

Bridge Culvert Inspection				
Bridge File Number	83086 -1 Bridge Culvert		Form Type	CUL1
Year Built	1970		Lot No.	4
Bridge or Town Name	LOUGHEED		Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	870:02 C1 19.177		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	13-Dec-2012
Legal Land Location	NW SEC 27 TWP 45 RGE 11 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-111:31:40, 52:54:46		Data Entry Date	14-Jan-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA16		Review Date	20-Dec-2012
Clear Roadway/Skew	8.2 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	570 / 2011 (A)		Dept. Review Date	17-Jan-2013
Road Classification	RCU-208-110		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	-	1800	MP	25	68X13	3.5	ROUND
Special Features								
Special Features Comment								

**Posting Information**

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)	No										
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not required; cattlepass.										

**Utilities (Located at)**

Utility Attachments											
Telephone	West r/w.					Gas					
Power	East r/w, 2 wire.					Municipal					
Others						Problem (Y/N) No					
Remarks											

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	1.1km N of TWP Rd 44-4. Crest curve to the N with limited sight distance; no passing NB.
Vertical Alignment		6	5	
Roadway Width (m)	8.200			
Embankment		8	8	Est. due to snow cover.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 2)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>5</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		X	N	Snow covered.
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>6</b>	

**Bridge Culvert Barrel**

Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP)</b>				
Barrel Last Accessible Date	13-Dec-2012			(Measured 1690 x 1890 near centerline. 06May2003). Pipe squeezed; 100mm mower dent at West end.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		5	5	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				Estimated
Percent Sag	5			
Sidewall		5	5	
Measured Span (mm)	1684			Span at W end=1684=116mm=6.4% Span at mid=1719=81mm Span at E end=1695=105mm
Measured At Ring No.				
Deflection (mm)	116			6.4%
Percent Deflection	6			
Floor		N	N	Dirt/gravel covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	50			
Longitudinal Seams		X	X	
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP)				
Coating		7	7	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		X	X	Could carry drainage/run-off.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>5</b>	<b>5</b>	
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	Squared end.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		X	N	Snow covered.
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		7	7	
Roadway Surface		7	7	
(Type : )				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				

Structure Usage				
		Last	Now	Explanation of Condition
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		6	6	
Structure In Use (Y/N)	No			W fences in disrepair; E fence removed.
<b>Grade Separation General Rating</b>		<b>6</b>	<b>6</b>	

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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>72.5/71.5</b>	Est. Repl. Yr	2030	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)	N						
Proposed Action	2007.06.11 review in two years to determine continued usage.						
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	13-Mar-2016		Previous Inspection Date	10-Dec-2010			
Inspection Cycle (Default) (months)	39						
Comment							