

Bridge Culvert Inspection			
Bridge File Number	71887 -1 Bridge Culvert	Form Type	CULM
Year Built	1952	Lot No.	5
Bridge or Town Name	CHIP LAKE	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO LOBSTICK RIVER, 8.11.84.51.17, WATERCRS-ST	Inspector Class	BR CLS B
Located On	16:08 L1 35.375	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	16-Aug-2012
Legal Land Location	SW SEC 32 TWP 53 RGE 10 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:26:56, 53:37:04	Data Entry Date	28-Aug-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA12	Review Date	24-Aug-2012
Clear Roadway/Skew	11.2 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	6,230 / 2011 (A)	Dept. Review Date	30-Aug-2012
Road Classification	RAD-412.4-120	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1830	SP	26.2	152X51	3.0	ROUND
2	MAIN	-	1830	SP	26.2	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North sideslope	Gas	
Power	1 wire North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag on u/s end of West pipe.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	LR int. 100m West. Local road intersection.
Vertical Alignment	8	8	
Roadway Width (m)	11.200		WBL
Embankment	6	6	North sideslope 3:1. South sideslope 2:1.
Sideslope (_:1)	2.0		
(Height of Cover(m) : 1.5)			
Guardrail (Y/N)	Yes		1 rotten post NW - photo #1. 3 sections with minor strike damage, still functional.
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	S		East pipe.
End Treatment (Concrete, Steel, Others, None)	NONE		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		X	X	Bevel has been removed, was torch cut.
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		5	5	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	5	
Beavers (Y/N)	Yes			Beaver dam across inlet 400mm high.
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1830, Type: SP)				
Barrel Last Accessible Date	13-Sep-2010			Only accessible for 4 rings on d/s.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	N	
Measured Rise (mm)	1735			
Measured At Ring No.	8			
Sag (mm)	95			
Percent Sag	5			
Sidewall		6	N	
Measured Span (mm)	1897			
Measured At Ring No.	8			
Deflection (mm)	67			
Percent Deflection	4			
Floor		6	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	N	
Separation (mm)	0			
Longitudinal Seams		6	N	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				1N stagger.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1830, Type: SP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Due to d/s channel constriction.
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		6	N	Previous from 2010 was '6'.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		East pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	400			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		4	4	Scour along side pipe x 2m.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Loss of fill around bevel end. Grassed.
Beavers (Y/N)	Yes			Beaver dam 30m d/s.
Downstream End General Rating		4	4	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		West pipe.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		X	X	Bevel has been removed by a torch.
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		4	5	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	5	
Beavers (Y/N)	Yes			Small dam at inlet
Upstream End General Rating		4	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1830, Type: SP)				
Barrel Last Accessible Date	16-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)	1762			
Measured At Ring No.	4			
Sag (mm)	68			
Percent Sag	4			
Sidewall		6	6	
Measured Span (mm)	1870			
Measured At Ring No.	4			
Deflection (mm)	40			
Percent Deflection	2			
Floor		6	N	
Bulge (mm)	0			
Measured At Ring No.	4			
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		6	6	1N stagger
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1830, Type: SP)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		West barrel.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		4	4	Protruding from fill 1m west side. Damaged - photo #3.
Heaving (mm)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		4	4	Void NW side of bevel end.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Scour hole off of D/S end, 1.0 m x 10.0 m x 10.0 m.
Beavers (Y/N)	Yes			Beaver dam 30m d/s.
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	U/S 90 degree bend, 30m from inlets.
Bank Stability		5	5	Vertical banks u/s.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			Drift on sideslope U/S.
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Remove dam U/S and debris					
OTHER ACTION	2013	Replace rotten guardrail post.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	59.3/60.1	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor erosion at d/s end.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Todd Warshawski		Previous Assistant's Name				
Next Inspection Date	16-May-2014		Previous Inspection Date	13-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							