Width	n (m)		11.300											
Embankment					7	7								
Sideslope (_:1)		3.0											
(Height of Co	ver(m) :	1.2)												
Guardrail (Y/N)			Yes				Attached to bridge & @ standard. Double layer flexbeam on bridge.							
Approach Roa	d / Emb	bankme	nt General Rat	ing	8	8								
						Upstre	am Fnd							
Culvert Comp	onent				Last	Now	Explan	ation of	Condi	tion				
(Pipe # : 1, Sp	an Type	e: Prima	ary Span)											
Direction			/		W		West e	nd center	span.					
End Treatment Others, None)	(Concre	ete, Stee	el, CONCRETE											
Headwall					6	6	Wide c	rack - 4m	m wide	9				
Collar					Х	X								

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary	/ Span)			
Wingwalls		7	7	Gabions.
(Shape :)				
Cutoff Wall		N	N	
Bevel End		Х	Х	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1500			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating	·	6	6	
		Brie	dge Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	ın (mm): 5400	, Rise (mm): 3000, Type: SCA)
Barrel Last Accessible Date	16-Jun-2012			Center span
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		8	8	Some effloresent staining @ bolt holes in roof.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		8	8	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	Rock within 1800mm of roof
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				1
Circumferential Seams		8	8	
Separation (mm)	20		J	
Longitudinal Seams		8	8	Vertical gap.
Total No. of Cracked Rings	0		Ŭ	_ · · · · · · · · · · · · · · · · · · ·
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			

Alberta Transportation

Bridge Inspection & Maintenance System (Web 2005)

13694 - 2 Bridge Culvert

Bridge Culvert Barrel										
Culvert Component		Last	Now	Explanation of Condition						
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	n (mm): 5400	, Rise (mm): 3000, Type: SCA)						
Coating		7	7							
Corrosion By Soil (Y/N)	No									
Corrosion By Water (Y/N)	No									
Camber POS/ZERO/NEG	ZERO									
Ponding (Y/N)	No									
Fish Passage Adequacy		7	7							
Baffle		N	N	(Old rock baffles buried in rock.)						
(Туре :)			1							
Waterway Adequacy	1	6	6	Rock to 1800mm from roof. Large drift accumulation at D/S						
Icing (Y/N)	No									
Silting (Y/N)	No									
Drift (Y/N)	Yes		_							
Barrel General Rating		8	8							
		D	ownstr	eam End						
Culvert Component		Last	Now	Explanation of Condition						
(Pipe # : 1, Span Type: Primary	/ Span)									
Direction		E		East end centre span.						
End Treatment (Concrete, Steel, Others, None)	CONCRETE									
Headwall		7	7	Medium crack with leaching. Hairline cracking with leaching.						
Collar		Х	Х							
Wingwalls		7	7	Gabions.						
(Shape :)										
Cutoff Wall		N	N	Buried						
Bevel End		Х	Х							
Heaving (mm)										
Invert Above/Below Stream Bed	BELOW									
Above/Below (mm)	1500									
Scour Protection		8	8							
(Type : RIP RAP)										
(Avg. Rock Size(mm) : 300)										
Scour/Erosion		8	8							
Beavers (Y/N)	No									
Downstream End General Ration	ng	7	7							
			Upstre	am End						
Culvert Component		Last	Now	Explanation of Condition						
(Pipe # : 2, Span Type: Second	lary Span)									
Direction		W		West end South span.						
End Treatment (Concrete, Steel, Others, None)	CONCRETE									
Headwall	·	7	7	Wide crack with leaching. Narrow-medium cracks, some with leaching.						
Collar		х	Х							
				1						

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	lary Span)			
Wingwalls		7	7	Gabions.
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating	1	7	7	
		Brid	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN, S	Span (r	nm):	, Rise (mm): 3300, Type: MPB)
Barrel Last Accessible Date	16-Jun-2012			South span
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Туре :)				
Roof		8	8	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		8	8	
Measured Span (mm)	3355			1
Measured At Ring No.	2			1
Deflection (mm)	55			1
Percent Deflection	1			
Floor		N	N	500mm rock
Bulge (mm)				
Measured At Ring No.				1
Abrasion (Y/N)				1
Circumferential Seams	· · · · · · · · · · · · · · · · · · ·	8	8	Foam filled
Separation (mm)	60		0	
Longitudinal Seams		X	X	
Total No. of Cracked Rings			~	
Total No. of Rings with Two				
Min. Remaining Steel				
Between Cracks (mm)				-
Longitudinal Stagger (Y/N)				

