

Bridge Culvert Inspection			
Bridge File Number	75316 -2 Bridge Culvert	Form Type	CUL1
Year Built	1999	Lot No.	4
Bridge or Town Name	BARRHEAD	Inspector Name	Melanie Johnson
Located Over	2ND ORDER TRIBUTARY TO PEMBINA RIVER, 8.11.84.36.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	654:02 C1 17.693	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Aug-2011
Legal Land Location	SE SEC 17 TWP 58 RGE 3 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:24:06, 54:00:24	Data Entry Date	19-Sep-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA10	Review Date	07-Sep-2011
Clear Roadway/Skew	9 / 30 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	420 / 2010 (A)	Dept. Review Date	28-Sep-2011
Road Classification	RCU-209-110	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	3542	2600	RPE	28.6	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	North & South r/w.	Gas		
Power	1 wire North r/w. 2 O/H wires crossing Hwy 654, 30m East.	Municipal		
Others		Problem (Y/N)	No	
Remarks	BF tag installed on top of North headwall.			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Hwy 33 jct 50m East. Ent 20m NE. No passing both directions.
Vertical Alignment		9	9	
Roadway Width (m)	9.000			
Embankment		8	8	
Sideslope (_ :1)	5.0			
(Height of Cover(m) : 0.3)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	7	
Collar		8	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	7	Field stone. Sand/silt covering rock.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Upstream End General Rating		8	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3542, Rise (mm): 2600, Type: RPE)				
Barrel Last Accessible Date	27-Aug-2011			
Special Features				
Special Feature				Concrete Distribution Slab. "N"
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	(2003/08/21) Can't confirm, covered by mud/water.
Measured Rise (mm)	2560			At c/l.
Measured At Ring No.				
Sag (mm)	40			
Percent Sag	2			
Sidewall		8	8	At c/l.
Measured Span (mm)	3545			
Measured At Ring No.	4			
Deflection (mm)	3			
Percent Deflection				
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	5	
Separation (mm)	0			
Longitudinal Seams		8	5	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	Rust stain from several bolt holes in seams.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3542, Rise (mm): 2600, Type: RPE)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Siltng (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		8	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	7	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Downstream End General Rating		8	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Smooth bends in the channel U/S & D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
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) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	82.3/80.4	Est. Repl. Yr	2055	Maint. Req. (Y/N)	No
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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	27-Nov-2014		Previous Inspection Date	07-May-2008			
Inspection Cycle (Default) (months)	39						
Comment							