08307 -1 Bridge Culvert

					Bridg	e Culve	ert Inspe	ction					
Bridge File Num	ber	08307 -1	Bridge Culve	rt			Form Ty	ре	CULM				
Year Built		1987					Lot No.		3	3			
Bridge or Town I	Name	HOLDEN					Inspecto	r Name	Jason Saly	Jason Saly			
Located Over		TRIBUT.	ARY TO VERN CRS-ST	MILION R	IVER,	6.5.44,	Inspector Class Assistant Name		BR CLS A	BR CLS A			
Located On		855:12 (C1 21.330				Assistar						
Water Body CI./	Year						Inspection		02 Jun 2010				
Navigabil. Cl./Year						Data En		Jill Potts	03-Jun-2010				
Legal Land Loca	ation	SW SEC	11 TWP 49 R	GE 16 W	4M								
Longitude, Latitude -112:14:45, 53:12:33							ata Entry Date 01-Jul-2010						
Road Authority Alberta Transportation (AIT)							viewer Name John O'Brien						
Contract Main. Area CMA16							Review Date 24-Jun-2010 Dept. Reviewer Name Chris Black						
Clear Roadway/	Skew	12 /					·						
AADT/Year		520 / 20	09 (A)					eview Date	06-Jul-2010				
Road Classificat		RCU-20					Follow-U	рр ву					
Detour Length (k		3											
Bridge Culvert		ation					<u>'</u>						
Number of Culve			2										
Pipe #	Barrel	(Span	Rise (or	Dia.)	Туре		Length	Corr. Profile	PI./Slab Thickness	Shape		
1 N	MAIN	-		1600		MP	:	24	68X13	2.8	ROUND		
2 N	MAIN	-		1600		MP	:	24	68X13	2.8	ROUND		
Special Features	3												
Special Features	s Comr	nent											
					Uti	lities (L	_ocated a	at)					
Utility Attachmer		124 1											
Telephone	West	ditch.					Gas						
Power						Municipa							
Others							Problem	(Y/N) No	1				
Remarks				٨٠	oprood	sh Book	d / Embai	nkmont					
				A	Last	Now		ntion of Cor	ndition				
Horizontal Alignr	ment				9	8	LAPIGITO		Idition				
Vertical Alignme					9	8							
Roadway Width			12.000				There are cracks in the ashpalt over the pipe. There are several tire marks along these cracks.						
Embankment					N	7							
Sideslope (:	1)		3.0										
(Height of Cov		1.8)											
Guardrail (Y/N)			Yes				West side only.						
Approach Road	l / Emb	ankmen	t General Rat	ing	9	8							
							am End						
Culvert Compo					Last	Now	Explana	tion of Cor	ndition				
(Pipe # : 1 , Spa	n Type	: Primar	y Span)										
Direction					W		North pi	pe.					
End Treatment (Others, None)	Concre	ete, Steel	, STEEL										
Headwall					X	X							

08307 -1 Bridge Culvert

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Span Type: Primary	/ Span)			
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		X	X	
Bevel End		Х	5	(Spot corrosion in roof - photo. 07/11/2003)
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	7	
(Type: RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour Protection (Type: RIP RAP) (Avg. Rock Size(mm): 200) Scour/Erosion Beavers (Y/N) Upstream End General Rating Culvert Component (Pipe #: 1, Primary Span, Location Code: MAIN, Spath Barrel Last Accessible Date O7-Nov-2003 Special Features Special Feature (Type:) Special Feature		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		4	5	
		Brid	dae Cu	lvert Barrel
Culvert Component		1	Now	Explanation of Condition
•	tion Code: MAIN. Spa			, Rise (mm): 1600, Type: MP)
			•	(North pipe. Measured span 1680 near c/l. 07/11/2003) Unable to access due to water.
Special Features				
(Type:)				
Special Feature				
Roof		N	N	(Roof est 5% sag. Slight flattening. 07/11/2003)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	80			
Percent Sag				
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) 80 Percent Deflection Floor		N	N	(5.0% deflection. 07/11/2003)
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	80			
Percent Deflection				
Floor		N	N	(Silted over, ice 300mm. 07/11/2003)
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	(Dirt infiltration @ 2nd seam from West - photo. 1st seam from East.
Separation (mm)	70			07/11/2003)
Longitudinal Seams		Х	Х	
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)				
Longitudinal Stagger (1/11)	I			

