								4.					
D.I. El M		70070	4.0.1		ridg	e Culve	ert Inspec			OLU M			
Bridge File Number 70873 -1 Bridge Culvert				ert			Form Ty	pe		CULM			
Year Built 1954 Bridge or Town Name OBED							Lot No.		4				
	n Name	OBED	(A ODEE)(0 4	14.407.14/4.		200	Inspector Name		Shane Hall				
Located Over PONOKA CREEK, 8.11.127, W				11.127, WAT	ATERCRS-		· ·	Inspector Class Assistant Name		BR CLS A			
Located On 16:02 L1 50.372;16:02 R1 50.34							Assistant Class						
Water Body Cl./Year							Inspection Date		11-Aug-2012				
Navigabil. Cl./Year							Data Entry By			Theresa Lacusta			
Legal Land Location SW SEC 26 TWP 52 RGE 23 W				RGE 23 W5N	M		Data Entry Date			27-Aug-2012			
Longitude, Latitude -117:17:17, 53:30:60							Reviewer Name			Eric Carcoux			
Road Authority Alberta Transportation (AIT)				(AIT)			Review Date			27-Aug-2012			
Contract Main. Area CMA13							Dept. Reviewer Name Br			Brent Herrick			
Clear Roadway	y/Skew	25.3 / 0	-				Dept. Re	view Da	ate	30-Aug-2012			
AADT/Year			2011 (A)				Follow-U	Ір Ву					
Road Classific			12.4-120				_						
Detour Length		1											
Bridge Culver		ation	2										
Number of Cul Pipe #	Barrel		2 Span	Rise (or Di	ia \	Туре	1	anath		Corr. Profile	Pl./Slab	Shape	
Fipe #	Dallel		оран	Kise (oi Di	ia.)	туре	L	Length		Con. Frome	Thickness	Snape	
1	MAIN		-	1220		MP	79.1		68X13	2.8	ROUND		
2	MAIN		-	1220		MP	7	79.1		68X13	2.8	ROUND	
Special Featur	es												
Special Featur	es Comi	ment											
					114	1:4:00 /1	Lanatada	4)					
Utility Attachm	onto				Uti	lities (L	Located a	τ)					
Telephone		& South r/w. Gas											
Power							Municipa	اد					
Power 3 wires O/H North r/w. Others								Problem (Y/N) No					
Remarks	File ta	ıg in pla	ce.				1. 1.00.0111	(1/1.4)					
		5		Арр	roac	ch Road	d / Embar	nkment					
				L	.ast	Now	Explana	tion of (Condi	tion			
Horizontal Alig	nment				7	7	Local inte	ersectio	n 30m	West on EBL's	5.		
Vertical Alignm	nent				7	7							
Roadway Widt	:h (m)		25.300		12.5 EBL, 12.8 WBL.			VBL.					
Embankment					7	7	Median pipe 600mm dia, 10 m East.						
Sideslope (_	·1)		2.5				3:1 on upper WB, 2.5:1 on lower WB.						
(Height of Co		2)	2.0										
Guardrail (Y/N		-,	No										
				-									
Approach Roa	ad / Eml	oankme	nt General Ra	ting	7	7							
						Upstre	am End						
Culvert Comp	onent			L	.ast	Now	Explana	tion of (Condi	tion			
(Pipe # : 1, Sp	oan Type	e: Prima	ary Span)										
Direction				S	3		West pip	e.					
End Treatment (Concrete, Steel, STEEL Others, None)													
Headwall					Χ	X							
Collar	Collar				Х	Х							
Wingwalls					Χ	X							

			Unstre	am End
Culvert Component				Explanation of Condition
(Pipe # : 1, Span Type: Primary	/ Span)		11011	- Appariation of Containon
Cutoff Wall	, , ,	Х	Х	
Bevel End		7	5	Crown of bevel bent down 100mmphoto
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	5	
		_Brid	dae Cu	lvert Barrel
Culvert Component		Last	Now	
(Pipe # : 1, Primary Span, Locate	tion Code: MAIN, Spa			, Rise (mm): 1220, Type: MP)
Barrel Last Accessible Date	11-Aug-2012			West pipe.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)			_	
Roof	1	7	5	Crown dented locally @ d/s end. 15m from u/s.
