

Bridge Culvert Inspection				
Bridge File Number	00775 -1 Bridge Culvert		Form Type	CUL1
Year Built	1949		Lot No.	1
Bridge or Town Name	INNISFAIL		Inspector Name	Dave Lam
Located Over	WASKASOO CREEK, 3.81, WATERCRS-ST		Inspector Class	BR CLS A
Located On	590:02 C1 2.082		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	14-Jul-2011
Legal Land Location	SW SEC 26 TWP 35 RGE 28 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:54:19, 52:01:37		Data Entry Date	15-Aug-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA19		Review Date	27-Jul-2011
Clear Roadway/Skew	8.4 /		Dept. Reviewer Name	Chris Black
AADT/Year	3,670 / 2010 (A)		Dept. Review Date	30-Aug-2011
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	U/S	-	1800	MP	3.8	125X26		ROUND
1	MAIN	-	1800	MP	17.1	75X25	2.8,2.8,2.8	ROUND
1	D/S	-	1800	MP	3.8	125X26		ROUND
Special Features		VERT TIMBER STRUTS						
Special Features Comment		Extended at u/s with CSP.						

Utilities (Located at)				
Utility Attachments				
Telephone	Both sides.		Gas	North r/w.
Power	2 lines North r/w.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	No passing. Farm entrance at NE.
Vertical Alignment		6	6	
Roadway Width (m)	8.400			
Embankment		7	7	
Sideslope (__:1)	1.7			
(Height of Cover(m) : 1.7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		X	X	Barb wire fence across U/S barrel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		6	6	Sparce rock.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	6	
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: U/S, Span (mm): , Rise (mm): 1800, Type: MP)				
Barrel Last Accessible Date	14-Jul-2011			
Special Features				
Special Feature		7	7	150 x 200 T.T. struts @ 1.2 O.C. - only at u/s portion.
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		3	3	Sag estimated at 14% - same as sidewall.
Measured Rise (mm)				
Measured At Ring No.				Est.
Sag (mm)	260			
Percent Sag	14			
Sidewall		3	3	
Measured Span (mm)	2060			
Measured At Ring No.	3			
Deflection (mm)	260			
Percent Deflection	14			
Floor		5	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	5	Some rivets are defective on circ seam.
Separation (mm)	165			
Longitudinal Seams		7	7	Rivetted.
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)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Some pitting lower 1/2.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1800, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		4	4	Fence across U/S end with grass - restricts flow.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel Extension General Rating		4	4	Raised 1 points due to struts.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
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)	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	Minor erosion at bevel.
Beavers (Y/N)	No			
Downstream End General Rating		6	5	
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)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			D/S only.
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	2011	Remove fence and grass @ U/S.							
INSTALL CONCRETE/STEEL LINING									
INSTALL STRUTS									
INSTALL CONCRETE COLLAR/CUTOFF									
REPAIR SEAMS									
OTHER ACTION	2011	Consider installing bevel at u/s end if existing culvert is to remain in service more than 5yrs.							
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	48.4/46.6	2020	Maint. Req'd. (Y/N)	Yes			
Special Comments for Next Inspection	No action for sag or deflection; struts in place.		Department Comments						
Maintenance Reviewed By			Date						
Proposed Long-Term Strategy	2004.05.29 Culvert struttred in 1991. Should be okay until 2019.								
On 3-Year Program (Y/N)									
Proposed Action									
Previous Inspector's Name	Garry Roberts	Previous Assistant's Name							
Next Inspection Date	14-Oct-2014	Previous Inspection Date	23-Feb-2009						
Inspection Cycle (Default) (months)	39								
Comment									
				Estimated Total	0				

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION	2011	Remove fence and grass @ U/S.	next time on site			
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION	2011	Consider installing bevel at u/s end if existing culvert is to remain in service more than 5yrs.	defer, replacement programmed 2019			
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	48.4/46.6	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
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Special Comments for Next Inspection	No action for sag or deflection; struts in place.	Department Comments	tentatively programmed for replacement in 2019. AS
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Maintenance Reviewed By	Andrew Smikles	Date	22-Aug-2012	Estimated Total	0
Proposed Long-Term Strategy	2004.05.29 Culvert strutted in 1991. Should be okay until 2019.				
On 3-Year Program (Y/N)					
Proposed Action					
Previous Inspector's Name	Garry Roberts	Previous Assistant's Name			
Next Inspection Date	14-Oct-2014	Previous Inspection Date	23-Feb-2009		
Inspection Cycle (Default) (months)	39				
Comment					