

Bridge Culvert Inspection				
Bridge File Number	73595 -1 Bridge Culvert		Form Type	CUL1
Year Built	1983		Lot No.	4
Bridge or Town Name	BARONS		Inspector Name	Tom Carey
Located Over	LNI - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	23:04 C1 21.128		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	18-Feb-2013
Legal Land Location	NE SEC 4 TWP 12 RGE 23 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-113:05:04, 49:58:09		Data Entry Date	17-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	03-Mar-2013
Clear Roadway/Skew	13 /		Dept. Reviewer Name	Tim Davies
AADT/Year	3,210 / 2011 (A)		Dept. Review Date	25-Mar-2013
Road Classification	RAU-213-130		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	9700	6530	AP	65			ARCH
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	At East r/w.		Gas
Power			Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		7	7	
Roadway Width (m)	13.000			
Embankment		7	7	Rip rap 90% up East embankment.
Sideslope (_ :1)	1.5			
(Height of Cover(m) : 8)				
Guardrail (Y/N)	Yes			Minor damage - 100mm bend at west.
Approach Road / Embankment General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		6	6	Moved inward 50mm - no change at NW. Some cracking - wingwalls and headwall - minor - 0.3 mm wide vertical cracks.
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	Ice within 1.5 m from roof.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			(From dwg on file 78698 - 980407)
Above/Below (mm)	250			
Scour Protection		N	N	Submerged - only seen at very top.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	G.R. carried forward.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 9700, Rise (mm): 6530, Type: AP)				
Barrel Last Accessible Date	18-Feb-2013			Ice within 1.5 m from roof.
Special Features				
Special Feature				'9' HSS Rail 65 x 65 mm HSS rail @ wings & headwall. Corrosion on west side of posts at east rail on head wall.
(Type :)				
Special Feature				
(Type :)				
Roof		N	8	3 longitudinal cracks 0.1 mm wide along roof
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	Ice within 1.5 m from roof.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	Viewed at roof only.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	8	
Separation (mm)	15			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 9700, Rise (mm): 6530, Type: AP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Rust staining and leaching from hairline vertical cracks - minor.
Collar		X	X	
Wingwalls		7	7	Moved inward 86mm @ NE - marked 2000- no change.
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	Ice within 1.5 m from roof
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			(From dwg file 78698-930719)
Above/Below (mm)	250			
Scour Protection		N	N	Submerged - only seen at very top.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	CPR structure 40 m east (D/S).
Bank Stability		5	5	Erosion at North East and South East - East of R.R bridge.
HWM (m below Top of Culvert)	1.7			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Unknown
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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) (%)	55.6/88.9	Sufficiency Rating (Last/Now) (%)	69.6/86.5	Est. Repl. Yr	2041	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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	18-Nov-2014		Previous Inspection Date	18-May-2011			
Inspection Cycle (Default) (months)	21						
Comment							