

Bridge Culvert Inspection				
Bridge File Number	77038 -1 Bridge Culvert		Form Type	CULE
Year Built	1969		Lot No.	4
Bridge or Town Name	COCHRANE		Inspector Name	Garry Roberts
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	22:16 C1 8.056		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	22-May-2012
Legal Land Location	SE SEC 27 TWP 25 RGE 4 W5M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-114:28:11, 51:09:32		Data Entry Date	21-Jun-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	22-May-2012
Clear Roadway/Skew	12 /		Dept. Reviewer Name	Tim Davies
AADT/Year	11,590 / 2011 (A)		Dept. Review Date	29-Jun-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	7			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	-	2300	MP	6.3	125X26	2.8	ROUND
1	MAIN	1740	2200	RPP	26.2	152X51	3.0	PIPE ARCH
1	D/S	-	2300	MP	8	125X26	2.8	ROUND
Special Features								
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)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Not req.											

Utilities (Located at)

Utility Attachments												
Telephone	West fence					Gas						
Power						Municipal						
Others	Street lights both rows.					Problem (Y/N)	No					
Remarks												

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Recently paved over and widened on west end. W side of roadway has a merge lane.
Vertical Alignment		6	6	
Roadway Width (m)	13.500			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		East
End Treatment (Concrete, Steel, Others, None)	NONE			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1500			
Scour Protection		5	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	8	
Beavers (Y/N)	No			
Upstream End General Rating		5	8	

Bridge Culvert Barrel

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2300, Type: MP)				
Barrel Last Accessible Date	24-Nov-2010			2300 CSP extensions - 6.3 m @ u/s and 8.0 m @ d/s. Water too deep to enter.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	P.R. 8
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	15			
Percent Sag	0			
Sidewall		8	N	P.R. 8
Measured Span (mm)	1665			
Measured At Ring No.	8			
Deflection (mm)				
Percent Deflection	1			
Floor		8	N	P.R. 8
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	N	P.R. 8
Separation (mm)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2300, Type: MP)				
Longitudinal Seams		X	N	
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		8	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
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 Extension General Rating		8	N	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1740, Rise (mm): 2200, Type: RPP)				
Barrel Last Accessible Date	24-Nov-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	N	(50 mm hole in roof at East at R 1- mower damage.) Est roof (D/S sidewall is squashed inward to transition to CSP extension.) P.R. 6
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	15			
Percent Sag	0			
Sidewall		7	N	P.R. 7
Measured Span (mm)	1665			
Measured At Ring No.	8			
Deflection (mm)				
Percent Deflection	1			
Floor		N	N	(Avg 600mm deep. Ice on floor based on 2200mm design. Concrete and silt covered.)
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	N	P.R. 7
Separation (mm)	0			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1740, Rise (mm): 2200, Type: RPP)				
Longitudinal Seams		7	N	P.R. 7
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)	No			
Coating		5	N	(Corrosion @ lower haunch and @ North sidewall @ D/S end) P.R. 5
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	200 mm silt.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		West side. Large pond located 10m D/S extends along ditch to the South.
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)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		5	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	8	
Beavers (Y/N)	No			
Downstream End General Rating		5	8	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	Culvert drains water from ditch @ East to slough at West.
Roadway Surface		6	N	
(Type : CONCRETE)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/55.6	Sufficiency Rating (Last/Now) (%)	62.5/63.3	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	22-Feb-2014		Previous Inspection Date	24-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							