

Bridge Culvert Inspection			
Bridge File Number	72258 -1 Bridge Culvert	Form Type	CUL1
Year Built	1961	Lot No.	2
Bridge or Town Name	CHIGWELL	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO PARLBY CREEK, 3.65.2.1.1.4, WATERCRS-ST	Inspector Class	BR CLS A
Located On	815:04 C1 8.776	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	13-Jul-2012
Legal Land Location	SW SEC 22 TWP 41 RGE 25 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:31:53, 52:32:31	Data Entry Date	01-Aug-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA19	Review Date	31-Jul-2012
Clear Roadway/Skew	10 / -15 deg. (LHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	720 / 2011 (A)	Dept. Review Date	02-Aug-2012
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1524	SP	41.5	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	West of centerline.	Gas		
Power	3 wires 15m East of centerline.	Municipal		
Others		Problem (Y/N)	No	
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	820m South of intersection.
Vertical Alignment		9	9	
Roadway Width (m)	9.000			
Embankment		8	8	
Sideslope (__:1)	2.0			
(Height of Cover(m) : 4)				
Guardrail (Y/N)	Yes			On the East side 64m.
Approach Road / Embankment General Rating		9	9	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	Grass & drift caught on fence.
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	Scour in channel, under bevel 0.4m.
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): , Rise (mm): 1524 , Type: SP)				
Barrel Last Accessible Date	13-Jul-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)	1569			
Measured At Ring No.	8			
Sag (mm)	45			
Percent Sag	3			
Sidewall		4	4	7.5%
Measured Span (mm)	1410			
Measured At Ring No.	8			
Deflection (mm)	114			
Percent Deflection	8			
Floor		6	6	10m from D/S end.
Bulge (mm)	100			
Measured At Ring No.	8			
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Bolts loose and missing in circumferential seams in haunch area.
Separation (mm)	0			
Longitudinal Seams		6	6	Pipe is poorly torqued throughout.
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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: SP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		4	4	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		5	5	Cracked.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		5	4	Concrete pad, approx 3m in streambed at opening.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	4	Erosion at end of concrete end protection. Void below NE protection.
Beavers (Y/N)	No			
Downstream End General Rating		5	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)				HWM not visible. Caught on U/S fence.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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	Fill void at outlet slope protection, 1m3 concrete.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	58.2/57.2	Est. Repl. Yr	2035	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	13-Oct-2015		Previous Inspection Date	03-Sep-2009			
Inspection Cycle (Default) (months)	39						
Comment							