

Bridge Culvert Inspection				
Bridge File Number	80737 -1 Bridge Culvert		Form Type	CUL1
Year Built	1983		Lot No.	4
Bridge or Town Name	MANNVILLE		Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	16:28 R1 7.358;16:28 L1 7.346		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	18-Jul-2012
Legal Land Location	SW SEC 21 TWP 50 RGE 9 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-111:16:02, 53:19:31		Data Entry Date	31-Jul-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA15		Review Date	28-Jul-2012
Clear Roadway/Skew	25 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	6,300 / 2011 (A)		Dept. Review Date	02-Aug-2012
Road Classification	RFD-412.4-130		Follow-Up By	
Detour Length (km)	1			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	77	125X26	2.8	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.										

**Utilities (Located at)**

Utility Attachments											
Telephone						Gas					
Power						Municipal					
Others						Problem (Y/N)	No				
Remarks											

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Located through long horizontal curve. R/W superelevated.
Vertical Alignment		7	7	
Roadway Width (m)	25.000			
Embankment		7	7	Measured to c/l from South crown.
Sideslope (___:1)	5.0			
(Height of Cover(m) : 1.8)				
Guardrail (Y/N)	Yes			Only at outside shoulder - max length 47 m.
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</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	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		N	7	Well vegetated.
Scour/Erosion		N	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
Barrel Last Accessible Date	18-Jul-2012			
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		7	7	Roof estimated; unable to measure rise due to dirt on floor.
Measured Rise (mm)	2168			
Measured At Ring No.				
Sag (mm)	32			
Percent Sag				
Sidewall		7	7	Span at S end=2205=5mm Span at midpipe=2223=23mm=1.0% Span at N end=2198=2mm
Measured Span (mm)	2223			
Measured At Ring No.				
Deflection (mm)	23			
Percent Deflection	1			
Floor		N	N	Dirt covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Infiltration - minor.
Separation (mm)	10			
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)				
Coating		7	7	No corrosion visible.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		X	8	Intended as a cattlepass though local drainage passes through to slough on North side. 400mm of silt in S half.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</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.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	175			
Scour Protection		N	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	7	
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 : CONCRETE)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
Drainage		5	5	
Structure In Use (Y/N)	No			Fence at South end in disrepair; treed-in at N end.
<b>Grade Separation General Rating</b>		<b>5</b>	<b>5</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>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>81.8/78.3</b>	Est. Repl. Yr	2037	Maint. Req. (Y/N)	No
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2003.11.20 When condition deteriorates & rehab is required, removal of cattle pass shall be investigated. Consider liner. Culvert ok until 2030.						
On 3-Year Program (Y/N)	Y						
Proposed Action	2008.01.08 Check within two years to determine if landowner is still using the structure. Brownlee & Associates						
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	18-Apr-2014		Previous Inspection Date	17-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							