

Bridge Culvert Inspection			
Bridge File Number	73955 -1 Bridge Culvert	Form Type	CUL1
Year Built	1978	Lot No.	2
Bridge or Town Name	BUCK CREEK	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO BUCKLAKE CREEK, 6.132.2.6, WATERCRS-ST	Inspector Class	BR CLS A
Located On	22:28 C1 20.999	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Sep-2011
Legal Land Location	NW SEC 5 TWP 48 RGE 6 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:51:18, 53:07:05	Data Entry Date	26-Oct-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11	Review Date	25-Oct-2011
Clear Roadway/Skew	10.4 / 0 deg.	Dept. Reviewer Name	Brent Herrick
AADT/Year	2,450 / 2010 (A)	Dept. Review Date	14-Nov-2011
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	SPE	62.2	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	
Power	7 wires east r/w.	Municipal	
Others	Pipeline crossing 80 m south.	Problem (Y/N)	No
Remarks	Tag @ West end.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Oilfield access 80m North & South.
Vertical Alignment	8	8	
Roadway Width (m)	10.400		
Embankment	8	8	
Sideslope (:1)	4.0		
(Height of Cover(m) : 5)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	5	Scaling and pitting rust on floor.
Heaving (mm)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		4	4	Scour 1m either side of pipe.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		4	4	
Beavers (Y/N)	Yes			Beaver dam @ inlet.
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): 1724, Rise (mm): 1901, Type: SPE)				
Barrel Last Accessible Date	05-Nov-2009			Only accessible to R9 due to water depth.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1860			
Measured At Ring No.	8			
Sag (mm)	41			
Percent Sag	2			
Sidewall		7	6	
Measured Span (mm)	1790			
Measured At Ring No.	8			
Deflection (mm)	66			
Percent Deflection	4			
Floor		N	N	(Scaling and pitting rust. 26/June/2006) Floor covered in water.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		6	6	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				50% not properly lapped.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	N	(Scaling and pitting rust on floor. Evidence of leakage through bolt holes. 26/June/2006)
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			800mm ponding near outlet.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Fish Passage Adequacy		7	7	
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		E		
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	Floor not visible, under water.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		4	4	Very few rocks.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		4	4	Scour hole 1.0 x 8.0 x 15m.
Beavers (Y/N)	Yes			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				No HWM visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			Beaver dam upstream and downstream.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2011	U/S					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2011	Remove beaver dams & drift.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	64.1/64.2	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor downstream scour.		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	Kris Bosters		Previous Assistant's Name	Sara Wadlow			
Next Inspection Date	27-Jun-2013		Previous Inspection Date	05-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							