Measured Rise (mm)	1152			
Measured At Ring No.				
Sag (mm)	68			
Percent Sag	6			
Sidewall	I	7	5	75mm dent(construction) 15m from d/s end.
Measured Span (mm)	1279			Measures 1125 at this location.
Measured At Ring No.				15m from u/s
Deflection (mm)	59			
Percent Deflection	6			
Floor	I_	7	7	
Bulge (mm)	0			-
Measured At Ring No.	 			
Abrasion (Y/N)	No			
Circumferential Seams	I	7	7	
Separation (mm)	55			
Longitudinal Seams		7	7	Riveted seams U/S portion.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Minor superficial rusting on floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

		Brid	dae Cu	Ivert Barrel
Culvert Component		1		Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	ın (mm		, Rise (mm): 1220, Type: MP)
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	Hanging outlet, 800mm.
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	5	
		D	ownstr	eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary	Span)			
Direction		N		West pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		X	Х	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	800			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No		1	
Downstream End General Ratio	ıg	7	7	
				am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			I
End Treatment (Concrete, Steel, STEEL		S		East pipe.
Others, None) Headwall	0.222	X	Х	
Collar		_ ^ _	_ ^	
Wingwalls (Shape:)		X	X	
(Shape:) Cutoff Wall			X	
Gulon vvan		X	_ ^	

Calvert Component				Upstre	am End
Pipe # 2, 2 Span Type: Secondary Span	Culvert Component				
Heaving (mm)	(Pipe # : 2, Span Type: Second	ary Span)			
Invert Above/Below (mm)	Bevel End		5	5	
Above/Below (nm) 100 7	Heaving (mm)	100			
Scour Protection 7	Invert Above/Below Stream Bed	BELOW			
Crype : RIP RAP	Above/Below (mm)	100			
(Avg. Rock Size(mm) : 250)	` '		7	7	
Scour/Erosion 7 7 7					
Beavers (Y/N)	(Avg. Rock Size(mm) : 250)				
Upstream End General Rating	Scour/Erosion		7	7	
Stidge Culvert Component Last Now Explanation of Condition Rise (mm): 1220, Type: MP)	Beavers (Y/N)	No			
Last Now Explanation of Condition Pipe # 2, Secondary Span, Location Code: MAIN, Span (mm): 7, Rise (mm): 1220, Type: MP)	Upstream End General Rating		5	5	
Last Now Explanation of Condition Pipe # 2, Secondary Span, Location Code: MAIN, Span (mm): 7, Rise (mm): 1220, Type: MP)			Brio	dge Cu	Ivert Barrel
Barrel Last Accessible Date 12-Jul-2005 East pipe Viewed from ends, shape looks good. Not accessible due to high flow and small diameter pipe. Special Feature (Type :) Special Feature (Type :) Special Feature (Type :) Roof N N N Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag Sidewall N N N Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection Floor N N N Builge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams N N N Separation (mm) Longitudinal Saams Total No. of Cracked Rings Min. Remaining Steel Between Cracks (mm) Proper Lap (TyN) Longitudinal Stagger (Y/N) Yes Longitudinal Stagger (Y/N) Corrosion By Soil (Y/N) Corrosion By Water (Y/N) Minor superficial rust on floor, 12-Jul-2005 Corrosion By Water (Y/N) Minor superficial rust on floor, 12-Jul-2005 Corrosion By Water (Y/N)	Culvert Component				
Barrel Last Accessible Date 12-Jul-2005 East pipe Viewelf from ends, shape looks good.	(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN, S	Span (r	nm):	·
Special Feature (Type :) Spec	Barrel Last Accessible Date	12-Jul-2005			East pipe Viewed from ends, shape looks good.