Alberta Transportation

Bridge Inspection & Maintenance System (Web 2005)

13694 - 2 Bridge Culvert

		Bric	lge Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN, S	Span (n	nm):	, Rise (mm): 3300, Type: MPB)
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy	·	7	7	
Baffle		Х	Х	
(Туре :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	8	
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	lary Span)			
Direction		E		East end South span
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		Х	Х	
Wingwalls		7	7	Gabions
(Shape :)				
Cutoff Wall		N	N	
Bevel End		Х	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)			1	
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Ratin	ng	7	7	
			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Second	ary Span)			
Direction		W		West End North Pipe
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Medium width crack
Collar		Х	X	

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Second	lary Span)		_	
Wingwalls		7	7	Gabions
(Shape :)			1	
Cutoff Wall			N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
		Brie	dge Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Lo	ocation Code: MAIN, S	Span (r	nm):	, Rise (mm): 3300, Type: MPB)
Barrel Last Accessible Date	16-Jun-2012			North Pipe Handles low flows
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Туре :)				
Roof		8	8	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall	·	8	8	
Measured Span (mm)	3345			
Measured At Ring No.	2			
Deflection (mm)	45			
Percent Deflection	1			
Floor		8	8	50% visible.
Bulge (mm)	0			U/S end rock covered.
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	25		Ŭ	
Longitudinal Seams		Х	X	
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)				

Alberta Transportation

Bridge Inspection & Maintenance System (Web 2005)

13694 - 2 Bridge Culvert

Culvert Commence		Brig		Evelopetion of Condition
(Pipe # : 3 Secondary Span La	Cation Code: MAIN	Last		
Cooting	cation code. MAIN, a	pan (i	<u></u>	, Rise (mm). 5500, Type. MFB)
Correction By Soil (V/N)	No	1	1	
Corrosion By Water (Y/N)	No			
	7500			
Camber POS/ZERO/NEG	ZERU			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		Х	Х	
(Туре :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	8	
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Second	lary Span)			
Direction		E		East End North Pipe
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall	1	7	7	wide crack
Collar		Х	Х	
Wingwalls		7	7	Gabions
(Shape :)				
Cutoff Wall		N	N	
Bevel End		Х	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400		-	
Scour Protection		8	8	
(Type : RIP RAP)				-
(Avg. Rock Size(mm) : 300)			1	
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Ratin	ng	7	7	
		S	structu	re Usage
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	90 deg curves D/S
Bank Stability		6	6	
HWM (m below Top of Culvert)				NO HWM VISIBLE
Drift (Y/N)	Yes			

Structure Usage									
		Last	Now	Explanation of Condition					
Channel Bottom Degrading/Aggrading	AGGRADING								
Beavers (Y/N)	No								
(Fish Compensation Measure 1 :	NONE)								
(Fish Compensation Measure 2 : NONE)									
Channel General Rating			5						

Maintenance Recommendations												
Inspector Recommendations	Year	Inspector Comments		Department Com		Target Year	Est. Cost	Cat #				
SHOTCRETE REPAIRS												
PLACE ADDITIONAL RIP RAP												
REMOVE DRIFT ACCUMULATION												
INSTALL CONCRETE/STEEL LINING												
INSTALL STRUTS												
INSTALL CONCRETE COLLAR/CUTC	DFF											
REPAIR SEAMS												
OTHER ACTION												
OTHER ACTION												
OTHER ACTION												
OTHER ACTION												
Structural Condition Rating (Last/No (%)	ow)	88.9/88.9	9 Sufficiency Rating (Last/N (%)	low) 74.1/74.1 Est. Repl. Yr		2063	Maint. Reqd. (Y/N)		No			
Special Comments for Next Inspection					Department Comments							
Maintenance Reviewed By					Date		E	Estimated Total	0			
Proposed Long-Term Strategy												
On 3-Year Program (Y/N)												
Proposed Action												
Previous Inspector's Name	Garry F	Roberts		Previous A	s Assistant's Name							
Next Inspection Date	16-Mar	-2014		Previous I	Previous Inspection Date 07-Oct-2010							
Inspection Cycle (Default) (months)	21											
Comment												