

Bridge Culvert Inspection								
Bridge File Number	70199 -1 Bridge Culvert				Form Type	CUL1		
Year Built	1957				Lot No.	2		
Bridge or Town Name	CORONATION				Inspector Name	Jason Saly		
Located Over	RIBSTONE CREEK, 5.2, WATERCRS-ST				Inspector Class	BR CLS A		
Located On	872:04 C1 1.568				Assistant Name			
Water Body Cl./Year					Assistant Class			
Navigabil. Cl./Year					Inspection Date	09-Jun-2011		
Legal Land Location	NW SEC 18 TWP 36 RGE 10 W4M				Data Entry By	Marcia Chavez		
Longitude, Latitude	-111:26:00, 52:05:55				Data Entry Date	27-Jun-2011		
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien		
Contract Main. Area	CMA21				Review Date	17-Jun-2011		
Clear Roadway/Skew	8.8 / 20 deg. (RHF)				Dept. Reviewer Name	Chris Black		
AADT/Year	920 / 2010 (A)				Dept. Review Date	30-Jun-2011		
Road Classification	RLU-209-110				Follow-Up By			
Detour Length (km)	3							
Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	1829	SP	29.3	152X51	2.8	ROUND
Special Features								
Special Features Comment								
Utilities (Located at)								
Utility Attachments								
Telephone	West side of road.				Gas			
Power	15m East of c/l. 2 wires also crosses 75m N.				Municipal			
Others					Problem (Y/N)	Yes		
Remarks	Telephone cable inside culvert running West to East.							
Approach Road / Embankment								
			Last	Now	Explanation of Condition			
Horizontal Alignment			7	7	On SH 872 at Coronation 100m S of NE 13-36-11-4. Land access 75m N. In sag curve.			
Vertical Alignment			6	6				
Roadway Width (m)	8.100				2:1 at bottom.			
Embankment			6	6				
Sideslope ( __:1)	3.0							
(Height of Cover(m) : 1)								
Guardrail (Y/N)	No							
<b>Approach Road / Embankment General Rating</b>			<b>6</b>	<b>6</b>				
Upstream End								
<b>Culvert Component</b>			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		4	3	Rust with significant perforation.
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		4	4	Minor erosion on NW haunch area.
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		4	4	
Beavers (Y/N)	Yes			An old dam surrounds the inlet but does allow some water to flow.
<b>Upstream End General Rating</b>		<b>4</b>	<b>3</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SP)				
Barrel Last Accessible Date	09-Jun-2011			
Special Features				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		4	4	150 x 60mm hole in roof on U/S R1. Rise at R4=1667=162mm=8.9% Rise at R5=1702=127mm Rise at R6=1685=144mm
Measured Rise (mm)	1667			
Measured At Ring No.	4			
Sag (mm)	162			
Percent Sag	9			
Sidewall		5	5	Span at R2=1953=124mm=6.8% Span at R4=1943=114mm Span at R6=1914=88mm
Measured Span (mm)	1953			
Measured At Ring No.	2			
Deflection (mm)	124			
Percent Deflection	7			
Floor		5	4	Rusted through at W bevel.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		4	4	9 missing nuts on North sidewall R7 and R8.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	4	Superficial rust and seam stains.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	
Icing (Y/N)	No			Minor
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	
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		5	5	Superficial rust.
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	5	Apron area only.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	Old abandoned dam around inlet.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Scour hole D/S from outlet away from pipe. No problem found.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>6</b>	<b>6</b>	

Maintenance Recommendations											
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	Structural Condition Rating (Last/Now) (%)	Sufficiency Rating (Last/Now) (%)	Est. Repl. Yr	Maint. Req'd. (Y/N)	Yes
SHOTCRETE REPAIRS											
PLACE ADDITIONAL RIP RAP	2011	Armour W bevel.									
REMOVE DRIFT ACCUMULATION	2011	Remove dam U/S.									
INSTALL CONCRETE/STEEL LINING											
INSTALL STRUTS											
INSTALL CONCRETE COLLAR/CUTOFF											
REPAIR SEAMS	2011	Install 9 missing nuts on R7-8.									
OTHER ACTION	2015	Replace W bevel at next rehab.									
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>52.9/52.0</b>	<b>2019</b>	<b>Maint. Req'd. (Y/N)</b>	<b>Yes</b>					
Special Comments for Next Inspection	Advise TELUS to relocate cable inside the culvert.										
Maintenance Reviewed By	Date										
Proposed Long-Term Strategy	2004.05.30 Culvert should be good until 2018.										
On 3-Year Program (Y/N)											
Proposed Action											
Previous Inspector's Name	Bryan Wai		Previous Assistant's Name								
Next Inspection Date	09-Sep-2014		Previous Inspection Date		26-Mar-2008						
Inspection Cycle (Default) (months)	39										
Comment											
	Estimated Total 0										

**Maintenance Recommendations**

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP	2011	Armour W bevel.	Programmed	2012		
REMOVE DRIFT ACCUMULATION	2011	Remove dam U/S.	Programmed	2012		
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS	2011	Install 9 missing nuts on R7-8.	Programmed	2012		
OTHER ACTION	2015	Replace W bevel at next rehab.	Programmed	2012		
OTHER ACTION						
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<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>52.9/52.0</b>	Est. Repl. Yr	2019	Maint. Req. (Y/N)	Yes
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Special Comments for Next Inspection	Advise TELUS to relocate cable inside the culvert.	Department Comments	Currently programmed in PMA for replacement in 2022. DA
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Maintenance Reviewed By	Darron Ahlstedt	Date	15-Jun-2012	Estimated Total	0
Proposed Long-Term Strategy	2004.05.30 Culvert should be good until 2018.				
On 3-Year Program (Y/N)					
Proposed Action					
Previous Inspector's Name	Bryan Wai	Previous Assistant's Name			
Next Inspection Date	09-Sep-2014	Previous Inspection Date	26-Mar-2008		
Inspection Cycle (Default) (months)	39				
Comment					