

Bridge Culvert Inspection				
Bridge File Number	74308 -1 Bridge Culvert		Form Type	CUL1
Year Built	1955		Lot No.	2
Bridge or Town Name	CALAIS		Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO STURGEON CREEK, 8.10.58.7.23.7, WATERCRS-ST		Inspector Class	BR CLS B
Located On	43:06 C1 33.514		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	03-Dec-2012
Legal Land Location	NW SEC 14 TWP 70 RGE 24 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:33:31, 55:03:56		Data Entry Date	20-Jan-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA03		Review Date	09-Jan-2013
Clear Roadway/Skew	12.3 /		Dept. Reviewer Name	David Morrison
AADT/Year	5,020 / 2011 (A)		Dept. Review Date	19-Mar-2013
Road Classification	RAU-213.4-120		Follow-Up By	
Detour Length (km)	275			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2430	SP	54.9	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	North r/w		Gas	
Power	4 wire o/h, & 3w o/h South r/w.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Approach 300m West. Crest curve East.
Vertical Alignment		7	7	
Roadway Width (m)	12.300			
Embankment		8	8	
Sideslope (:1)	4.0			
(Height of Cover(m) : 2.5)				
Guardrail (Y/N)	Yes			South side is 8.0 m off of shoulder
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
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		N	N	Concrete slab, on bevel floor. Snow/ice covered.
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		N	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	Yes			
Upstream End General Rating		5	5	GR carried forward.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2430, Type: SP)				
Barrel Last Accessible Date	03-Dec-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	5	Upward-carried over -05-May-2009 due to ice
Measured Rise (mm)				
Measured At Ring No.	2			
Sag (mm)	128			
Percent Sag	5			
Sidewall		N	5	Tear in sidewall @ R 17, construction damage.
Measured Span (mm)	2302			
Measured At Ring No.	2			
Deflection (mm)	128			
Percent Deflection	5			
Floor		N	4	Pitting rust 7 scaling rust.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		6	6	1N stagger.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Pitting & scaling rust.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2430, Type: SP)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		4	4	Water moves fast through barrel.-05-May-2009
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		N	5	
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		N	N	Bevel unsupported, snow/ice covered.-05-May-2009
Heaving (mm)	50			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	800			
Scour Protection		N	N	Snow covered.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	Bevel projecting 2m & unsupported for 1.2 m. Scour hole 20 x 5 x 1m. -photo Snow/ice covered.
Beavers (Y/N)	No			
Downstream End General Rating		3	3	GR carried fwd.-05-May-2009
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	Downstream banks slumping.
HWM (m below Top of Culvert)				Hwm not visible.
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		5	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2013	20m3 Class 1 d/s. carried over 05-May-2009					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	D/S end scour repair.-carried over 05-May-2009					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	45.0/46.3	Est. Repl. Yr	2015	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Review for replacement with hwy twinning. Defer repairs until decision is made.		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	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	03-Sep-2014		Previous Inspection Date	10-Feb-2011			
Inspection Cycle (Default) (months)	21						
Comment							