

Bridge Culvert Inspection				
Bridge File Number	00466 -1 Bridge Culvert		Form Type	CUL1
Year Built	1992		Lot No.	4
Bridge or Town Name	CARDSTON		Inspector Name	Jason Rusu
Located Over	LAYTON CREEK, 2.12.22.12, WATERCRS-ST		Inspector Class	BR CLS A
Located On	5:02 C1 36.134		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	28-Oct-2011
Legal Land Location	NE SEC 12 TWP 3 RGE 26 W4M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-113:22:13, 49:12:09		Data Entry Date	21-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	09-Nov-2011
Clear Roadway/Skew	12.6 / -35 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	1,290 / 2010 (A)		Dept. Review Date	25-Nov-2011
Road Classification	RAU-213.4-120		Follow-Up By	
Detour Length (km)	8			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	70	75X25	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	SOUTH DITCH		Gas	
Power	2 W 10 m SOUTH, 1, W CROSSES		Municipal	
Others	ROAD 30 m WEST		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Curve 150 m west.
Vertical Alignment		6	6	In sag curve. Private access at SE.
Roadway Width (m)	12.600			
Embankment		N	6	5:1 on N. side.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 4.1)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		SOUTH
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		N	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Barrel Last Accessible Date	28-Oct-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)	2440			Upward.
Measured At Ring No.	3			
Sag (mm)				
Percent Sag				
Sidewall		8	8	inward
Measured Span (mm)	2380			
Measured At Ring No.	1			
Deflection (mm)				
Percent Deflection				
Floor		N	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	
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)				
Coating		5	5	Superficial corrosion @ haunches.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		NORTH
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		N	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	45 DEG ANGLE 5 m D/S. CURVES @ U/S
Bank Stability		4	4	CUTBANKS AT BEND Immediately IN FRONT OF ROCK AND THROUGHOUT VALLEY. Cut bank @ d/s @ W
HWM (m below Top of Culvert)				None visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

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) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	74.2/78.4	Est. Repl. Yr	2036	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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	28-Jul-2013		Previous Inspection Date	20-Dec-2009			
Inspection Cycle (Default) (months)	21						
Comment							