

Bridge Culvert Inspection				
Bridge File Number	86164 -1 Bridge Culvert		Form Type	CUL1
Year Built	1961		Lot No.	1
Bridge or Town Name			Inspector Name	Brian Pientsch
Located Over	WATERCOURSE, WATERCRS-NI		Inspector Class	BR CLS A
Located On	35:18 C1 52.508		Assistant Name	Clem Guenette
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Jan-2012
Legal Land Location	SW SEC 20 TWP 120 RGE 19 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:14:58, 59:25:51		Data Entry Date	29-Feb-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA01		Review Date	26-Feb-2012
Clear Roadway/Skew	9.4 /		Dept. Reviewer Name	David Morrison
AADT/Year	370 / 2011 (A)		Dept. Review Date	30-Mar-2012
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	PI./Slab Thickness	Shape
1	MAIN	-	1200	MP	32	75X25	4.0	ROUND
Special Features	BARREL ELBOW							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Along E r/w.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	
Vertical Alignment	8	8	
Roadway Width (m)	10.700		
Embankment	3	3	Gully 1.5m deep x 1m wide x 8m long on NW ditch. Slump 2m high 8m East of road shoulder.
Sideslope (:1)	3.0		
(Height of Cover(m) : 4)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	3	3	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	NONE		
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		X	X	construction damage on edge of barrel end when removing beaverdam.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		4	4	Gully 1.5mx1m - 2m North of bevel.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	Gully 1.5mx1m - 2m North of bevel. Slump 1.5m high on South side of barrel end.
Beavers (Y/N)	No			
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): 1200, Type: MP)				
Barrel Last Accessible Date	26-May-2010			Not accessible 0.45m crown to ice
Special Features				
Special Feature		6	N	
(Type : BARREL ELBOW)				
Special Feature				
(Type :)				
Roof		5	N	Minor 60mm tear - Ring 2 at 11 o'clock.-26-May-2010
Measured Rise (mm)	1116			
Measured At Ring No.	29			
Sag (mm)	84			
Percent Sag	7			
Sidewall		6	N	
Measured Span (mm)	1227			
Measured At Ring No.	29			
Deflection (mm)	27			
Percent Deflection	3			
Floor		N	N	Under water.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	N	
Separation (mm)				
Longitudinal Seams		5	N	Riveted pipe.
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		4	N	Pitting rust lower 1/2. Alkaline deposits through rivets.-26-May-2010
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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): , Rise (mm): 1200, Type: MP)				
Fish Passage Adequacy		3	3	D/S culvert end undermined by approx 1m.-26-May-2010
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)		No		
Siltting (Y/N)		No		
Drift (Y/N)		No		
Barrel General Rating		5	N	GR was 5 on 26-May-2010
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)		NONE		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	Culvert undermined approx 1m.-26-May-2010
Heaving (mm)				
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)		800		
Scour Protection		3	3	Erosion/ 2m vertical slump. N and S side of d/s culvert end.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		3	3	
Beavers (Y/N)		No		
Downstream End General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		3	3	Vertical slumps and slides along d/s channel.
HWM (m below Top of Culvert)				HWM not visible. D/S channel.
Drift (Y/N)		Yes		
Channel Bottom Degrading/Aggrading		DEGRADING		20m d/s end.
Beavers (Y/N)		Yes		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		3	3	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2012	D/S and U/S apron.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS	2012	Consider replacement due to overall condition, embankment slumping and stream degradation.					
OTHER ACTION	2012	Assessment					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	37.8/37.8	Est. Repl. Yr	2012	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor slides and erosion along d/s embankment. Consider delaying repairs until Assessment completed.		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	10-Oct-2013		Previous Inspection Date	26-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							