		Brid	dge Cu	lvert Barrel		
Culvert Component		Last Now		Explanation of Condition		
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	ın (mm):	, Rise (mm): 1600, Type: MP)		
Coating		N	N	(Spot corrosion on roof near East end - photo. 07/11/2003)		
Corrosion By Soil (Y/N)	Corrosion By Soil (Y/N) Corrosion By Water (Y/N) amber POS/ZERO/NEG NEG Onding (Y/N) Sh Passage Adequacy affile Type:) Caterway Adequacy Icing (Y/N) Silting (Y/N) Porift (Y/N) Arrel General Rating					
Corrosion By Water (Y/N)						
Camber POS/ZERO/NEG	NEG					
Ponding (Y/N)	Yes			(Caused by silt buildup @ both ends. 07/11/2003)		
Fish Passage Adequacy		Х	5			
Baffle		Х	Х			
(Type:)			1			
Waterway Adequacy		N	5	(300mm.)		
Icing (Y/N)	No					
Silting (Y/N)	Yes					
Drift (Y/N)	No					
Barrel General Rating		4	4	G.R. carried forward since 07/Nov/2003.		
				eam End		
		Last	Now	Explanation of Condition		
	/ Span)	1				
Direction	I	E		North pipe.		
End Treatment (Concrete, Steel, Others, None)	STEEL		1			
Headwall		X	Х			
Collar		X	X			
Wingwalls		Х	X			
(Shape:)						
Cutoff Wall		Х	X			
Bevel End		N	5	(Torn bevel edge in roof - photo. 07/11/2003)		
Heaving (mm)	0					
Invert Above/Below Stream Bed	BELOW					
Additional contents of the con						
Scour Protection		N	7			
(Type: RIP RAP)						
(Avg. Rock Size(mm) : 200)						
Scour/Erosion		N	7			
Beavers (Y/N)	No					
Downstream End General Ratio	ng	4	5			
			linstre	am End		
Culvert Component		_		Explanation of Condition		
	larv Span)	1	1			
Direction	, , , , , , , , , , , , , , , , , , ,	W		South pipe.		
End Treatment (Concrete, Steel,	STEEL					
Headwall		Х	Х			
Collar		Х	X			

08307 -1 Bridge Culvert

			Upstre	eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		X	X	
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	7	
(Type: RIP RAP)				
(Avg. Rock Size(mm) : 200)			_	
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
		Brid	dae Cu	lvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN. S			, Rise (mm): 1600, Type: MP)
Barrel Last Accessible Date	07-Nov-2003		,	South pipe. (Measured span 1680 near c/l. 07/11/03) Pipe not accessible due to water levels.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		N	N	(Roof est 5%. Slight flattening. 07/11/2003)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	70			
Percent Sag				
Sidewall		N	N	(Measured span 1670 near c/l.
Measured Span (mm)				5.0% deflection. 07/11/2003)
Measured At Ring No.				
Deflection (mm)	70			
Percent Deflection				
Floor		N	N	(Silted over, ice 300mm. 07/11/2003)
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	(Dirt infiltration @ 2nd seam from West - photo. 1st seam from East.
Separation (mm)	125			07/11/2003)
Longitudinal Seams		Х	Х	
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)				

