

Bridge Culvert Inspection				
Bridge File Number	75285 -1 Bridge Culvert		Form Type	CUL1
Year Built	1960		Lot No.	1
Bridge or Town Name	INNISFAIL		Inspector Name	Jason Saly
Located Over	TRIBUTARY TO THREEHILLS CREEK, 3.50.2.22, WATERCRS-ST		Inspector Class	BR CLS A
Located On	805:02 C1 30.894		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	14-Feb-2012
Legal Land Location	SW SEC 12 TWP 35 RGE 26 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:35:59, 51:59:02		Data Entry Date	09-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA19		Review Date	29-Feb-2012
Clear Roadway/Skew	8.5 / -30 deg. (LHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	530 / 2010 (A)		Dept. Review Date	21-Mar-2012
Road Classification	RCU-208-110		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	-	1500	MP	15.6	68X13	2.8	ROUND
1	MAIN	-	1500	MP	24.9	68X13	2.8	ROUND
1	D/S	-	1500	MP	10	68X13	2.8	ROUND
Special Features	VERT TIMBER STRUTS							
Special Features Comment	Extension - 15.6m u/s; 10m d/s.							

Utilities (Located at)			
Utility Attachments			
Telephone	West of c/l.	Gas	
Power	3 wires 15m East r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	1500m South of local road intersection. In bottom of sag, hills in both directions, limited sight distance to North. No passing.
Vertical Alignment		6	6	
Roadway Width (m)	8.500			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 2)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	6	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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	Square end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		4	N	(Insufficient. Sparce rock. 17Sep2005) - Snow.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	N	(Minor scour. 17Sep2005).
Beavers (Y/N)	No			
Upstream End General Rating		4	4	GR carried forward from 17Sep2005.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1500, Type: MP)				
Barrel Last Accessible Date	14-Feb-2012			
Special Features				
Special Feature			6	'7' Strut; 150x200 in original barrel. Extensions were joined directly to existing bevel ends. Random struts not sitting square.
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		3	3	Rise at u/s ext.=1355=145mm=9.7% Rise at main barrel W end=1345=155mm Rise at main barrel Midpipe=1320=180mm=12% Rise at main barrel E end=1380=120mm Rise at d/s ext.=1285=215mm=14%
Measured Rise (mm)	1285			
Measured At Ring No.				
Sag (mm)	215			
Percent Sag	14			
Sidewall		3	3	Span at u/s ext.=1644=144mm=9.6% Span at main barrel W end=1675=175mm Span at main barrel Midpipe=1690=190mm=12.7% Rise at main barrel E end=1620=120mm Rise at d/s ext.=1717=217mm=14.5%
Measured Span (mm)	1717			
Measured At Ring No.				
Deflection (mm)	217			
Percent Deflection	14			
Floor		5	5	Midspan
Bulge (mm)	30			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	
Separation (mm)	55			
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		6	5	
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): 1500, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	Due to struts.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		4	3	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
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	Square end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		5	N	Sparce.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		5	N	
Beavers (Y/N)	No			
Downstream End General Rating		5	N	Previous GR was 5 on 17Sep2005 based on scour & erosion.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Fence across D/S opening - photo.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
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	2012	Both extensions.								
INSTALL CONCRETE COLLAR/CUTOFF										
REPAIR SEAMS										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)	44.4/33.3	Sufficiency Rating (Last/Now) (%)	50.8/45.8	Est. Repl. Yr	2015	Maint. Req. (Y/N)	Yes			
Special Comments for Next Inspection	Department Comments									
Maintenance Reviewed By	Date							Estimated Total	0	
Proposed Long-Term Strategy	2004.09.24Monitor Normal BIM. Estimated replacement Year 2015.									
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Dave Lam		Previous Assistant's Name							
Next Inspection Date	14-May-2015		Previous Inspection Date		17-Sep-2005					
Inspection Cycle (Default) (months)	39									
Comment										

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	2012	Both extensions.	programmed	2012		
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	44.4/33.3	Sufficiency Rating (Last/Now) (%)	50.8/45.8	Est. Repl. Yr	2015	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection			Department Comments	Replacement need year changed to 2020.DA		
Maintenance Reviewed By	Darron Ahlstedt		Date	22-Nov-2012	Estimated Total	0
Proposed Long-Term Strategy	2004.09.24Monitor Normal BIM. Estimated replacement Year 2015.					
On 3-Year Program (Y/N)						
Proposed Action						
Previous Inspector's Name	Dave Lam		Previous Assistant's Name			
Next Inspection Date	14-May-2015		Previous Inspection Date	17-Sep-2005		
Inspection Cycle (Default) (months)	39					
Comment						