Type : Special Feature	Special Features				
Special Feature Company Corrosion By Water (Y/N) N N N N N N N N N N N N N N N N N N	Special Feature				
Type : Roof	(Type:)				
Type : Roof	Special Feature				
Roof	·				
Measured Rise (mm)			N	N	
Measured At Ring No. Sag (mm) Percent Sag Sidewall N N N Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection Floor Rulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams Separation (mm) Longitudinal Seams N N N Separation (mm) Total No. of Cracked Rings Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Yes Coating Corrosion By Soil (Y/N) Corrosion By Soil (Y/N) Corrosion By Soil (Y/N) Corrosion By Soil (Y/N) Corrosion By Water (Y/N) Total No. of Rings with Two Corrosion By Soil (Y/N) Corrosion By Water (Y/N) Minor superficial rust on floor. 12-Jul-2005	Measured Rise (mm)			_	
Sag (mm) Percent Sag Sidewall N N N Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection Floor N N N Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams Separation (mm) Longitudinal Seams N N N Total No. of Cracked Rings Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Yes Coating Corrosion By Soil (Y/N) M A Reflection 12-Jul-2005 6.6% deflection 12-Jul-2005 Riveted seams U/S portion.					7.4% sag-12-Jul-2005
Percent Sag Sidewall					
Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection Floor Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams Separation (mm) Longitudinal Seams Total No. of Cracked Rings Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Longitudinal Stagger (Y/N) Ves Coating N N M Minor superficial rust on floor. 12-Jul-2005					
Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection Floor Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams Separation (mm) Longitudinal Seams N N Total No. of Cracked Rings O Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Longitudinal Stagger (Y/N) Yes Coating N N Minor superficial rust on floor. 12-Jul-2005 Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)	Sidewall		N	N	
Measured At Ring No. Deflection (mm) Percent Deflection Floor N N N Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams N N Separation (mm) Longitudinal Seams Total No. of Cracked Rings Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Longitudinal Stagger (Y/N) Yes Coating N N Minor superficial rust on floor. 12-Jul-2005	Measured Span (mm)				6 69/ deflection 12 Jul 2005
Deflection (mm) Percent Deflection Floor N N N Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams N N Separation (mm) Longitudinal Seams Total No. of Cracked Rings O Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Longitudinal Stagger (Y/N) Ves Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)					- 0.0% deflection 12-Jul-2005
Percent Deflection Floor Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams Separation (mm) Longitudinal Seams N N N Total No. of Cracked Rings O Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Longitudinal Stagger (Y/N) Coating N N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)					
Floor N N N Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams Separation (mm) Longitudinal Seams N N N Total No. of Cracked Rings O Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Longitudinal Stagger (Y/N) Yes Coating N N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)					
Bulge (mm) Measured At Ring No. Abrasion (Y/N) Circumferential Seams N N Separation (mm) Longitudinal Seams N N Riveted seams U/S portion. Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Proper Lap (Y/N) Corrosion By Soil (Y/N) Corrosion By Water (Y/N) Minor superficial rust on floor. 12-Jul-2005			N	N	
Measured At Ring No. Abrasion (Y/N) Circumferential Seams Separation (mm) Longitudinal Seams N N N Riveted seams U/S portion. 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) Yes Longitudinal Stagger (Y/N) Corrosion By Soil (Y/N) Corrosion By Water (Y/N)					
Abrasion (Y/N) Circumferential Seams N N Separation (mm) Longitudinal Seams N N 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) Yes Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)					
Circumferential Seams Separation (mm) Longitudinal Seams N N Total No. of Cracked Rings O Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Longitudinal Stagger (Y/N) Corrosion By Soil (Y/N) Corrosion By Water (Y/N) N Riveted seams U/S portion. N N N Riveted seams U/S portion. N N Minor superficial rust on floor. 12-Jul-2005					
Separation (mm) Longitudinal Seams N N N Riveted seams U/S portion. Total No. of Cracked Rings 0 Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Yes Longitudinal Stagger (Y/N) Yes Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)			N	N	
Longitudinal Seams N N N Total No. of Cracked Rings 0 Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Yes Longitudinal Stagger (Y/N) Yes Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)			- ' '		
Total No. of Cracked Rings 0 Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Yes Longitudinal Stagger (Y/N) Yes Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)			N	N	Riveted seams II/S portion
Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Longitudinal Stagger (Y/N) Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)		0	- ' '	- 11	Triveted Scarils 6/6 portion.
Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Yes Longitudinal Stagger (Y/N) Yes Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)	Total No. of Rings with Two				
Proper Lap (Y/N) Yes Longitudinal Stagger (Y/N) Yes Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)	Min. Remaining Steel				
Longitudinal Stagger (Y/N) Yes Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)	` '	Yes			
Coating N N Minor superficial rust on floor. 12-Jul-2005 Corrosion By Soil (Y/N) Corrosion By Water (Y/N)					
Corrosion By Soil (Y/N) Corrosion By Water (Y/N)			N	N	Minor superficial rust on floor, 12-Jul-2005
Corrosion By Water (Y/N)					
	1	NEG			

		Brid	dge Cu	lvert Barrel				
Culvert Component		Last	Now	Explanation of Condition				
(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN, S	Span (r	nm):	, Rise (mm): 1220, Type: MP)				
Ponding (Y/N)	No							
Fish Passage Adequacy		5	5					
Baffle		Х	Х					
(Type:)								
Waterway Adequacy		5	5					
Icing (Y/N)	No							
Silting (Y/N)	No							
Drift (Y/N)	No							
Barrel General Rating		4	4	GR carried forward from 2005				
			ownstr	ream End				
Culvert Component			Now	Explanation of Condition				
(Pipe # : 2, Span Type: Second	lary Span)	Luot	11011	Explanation of condition				
Direction	ary opani,	N		East pipe.				
End Treatment (Concrete, Steel, Others, None)	STEEL	IN		Last pipe.				
Headwall		Х	Х					
		Х	Х					
Collar Wingwalls (Shape:) Cutoff Wall		Х	Х					
(Shape:)		1	_					
Cutoff Wall		X	X					
Bevel End		5	5					
Heaving (mm)	0							
Invert Above/Below Stream Bed	ABOVE							
Above/Below (mm)	150							
Scour Protection		7	7					
(Type : RIP RAP)								
(Avg. Rock Size(mm) : 300)								
Scour/Erosion		7	7					
Beavers (Y/N)	No							
Downstream End General Ratio	ng	5	5					
		S	Structu	re Usage				
		Last		Explanation of Condition				
Channel (U/S and D/S)			111011					
Alignment		6	6					
Bank Stability		6	6					
HWM (m below Top of Culvert)				HWM not visible.				
Drift (Y/N)	No							
Channel Bottom Degrading/Aggrading	DEGRADING			Deg d/s only				
Beavers (Y/N)	No							
(Fish Compensation Measure 1 :	NONE)							
(Fish Compensation Measure 2 :	NONE)							
Channel General Rating		6	6					

70873 -1 Bridge Culvert

			Maintena	nce Recommen	dations					
Inspector Recommendations Year Inspector Comments					Department Com	ments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING	3									
INSTALL STRUTS										
INSTALL CONCRETE COLLAR/CUT	OFF									
REPAIR SEAMS										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/N (%)	ow) 44.4/4	4.4	Sufficiency Rating (%)	(Last/Now)	44.1/44.1	Est. Repl. Yr	2033	Maint. Re	qd. (Y/N)	No
Special Comments for Next Inspection					Department Comments					
Maintenance Reviewed By					Date		E	Estimated Tota	1 0	
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Eric Carcoux			Previous	Assistant's Name					
Next Inspection Date	11-May-2014			Previous	Inspection Date	15-Sep-2010				
Inspection Cycle (Default) (months)	21									
Comment										