Bridge Culvert Inspection

Bridge File Number	74631 -1 Bridge Culvert	Form Type	CUL1
Year Built	1957	Lot No.	3
Bridge or Town Name	COCHRANE	Inspector Name	Garry Roberts
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	1:06 L1 19.712;1:06 R1 19.735	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	13-Feb-2012
Legal Land Location	SE SEC 34 TWP 24 RGE 4 W5M	Data Entry By	Erin Roberts
Longitude, Latitude	-114:28:35, 51:05:13	Data Entry Date	14-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA28	Review Date	22-Feb-2012
Clear Roadway/Skew	32.5 /	Dept. Reviewer Name	Tim Davies
AADT/Year	18,200 / 2010 (A)	Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2430	2430	BP	70.6			RECTANGLE
Special Features		INSULATED FLOOR						
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)				No								
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Not Required											

Utilities (Located at)

Utility Attachments			
Telephone	South & North ditch	Gas	
Power	3W 50 m North OF CL & 1 West 20 m East	Municipal	
Others	Fibre Optics Cable conduit thru structure.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Entrance to service station, weigh scale.
Vertical Alignment		8	8	
Roadway Width (m)	32.500			16.6 EB & 15.7 WB
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **1.3**)				
Guardrail (Y/N)	Yes			Damage at NW.
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				North
End Treatment (Concrete, Steel, Others, None)	CONCRETE			BF 81690 under service road North
Headwall		6	6	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Collar		X	X	
Wingwalls		7	7	
(Shape :)				
Cutoff Wall		N	N	Buried
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		X	X	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2430, Rise (mm): 2430, Type: BP**)				
Barrel Last Accessible Date	13-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		5	5	Foam filled HORIZ CRACKS-VERT CRACKS UP TO 10 mm wide
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		5	4	North 1/2 concrete poured over original floor, 100mm deep. 20mm wide longitudinal crack in North barrel.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	CONST JOINT IS CRACKED @ roof patch w/spall 200x75
Separation (mm)	16			
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): 2430, Rise (mm): 2430, Type: BP**)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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			
Barrel General Rating		**5**	**5**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				South
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		5	5	Spall at West wall- minor.
(Shape :)				
Cutoff Wall		N	N	Buried
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	50			
Scour Protection		X	X	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**5**	

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		5	5	
Structure In Use (Y/N)	Yes			
Grade Separation General Rating		**5**	**5**	

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	Replace NW wing end at North service rose at NW guardrail.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**67.1/67.0**	Est. Repl. Yr	2024	Maint. Reqd. (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	13-Nov-2013	Previous Inspection Date	14-Sep-2010
Inspection Cycle (Default) (months)	21		
Comment			