

Bridge Culvert Inspection			
Bridge File Number	75716 -1 Bridge Culvert	Form Type	CUL1
Year Built	1965	Lot No.	1
Bridge or Town Name	FT VERMILION	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO CARIBOU RIVER, 8.10.21.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	58:10 C1 9.289	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	BR CLS B
Navigabil. Cl./Year		Inspection Date	13-Jun-2012
Legal Land Location	NE SEC 31 TWP 109 RGE 12 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:59:25, 58:30:53	Data Entry Date	10-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA01	Review Date	04-Nov-2012
Clear Roadway/Skew	11.5 / 0 deg.	Dept. Reviewer Name	David Morrison
AADT/Year	230 / 2011 (A)	Dept. Review Date	21-Mar-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	10		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1524	MP	18.3	68X13	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	3 wire o/h - South r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		8	8	
Roadway Width (m)	11.200			
Embankment		6	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : 0.7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		8	8	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	N	Covered in water.
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
Beavers (Y/N)	Yes			Beaver dam inside barrel-2m from u/s end.
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Barrel Last Accessible Date	06-Aug-2008			1.1m water in pipe.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	N	Sag est. silt on floor.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	37			
Percent Sag	3			
Sidewall		5	N	@ C/L
Measured Span (mm)	1576			
Measured At Ring No.				
Deflection (mm)	52			
Percent Deflection	4			
Floor		N	N	Silt covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	N	
Separation (mm)	30			
Longitudinal Seams		7	N	Rivettted seams
Total No. of Cracked Rings				
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		4	N	SCALING RUST, LOWER 1/3 & SOIL, RUST SPOTS IN PIPE FROM SOIL SIDE CORROSION
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		3	3	Beaverdam inside barrel-almost 100% blocked.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
Barrel General Rating		5	N	

Downstream 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	
Bevel End		6	N	Water above bevel.
Heaving (mm)	75			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		4	5	Vegetated.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	5	Vegetated
Beavers (Y/N)	No			
Downstream End General Rating		4	5	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		5	5	Banks sloughing d/s.
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			B/D inside culvert barrel.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2013	Remove beaverdam inside barrel.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Unable to access barrel last 2 inspection cycles recommend level 2 inspection as per bim manual.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	50.5/51.3	Est. Repl. Yr	2017	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Unable to access barrel last 2 inspection cycles recommend level 2 inspection as per bim manual.		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	Brian Pientsch		Previous Assistant's Name	Lisbeth Medina			
Next Inspection Date	13-Mar-2014		Previous Inspection Date	06-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							