

Bridge Culvert Inspection				
Bridge File Number	78953 -1 Bridge Culvert		Form Type	CUL1
Year Built	1978		Lot No.	4
Bridge or Town Name	CARDSTON		Inspector Name	Jon Davies
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS B
Located On	2:02 C1 13.937		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	12-Oct-2011
Legal Land Location	SE SEC 8 TWP 2 RGE 25 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-113:18:13, 49:06:30		Data Entry Date	24-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Jason Rusu
Contract Main. Area	CMA25		Review Date	10-Nov-2011
Clear Roadway/Skew	16.8 /		Dept. Reviewer Name	Tim Davies
AADT/Year	660 / 2010 (A)		Dept. Review Date	25-Nov-2011
Road Classification	RAU-213-120		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2130	MP	31.7	75X25	2.8	ROUND
Special Features		CONC FLOOR						
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	W. ditch		Gas	30 m WEST
Power	1 wire crosses road 50 m N.		Municipal	
Others	Fibre optics @ E r/w		Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Intersection 50 m south. Hill to north. Limited sight distance. No passing. TURNING LANES OVER CULVERT
Vertical Alignment		6	6	
Roadway Width (m)	16.800			
Embankment		7	7	
Sideslope (__:1)	3.5			
(Height of Cover(m) : 1.7)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	2:1 over pipe East end.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		WEST
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		7	7	Rock over roof and along sides.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2130, Type: MP)				
Barrel Last Accessible Date	20-Feb-2010			
Special Features				
Special Feature			7	Concrete floors
(Type : CONC FLOOR)				
Special Feature				
(Type :)				
Roof		7	7	Estimate.
Measured Rise (mm)	2182			
Measured At Ring No.	2			
Sag (mm)	52			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	2182			
Measured At Ring No.	2			
Deflection (mm)	52			
Percent Deflection	2			
Floor		N	N	Concrete covered-150mm.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	50 mm H gap @ u/s seam. 50 mm V & 60 mm H gap @ 2nd seam u/s. No dirt infiltration.
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): 2130, Type: MP)				
Coating		6	6	
Corrosion By Soil (Y/N)	No			
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	7	Handles drainage
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		EAST
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	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	
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		7	7	
Structure In Use (Y/N)	No			
Grade Separation General Rating		6	6	No guide fencing

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							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	81.4/76.5	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)							
Proposed Action							
Previous Inspector's Name	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	12-Jul-2013		Previous Inspection Date	20-Jan-2010			
Inspection Cycle (Default) (months)	21						
Comment							