

Bridge Culvert Inspection				
Bridge File Number	75719 -1 Bridge Culvert		Form Type	CUL1
Year Built	1975		Lot No.	1
Bridge or Town Name	FT VERMILION		Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO PEACE RIVER, 8.10.19, WATERCRS-ST		Inspector Class	BR CLS A
Located On	58:10 C1 38.140		Assistant Name	Clem Guenette
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	13-Jun-2012
Legal Land Location	NW SEC 18 TWP 110 RGE 9 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:30:16, 58:33:19		Data Entry Date	06-Nov-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA01		Review Date	04-Nov-2012
Clear Roadway/Skew	11 / 15 deg. (RHF)		Dept. Reviewer Name	David Morrison
AADT/Year	230 / 2011 (A)		Dept. Review Date	14-Jan-2013
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	999			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2905	SP	30.5	152X51	3.0	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)	11.500		
Embankment	6	6	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 1.5)			
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		N	N	(Bottom 3/4 of bevel is protruding from fill 500mm. 05/05/10)
Heaving (mm)	200			Only 10% visible-water 1.0m deep.
Invert Above/Below Stream Bed	BELOW			End of bevel under water.
Above/Below (mm)	800			
Scour Protection		5	4	Erosion on East side bevel 1.8m Long x 0.7m Wide x 0.5m Deep.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	4	Erosion @ beve.
Beavers (Y/N)	Yes			Large dam 15m u/s
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2905, Type: SP)				
Barrel Last Accessible Date	17-Jan-2007			Water 1.0m deep. Shape of pipe adequate when viewed from both ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	N	Slight depression at 10:30 u/s of c/l. Floor water covered - no rise measured south end of the barrel damaged at top.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		6	N	2007-01-17
Measured Span (mm)	2951			
Measured At Ring No.	5			
Deflection (mm)	46			
Percent Deflection	2			
Floor		N	N	Water cover
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	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		6	6	Staining. Viewed from ends.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			(Ponding 500mm 05/05/10)

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2905, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		N	N	GR 6 17-Jan-2007
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 (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		4	4	Sides damaged from 9 to 3 o'clock. Water 1.0m deep
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			End of bevel under water.
Above/Below (mm)	400			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
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	
Bank Stability		5	5	Slumping of the bank d/s.
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Incised channel
Beavers (Y/N)	Yes			B/D 20m U/S
(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	2012	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) (%)	57.0/56.9	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							
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							