

Bridge Culvert Inspection			
Bridge File Number	13634 -1 Bridge Culvert	Form Type	CUL1
Year Built	1924	Lot No.	3
Bridge or Town Name	COLEMAN	Inspector Name	Garry Roberts
Located Over	MCGILLIVRAY CREEK, 2.12.37.16, WATERCRS-ST	Inspector Class	BR CLS A
Located On	3:02 C1 13.259	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Nov-2011
Legal Land Location	NE SEC 7 TWP 8 RGE 4 W5M	Data Entry By	Erin Roberts
Longitude, Latitude	-114:31:15, 49:38:06	Data Entry Date	05-Jan-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA26	Review Date	08-Dec-2011
Clear Roadway/Skew	13.5 /	Dept. Reviewer Name	Tim Davies
AADT/Year	6,470 / 2010 (A)	Dept. Review Date	10-Jan-2012
Road Classification	RAU-213-120	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	3660	3200	AP	68.3			ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	At SW & NW			Gas	20 m West		
Power	2 wire 6 m South of South road			Municipal			
Others				Problem (Y/N)	No		
Remarks							

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		4	5	Curves and grade to West within town. 13.5m hwy & 7.0m approach road. Posted for 60km/hr.
Vertical Alignment		4	5	
Roadway Width (m)	20.500			
Embankment		4	4	Erosion @ U/S to fenceline. This is bringing material into u/s end of structure. Also erosion over D/S end up to guardrail on local road. Metal retaining wall at South side is corroding.
Sideslope (__:1)	1.0			
(Height of Cover(m) : 11)				
Guardrail (Y/N)	Yes			Broken post on local road rail.
Approach Road / Embankment General Rating		4	5	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		North
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Sealed cracks
Collar		X	X	
Wingwalls		6	6	
(Shape : FLARE)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3660, Rise (mm): 3200, Type: AP)				
Barrel Last Accessible Date	28-Nov-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	6	Most seams are patched.
Measured Rise (mm)	3200			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		N	6	Numerous patches on sidewall & roof. Newer pony wall poured 0.6m high along both sides.
Measured Span (mm)	3660			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		N	5	The floor is heavily scaled but still functional. 1st seam @ d/s end, floor abrasion very heavy, 600mmx600mmx100mm deep rebar exposed. Appears that floor has been patched or covered with concrete before.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		N	5	No leakage @ this inspection.
Separation (mm)	30			
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 3660, Rise (mm): 3200, Type: AP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		South end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Scaling minor
Collar		X	X	
Wingwalls		5	5	Undermining at the SW corner-200mm rock lined 2mm wide cracks and minor spalls.
(Shape : FLARE)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	400			
Scour Protection		5	5	Rock wall at East - soil at West 400 mm rock in SB.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		5	5	3mx10mx0.8m scour hole lined w/ rock
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Bends 30deg at d/s.
Bank Stability		6	6	
HWM (m below Top of Culvert)	2.5			HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

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	2012	Repair guardrail along town road and binwall along highway shoulder.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/66.7	Sufficiency Rating (Last/Now) (%)	48.2/63.3	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
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	28-Aug-2013		Previous Inspection Date	17-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							