

Bridge Culvert Inspection				
Bridge File Number	75255 -1 Bridge Culvert		Form Type	CUL1
Year Built	1960		Lot No.	2
Bridge or Town Name	PINCHER CREE		Inspector Name	Calvin Roberts
Located Over	TRIBUTARY TO MILL CREEK, 2.12.35.4.1, WATERCRS-ST		Inspector Class	BR CLS B
Located On	507:02 C1 18.423		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	09-Nov-2012
Legal Land Location	SE SEC 13 TWP 6 RGE 2 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-114:08:08, 49:28:14		Data Entry Date	13-Dec-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA26		Review Date	14-Nov-2012
Clear Roadway/Skew	8.6 / -30 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	920 / 2011 (A)		Dept. Review Date	27-Dec-2012
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	14			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1451	1600	SPE	78.6	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	South ditch.		Gas	
Power	North ditch.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	In a curve. Road rises to the West. West of BF 80420.
Vertical Alignment		6	6	
Roadway Width (m)	8.600			
Embankment		7	7	
Sideslope (__:1)	2.0			
(Height of Cover(m) : 10.6)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				North.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		N	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	4	Isolated perforations in floor. Drift across 50%.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	Lots of vegetation growing around the bevel.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		7	7	
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): 1451, Rise (mm): 1600, Type: SPE)				
Barrel Last Accessible Date	09-Nov-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1530			
Measured At Ring No.	19			
Sag (mm)	70			
Percent Sag	4			
Sidewall		7	7	Localized 100mm bulge in West S/W of R17.
Measured Span (mm)	1442			
Measured At Ring No.	19			
Deflection (mm)	9			
Percent Deflection				
Floor		3	3	Extensive perforations in the floor - see photos. Worst at D/S 1/3 of barrel.
Bulge (mm)	0			
Measured At Ring No.	12			
Abrasion (Y/N)	Yes			
Circumferential Seams		7	5	Isolated missing nuts.
Separation (mm)	0			
Longitudinal Seams		7	7	75% Correct. 1N stagger.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		3	3	Extensive perforations in the floor. Alkali corrosion at upper seams.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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): 1451, Rise (mm): 1600, Type: SPE)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		4	4	Drift at U/S.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		3	3	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				South.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	4	Isolated perforations on the floor.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	400			
Scour Protection		4	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		4	4	Scour hole 2M X 2M X .7 M - rock lined.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Curves at both ends. Some trees growing over each invert.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
OVERLAY DECK							
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Concrete Floor.					
OTHER ACTION	2013	Remove debris and vegetation from around the bevels of the pipe.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	39.7/38.4	Est. Repl. Yr	2018	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	09-Feb-2016		Previous Inspection Date	11-Sep-2009			
Inspection Cycle (Default) (months)	39						
Comment							