

Bridge Culvert Inspection			
Bridge File Number	08206 -1 Bridge Culvert	Form Type	CUL1
Year Built	1959	Lot No.	
Bridge or Town Name	MICHICHI	Inspector Name	Wayne Cappellani
Located Over	TRIBUTARY TO MICHICHI CREEK, 3.35.4, WATERCRS-ST	Inspector Class	BR CLS A
Located On	849:04 C1 6.217	Assistant Name	Chris Black
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Sep-2011
Legal Land Location	NE SEC 36 TWP 29 RGE 19 W4M	Data Entry By	Wayne Cappellani
Longitude, Latitude	-112:32:13, 51:31:48	Data Entry Date	10-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Wayne Cappellani
Contract Main. Area	CMA21	Review Date	10-Sep-2012
Clear Roadway/Skew	8.5 / -20 deg. (LHF)	Dept. Reviewer Name	Wayne Cappellani
AADT/Year	100 / 2011 (A)	Dept. Review Date	10-Sep-2012
Road Classification	RLU-208G-90	Follow-Up By	
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2905	3203	SPE	33.5	152X51	3.5	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	No utilities found.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	Limited sight from N in pronounced valley. Field access to S. Winding road sign to N.
Vertical Alignment	5	5	
Roadway Width (m)	9.300		
Embankment	5	5	
Sideslope (__:1)	2.0		
(Height of Cover(m) : 2.3)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	5	5	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		
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	5	Minor damage on NE corner.
Heaving (mm)	300			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		5	5	Minor erosion along NE bevel end.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
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): 2905, Rise (mm): 3203, Type: SPE)				
Barrel Last Accessible Date	27-Sep-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)	3093			
Measured At Ring No.	4			
Sag (mm)	110			
Percent Sag	3			
Sidewall		5	4	1 dent D/S end, minor. Isolated perforation in N. sidewall in R1 next to E. beveled end; perforations max. 30mm dia. 5.3%
Measured Span (mm)	3010			
Measured At Ring No.	4			
Deflection (mm)	105			
Percent Deflection	4			
Floor		6	5	Minor section loss with medium corrosion. No perforations visible in floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	6	
Separation (mm)	0			
Longitudinal Seams		7	6	1N.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	4	Perforations in N. sidewall in R 1 near E. beveled end; minor section loss/medium corrosion in floor.
Corrosion By Soil (Y/N)	Yes			
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): 2905, Rise (mm): 3203, Type: SPE)				
Fish Passage Adequacy		4	4	D/S invert above S/B - 500mm drop.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	4	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)	500			
Scour Protection		4	4	Shallow basin formed within rock riprap, 3m X 3m, ~1m deep. Embankment eroding.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		4	4	
Beavers (Y/N)		No		
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	4	Sharp bend U/S cause severe erosion of S. bank.
Bank Stability		6	4	Vertical banks d/s, stable. Severe erosion of S. bank @ U/S end.
HWM (m below Top of Culvert)				(HWM 600mm above S.B. 01/08/16). HWM not visible.
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading		DEGRADING		
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2012	10 cum. Class I, d/s.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2012	Review warrant for guardrail for approach road.					
OTHER ACTION	2012	Devert channel @ U/S end rebuild S. bank.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/44.4	Sufficiency Rating (Last/Now) (%)	50.1/43.9	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2004.12.27 Future grading project. Structurally ok until 2020. May consider liner if road work necessitates action.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	27-Dec-2014		Previous Inspection Date	10-May-2011			
Inspection Cycle (Default) (months)	39						
Comment							