Last Now Explanation of Condition (Fipe #: 2, Secondary Span, Location Code: MAIN, Span (mm): Rise (mm): 1800, Type: MP)			Brid	dge Cu	lvert Barrel
Coaring	Culvert Component		Last	Now	Explanation of Condition
Corrosion By Soil (Y/N)	(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN, S	}pan (r	nm):	, Rise (mm): 1600, Type: MP)
Carrosion By Water (V/N) Camber POS/ZERO/NEG NEG	Coating		N	N	(Spot corrosion on roof near East end - photo. 07/11/2003)
Camber POS/ZERO/NEG	Corrosion By Soil (Y/N)	Yes			
Fish Passage Adequacy Fish Passage Adequacy Fish Passage Adequacy Fish Passage Adequacy Value Valu	Corrosion By Water (Y/N)				
Sith Passage Adequacy	Camber POS/ZERO/NEG	NEG			
Saffle	Ponding (Y/N)	Yes			(Caused by silt buildup @ both ends. 07/11/2003)
Type : Waterway Adequacy	Fish Passage Adequacy		Х	5	
Vaterway Adequacy	Baffle		Х	Х	
Ling (Y/N)	(Type:)				
Sitting (Y/N)	Waterway Adequacy		N	5	(300mm)
Drift (Y/N)	Icing (Y/N)	No			
Barrel General Rating	Silting (Y/N)	Yes			
Culvert Component (Pipe #: 2, Span Type: Secondary Span) Direction End Treatment (Concrete, Steel, Others, None) Headwall X X Collar X X X Wingwalls (Shape:) Cutoff Wall X X X Bevel End Heaving (mm) Invert Above/Below (mm) Above/Below (mm) Courretion X X X Bevel Find Above/Below Stream Bed BELOW Above/Selow (mm) Scour Protection X X X Find Treatment (Concrete, Steel, STEEL Others, None) N 7 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir, 0.7/11/2003)	Drift (Y/N)	No			
Culvert Component Last Now Explanation of Condition	Barrel General Rating		4	4	G.R. carried forward since 07/Nov/2003.
Culvert Component Last Now Explanation of Condition			D	ownstr	ream End
Direction	Culvert Component				
End Treatment (Concrete, Steel, Others, None)	(Pipe # : 2, Span Type: Second	lary Span)			
Collar	Direction		Е		South pipe.
Collar	End Treatment (Concrete, Steel, Others, None)	STEEL			
Wingwalls (Shape:) Cutoff Wall X	Headwall		X	X	
Cutoff Wall	Collar		Х	Х	
Cutoff Wall	Wingwalls		Х	Х	
Bevel End Heaving (mm) Invert Above/Below Stream Bed BELOW Above/Below (mm) Scour Protection (Type: RIP RAP) (Avg. Rock Size(mm): 200) Scour/Erosion N 7 Beavers (Y/N) No Downstream End General Rating 4 7 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	(Shape:)				
Heaving (mm) 0 Invert Above/Below Stream Bed BELOW Above/Below (mm) 400 Scour Protection N 7 (Type: RIP RAP) (Avg. Rock Size(mm): 200) Scour/Erosion N 7 Beavers (Y/N) No No Downstream End General Rating 4 7 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Structure Usage Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	Cutoff Wall		Х	X	
Invert Above/Below Stream Bed BELOW Above/Below (mm) 400 Scour Protection N 7 (Type: RIP RAP) (Avg. Rock Size(mm): 200) Scour/Erosion N 7 Beavers (Y/N) No Downstream End General Rating 4 7 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	Bevel End		N	7	
Above/Below (mm) 400 Scour Protection N 7 (Type: RIP RAP) (Avg. Rock Size(mm): 200) Scour/Erosion N 7 Beavers (Y/N) No Downstream End General Rating 4 7 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	Heaving (mm)	0			
Scour Protection N 7 (Type: RIP RAP) (Avg. Rock Size(mm): 200) Scour/Erosion N 7 Beavers (Y/N) No Downstream End General Rating 4 7 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	Invert Above/Below Stream Bed	BELOW			
(Type : RIP RAP) (Avg. Rock Size(mm) : 200) Scour/Erosion N 7 Beavers (Y/N) No Downstream End General Rating 4 7 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	Above/Below (mm)	400			
(Avg. Rock Size(mm) : 200) Scour/Erosion N 7 Beavers (Y/N) No Downstream End General Rating 4 7 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	Scour Protection		N	7	
Scour/Erosion N 7 Beavers (Y/N) No Downstream End General Rating 4 7 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	(Type : RIP RAP)				
Beavers (Y/N) No Downstream End General Rating Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	(Avg. Rock Size(mm) : 200)				
Downstream End General Rating Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	Scour/Erosion		N	7	
Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)	Beavers (Y/N)	No			
Last Now Explanation of Condition	Downstream End General Ratio	ng	4	7	
Last Now Explanation of Condition			ş	Structu	re Usage
Alignment 8 7 (Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)					
reservoir. 07/11/2003)	Channel (U/S and D/S)				
Bank Stability N 7	Alignment		8	7	(Control gate in U/S channel used to divert water to Holden water reservoir. 07/11/2003)
	Bank Stability		N	7	
HWM (m below Top of Culvert) HWM not visible.	HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N) No		No			

Structure Usage								
		Last	Now	Explanation of Condition				
Channel Bottom Degrading/Aggrading				Unknown.				
Beavers (Y/N) No								
(Fish Compensation Measure 1 :	NONE)							
(Fish Compensation Measure 2 : NONE)								
Channel General Rating			7					

		Maintenance F	Recommendations				
Inspector Recommendations	Year	Inspector Comments	Department C	Comments	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	2010	Seal cracks in ACP above pipes.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/N (%)	low) 44.4/4	Sufficiency Rating (Last (%)	t/Now) 63.3/51.9	Est. Repl. Yr 202	Maint. Re	qd. (Y/N)	Yes
Special (Area appears corr bevel from bevel e Next Inspection	isive. Monitor s dge does not n	pot corrosion. 07/Nov/2003) (North pipeed to be repaired at this time. D.L. 07	Department Comments				
Maintenance Reviewed By			Date		Estimated Tota	I 0	
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Tim Davies		Previous Assistant's Nam	ne			
Next Inspection Date	03-Sep-2013		Previous Inspection Date 22-Mar-2007				
Inspection Cycle (Default) (months)	39						
Comment							