

Bridge Culvert Inspection				
Bridge File Number	80421 -1 Bridge Culvert		Form Type	CUL1
Year Built	1984		Lot No.	4
Bridge or Town Name	CARDSTON		Inspector Name	Jason Rusu
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	2:04 C1 3.774		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Oct-2011
Legal Land Location	SW SEC 27 TWP 3 RGE 25 W4M		Data Entry By	Erin Roberts
Longitude, Latitude	-113:17:50, 49:14:07		Data Entry Date	19-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	09-Nov-2011
Clear Roadway/Skew	11 /		Dept. Reviewer Name	Tim Davies
AADT/Year	2,460 / 2010 (A)		Dept. Review Date	21-Nov-2011
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	2200	MP	30	125X26		ROUND
Special Features								
Special Features Comment								

Posting Information											
Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)											
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	West ditch		Gas
Power	1 wire East		Municipal
Others	Fibre Optic line West ditch		Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		7	7	
Roadway Width (m)	11.000			
Embankment		7	7	
Sideslope (___:1)	4.0			
(Height of Cover(m) : 1.1)				
Guardrail (Y/N)	Yes			Guardrail 4.5m down embankment both sides
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		West side.
End Treatment (Concrete, Steel, Others, None)		STEEL		
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		6	6	Bevel cut from barrel section in field. Cut incorrectly.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		6	6	
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>6</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	16-Oct-2011			
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		7	7	
Measured Rise (mm)	2124			
Measured At Ring No.	4			
Sag (mm)	76			
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	2276			
Measured At Ring No.	4			
Deflection (mm)	76			
Percent Deflection	3			
Floor		N	N	100mm deep dirt on floor
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	5	1st SEAM FROM U/S-ROOF DAMAGED-MINOR. 65mm horizontal circ seam separation. SOIL INFILTRATION @ 3 seams - minor
Separation (mm)	60			
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): 2200, Type: MP)				
Coating		5	5	MINOR, SUPERFICIAL RUSTING @ HAUNCH. SUPERFICIAL RUST ON TOP OF CROWN AREA ON West END and East.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
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		E		EAST SIDE
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	6	NOTCHES CUT OUT OF BEVEL, same as u/s end.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		X	X	FENCES UP TO BARREL IN DISREPAIR. 1200mm CSP 5m North @ East end
Roadway Surface		6	6	
(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			
<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>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>79.0/79.0</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)							
Proposed Action							
Previous Inspector's Name	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	16-Jul-2013		Previous Inspection Date	21-Jan-2010			
Inspection Cycle (Default) (months)	21						
Comment							