

Bridge Culvert Inspection			
Bridge File Number	73581 -1 Bridge Culvert	Form Type	CUL1
Year Built	1965	Lot No.	4
Bridge or Town Name	MORECAMBE	Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	45:08 C1 21.807	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	22-Jan-2013
Legal Land Location	SW SEC 17 TWP 54 RGE 10 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:26:35, 53:39:38	Data Entry Date	28-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA14	Review Date	13-Feb-2013
Clear Roadway/Skew	9.2 /	Dept. Reviewer Name	Chris Black
AADT/Year	570 / 2011 (A)	Dept. Review Date	14-Mar-2013
Road Classification	RAU-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	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	MPE	21.3	68X13	3.5	ELLIPSE
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; cattle crossing.										

**Utilities (Located at)**

Utility Attachments											
Telephone	Plowed in South ditch.					Gas					
Power	3 line North, fenceline.					Municipal					
Others						Problem (Y/N)		No			
Remarks											

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 400m West. Curve 300m East. Structure located near top of crest curve. Poor sight distance to East.
Vertical Alignment		6	6	
Roadway Width (m)	9.200			Wide transverse crack in roadway over pipe. Previously sealed.
Embankment		5	N	Snow covered, but no signs of problems.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1.2)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

**Upstream End**

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	Square end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		6	N	(Some rock. Takes some flow from N. 07Jun2011) - Snow covered, but no signs of problems.
Scour/Erosion		6	N	Snow covered.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>N</b>	GR was 6 from 07Jun2011.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: MPE)				
Barrel Last Accessible Date	22-Jan-2013			
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		5	5	Minor mower damage in roof at S end of pipe. Could not measure rise due to dirt on floor.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	16			Estimate. 0.8%.
Percent Sag	0			
Sidewall		5	5	Span at N end=1621=103mm=6%Span at midspan=1766=42mm Span at S end=1638=86mm
Measured Span (mm)	1621			
Measured At Ring No.	1			Inwards.
Deflection (mm)	103			
Percent Deflection	6			
Floor		N	N	Covered with dirt.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	80			
Longitudinal Seams		7	7	Riveted.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: MPE)</b>				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	Takes some flow from North.
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		S			
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	Square end. Fenced off.	
Heaving (mm)	0				
Invert Above/Below Stream Bed	BELOW				
Above/Below (mm)	200				
Scour Protection		6	N	Snow covered, but no signs of problems.	
(Type : <b>NATURAL</b> )					
(Avg. Rock Size(mm) : )					
Scour/Erosion		6	N	Snow covered.	
Beavers (Y/N)	No				
<b>Downstream End General Rating</b>		<b>6</b>	<b>N</b>	GR was 6 from 07Jun2011.	

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	None			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
Drainage		7	7	
Structure In Use (Y/N)	No			New fencing to culvert at S, unsure of use.
<b>Grade Separation General Rating</b>		<b>7</b>	<b>7</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>65.1/63.1</b>	Est. Repl. Yr	2029	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)	Y						
Proposed Action	2008.01.03 Structure should be checked in respect to internal sagging. Brownlee & Associates						
Previous Inspector's Name	Jason Saly		Previous Assistant's Name				
Next Inspection Date	22-Oct-2014		Previous Inspection Date	07-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							