

Bridge Culvert Inspection			
Bridge File Number	13654 -1 Bridge Culvert	Form Type	CUL1
Year Built	1953	Lot No.	4
Bridge or Town Name	CHIP LAKE	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO LITTLE BRULE CK, 8.11.84.51.18.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	16:08 L1 30.528	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	16-Aug-2012
Legal Land Location	SW SEC 35 TWP 53 RGE 11 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:31:12, 53:37:09	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	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1810	SP	45.7	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	50m East.
Power	2 wires OH 200m NW.	Municipal	
Others	Monitoring well in South lane.	Problem (Y/N)	No
Remarks	BF tag on u/s bevel.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Residence access 50m West.
Vertical Alignment	8	8	On a gradual curve RT, LT curve 500m West.
Roadway Width (m)	11.200		WBL.
Embankment	7	7	4:1 on N side.
Sideslope (__:1)	2.5		
(Height of Cover(m) : 6)			
Guardrail (Y/N)	Yes		South side only.
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	S		
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		6	5	Fill settled 700mm.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	5	
Beavers (Y/N)	No			
Upstream End General Rating		6	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1810, Type: SP)				
Barrel Last Accessible Date	16-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)	1724			
Measured At Ring No.	8			
Sag (mm)	86			
Percent Sag	5			
Sidewall		6	6	Puncture hole in West sidewall from construction, small crack 50mm long @ R7 (not at a seam).
Measured Span (mm)	1859			
Measured At Ring No.	8			
Deflection (mm)	49			
Percent Deflection	3			
Floor		4	4	Extensive corrosion and pitting with isolated perforations in rings 1-3.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
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	4	Pitting bottom 1/4. Perforations in floor rings 1-3.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1810, Type: SP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
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
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		4	4	Scour around bevel 1.5m x 1m x 1m.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Scour hole at D/S end. 1.0 x 3.0 x 12 m long. Bevel unsupported for 1.5m.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	90 degree bend sharp 10 m D/S from end of pipe.
Bank Stability		5	5	Vertical banks. Scour hole at D/S end. 1.0 x 3.0 x 12 m long.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	64.7/63.6	Est. Repl. Yr	2020	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor corrosion on floor. Monitor erosion at outlet.		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	16-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							