

Bridge Culvert Inspection				
Bridge File Number	75333 -1 Bridge Culvert		Form Type	CUL1
Year Built	1963		Lot No.	4
Bridge or Town Name	RED DEER		Inspector Name	Owen Salava
Located Over	WASKASOO CREEK, 3.81, WATERCRS-ST		Inspector Class	BR CLS A
Located On	2:24 R1 27.448;2:24 L1 27.377		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	18-Mar-2013
Legal Land Location	NW SEC 5 TWP 38 RGE 27 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:50:05, 52:14:35		Data Entry Date	28-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA19		Review Date	23-Mar-2013
Clear Roadway/Skew	26 /		Dept. Reviewer Name	Chris Black
AADT/Year	36,590 / 2011 (A)		Dept. Review Date	09-Apr-2013
Road Classification	RFD-412.4-130		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	5385	3276	AP	79.9			ARCH
Special Features	STORM WATER DRAIN							
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	4 wire east ditch.		Gas	
Power			Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		9	9	
Roadway Width (m)	26.000			
Embankment		9	9	4:1 @ West.
Sideslope (_ :1)	3.0			
(Height of Cover(m) : 2.5)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		9	9	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	5	Underside parging deteriorating.
Collar		X	X	
Wingwalls		5	5	Several 0.5 to 1.5mm wide vertical cracks. South wing is spalled at top 300mm. Exposed rebar. Small spall top of North wingwall near barrel.
(Shape : FLARE)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	300			
Scour Protection		5	N	Snow covered.
(Type : CONCRETE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	N	Snow covered.
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): 5385, Rise (mm): 3276, Type: AP)				
Barrel Last Accessible Date	18-Mar-2013			
Special Features				
Special Feature		7	7	
(Type : STORM WATER DRAIN)				
Special Feature				
(Type :)				
Roof		5	5	2540 to ice.
Measured Rise (mm)	3276			
Measured At Ring No.	1			
Sag (mm)	0			(13Sep2011)
Percent Sag	0			
Sidewall		5	5	Longit. crack 75% of both sidewalls, 0.3mm wide to 1.0mm wide. Vertical cracks with efflorescence & exudation @ cracks. Widest point below ice.
Measured Span (mm)	5385			
Measured At Ring No.	1			
Deflection (mm)	0			(13Sep2011)
Percent Deflection	0			
Floor		N	N	Ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	
Separation (mm)	10			
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)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 5385, Rise (mm): 3276, Type: AP)				
Fish Passage Adequacy		7	7	
Baffle		N	N	Ice covered.
(Type :)				
Waterway Adequacy		7	7	
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		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		6	6	Several 1mm wide vertical & diagonal cracks.
(Shape : FLARE)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	N	Snow covered.
(Type : CONCRETE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
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)				HWM not visible.
Drift (Y/N)	No			
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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	59.1/59.1	Est. Repl. Yr	2033	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	18-Dec-2014		Previous Inspection Date	13-Sep-2011			
Inspection Cycle (Default) (months)	21						
Comment							