

Bridge Culvert Inspection			
Bridge File Number	02362 -1 Bridge Culvert	Form Type	CULM
Year Built	1971	Lot No.	4
Bridge or Town Name	COLEMAN	Inspector Name	Garry Roberts
Located Over	ALLISON CREEK, 2.12.37.20, WATERCRS-ST	Inspector Class	BR CLS A
Located On	3:02 C1 8.249	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Nov-2011
Legal Land Location	SW SEC 11 TWP 8 RGE 5 W5M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-114:35:11, 49:37:57	Data Entry Date	09-Jan-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA26	Review Date	08-Dec-2011
Clear Roadway/Skew	20 /	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	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3000	SP	46.9	152X51	4.2,4.2,4.2	ROUND
2	MAIN	-	3000	SP	46.9	152X51	4.2,4.2,4.2	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	At southeast	Gas	
Power	3 line 40 m east	Municipal	
Others	Fibre optic line N ditch	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Intersection 100m east of pipe to Sentinel Industrial Park. Turning lanes over pipes.
Vertical Alignment	7	7	
Roadway Width (m)	20.000		
Embankment	7	5	TRAFFIC OVER S EMBANKMENT -COVER LESS THAN 500mm- Some pit run material has been placed over the pipe - S end Steep at North end.
Sideslope (__:1)	2.0		
(Height of Cover(m) : 0.5)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	N		West pipe, north end.
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(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): 3000, Type: SP)				
Barrel Last Accessible Date	28-Nov-2011			W pipe 500mm of rock on the floor. This pipe is taking the flow
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Localized roof bulge @ ring 10, est 50mm Est
Measured Rise (mm)	2980			
Measured At Ring No.	12			
Sag (mm)	20			
Percent Sag	4			
Sidewall		6	6	Inward
Measured Span (mm)	2960			
Measured At Ring No.	12			
Deflection (mm)	40			
Percent Deflection	1			
Floor		N	N	Rock covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Poor circumferential seam btwn ring 9-10, cusping & misaligned bolt holes
Separation (mm)	50			
Longitudinal Seams		6	6	20mm cusping @ ring 10, west sidewall
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				1N
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	(Some perforations around bolt holes at d/s and 3rd ring fromd/s - 950803)
Corrosion By Soil (Y/N)	Yes			rock covered, no visible perforations
Corrosion By Water (Y/N)	Yes			superficial corrosion @ roof patch @ ring 9 alkali stains at roof.

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: SP)					
Camber POS/ZERO/NEG	ZERO				
Ponding (Y/N)	No				
Fish Passage Adequacy		5	5		
Baffle		X	X		
(Type :)					
Waterway Adequacy		7	7	300mm of gravel on the floor	
Icing (Y/N)	No				
Silting (Y/N)	Yes				
Drift (Y/N)	No				
Barrel General Rating		6	6		
Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Span Type: Primary Span)					
Direction		S		South end, west pipe.	
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	Some minor damage to roof and east side of bevel	
Heaving (mm)	0				
Invert Above/Below Stream Bed	BELOW				
Above/Below (mm)	500				
Scour Protection		7	7		
(Type : RIP RAP)					
(Avg. Rock Size(mm) : 300)					
Scour/Erosion		7	7		
Beavers (Y/N)	No				
Downstream End General Rating		6	6		
Upstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 2, Span Type: Secondary Span)					
Direction		N		East pipe, north end.	
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
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(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 # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: SP)				
Barrel Last Accessible Date	28-Nov-2011			East pipe.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	5	Est General flattening of roof from extension on to the South end not causing any problems.
Measured Rise (mm)	2910			
Measured At Ring No.	12			
Sag (mm)	90			
Percent Sag	3			
Sidewall		6	6	
Measured Span (mm)	3090			
Measured At Ring No.	12			
Deflection (mm)	90			
Percent Deflection	3			
Floor		N	N	Rock covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Poor circumferential seam btwn ring 9-10 and rings 10 - 11, cusping and misaligned bolt holes
Separation (mm)	50			
Longitudinal Seams		6	6	1N in main barrel and 2N in extension
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	(Some perforations around bolt holes @ d/s and 3rd ring from d/s - 950803) rock covered, no visible perforations Alkali stains @ roof
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	6	600mm ice on the floor
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		6	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		East pipe, south end.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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) (%)	66.7/55.6	Sufficiency Rating (Last/Now) (%)	68.6/60.1	Est. Repl. Yr	2025	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	28-Aug-2013		Previous Inspection Date	17-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							