

Bridge Culvert Inspection			
Bridge File Number	74163 -1 Bridge Culvert	Form Type	CUL1
Year Built	1985	Lot No.	4
Bridge or Town Name	LUNDBRECK	Inspector Name	Garry Roberts
Located Over	BURTON CREEK, 2.12.48.11, WATERCRS-ST	Inspector Class	BR CLS A
Located On	22:08 C1 20.107	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	16-Jun-2012
Legal Land Location	SE SEC 6 TWP 12 RGE 1 W5M	Data Entry By	Erin Roberts
Longitude, Latitude	-114:07:22, 49:58:00	Data Entry Date	17-Jul-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Joel Wozney
Contract Main. Area	CMA26	Review Date	27-Jun-2012
Clear Roadway/Skew	12.6 / -3 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	1,980 / 2011 (A)	Dept. Review Date	17-Jul-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	18		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	SP	125.6	152X51	3.0,4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ditch.	Gas	100m North.
Power	1 wire 100m to North & 2 wire 100m NW.	Municipal	
Others	Fibre optics @ East r/w.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	
Vertical Alignment	6	6	
Roadway Width (m)	11.500		
Embankment	6	6	Ditch armoured @ SE & NE.
Sideslope (__:1)	3.0		
(Height of Cover(m) : 18)			
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)	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		5	5	Steep slope into bevel
Heaving (mm)	400			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		5	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	4	Water eroding both sides of bevel.
Beavers (Y/N)	No			
Upstream End General Rating		5	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 1800 , Type: SP)				
Barrel Last Accessible Date	16-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1735			
Measured At Ring No.	18			
Sag (mm)	65			
Percent Sag	3			
Sidewall		7	7	Water piping through isolated rings
Measured Span (mm)	1860			
Measured At Ring No.	16			
Deflection (mm)	60			
Percent Deflection	3			
Floor		4	4	Corrosion Holes 20-40mm dia @ floor rings 18 + 19. Isolated perforations throughout middle rings starting at Ring 18
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			3N stagger
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Corrosion holes @ floor @ rings 20 + 21 - 20-40mm dia Corrosion staining through longitudinal seams @ lower haunches rings 20 to 25.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			Isolated perforations to floor throughout middle rings.
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	First 2 rings drop 1m steep fast flow
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	5	Some flow pooling on either side of U/S bevel, traveling under bevel.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	150			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		5	5	Bevel projects 600mm above slope @ North side - from cattle action.
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Culvert)				No visible HWM Minor drift in channel
Drift (Y/N)	Yes			
Channel Bottom Degrading/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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	70.0/62.0	Est. Repl. Yr	2035	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	16-Mar-2014		Previous Inspection Date	07-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							