

Bridge Culvert Inspection				
Bridge File Number	76523 -1 Bridge Culvert		Form Type	CUL1
Year Built	1968		Lot No.	4
Bridge or Town Name	SWAN HILLS		Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO SWAN RIVER, 8.11.80.39.19, WATERCRS-ST		Inspector Class	BR CLS B
Located On	33:12 C1 22.856		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Feb-2013
Legal Land Location	SE SEC 16 TWP 68 RGE 9 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:18:06, 54:52:53		Data Entry Date	10-Apr-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA06		Review Date	07-Apr-2013
Clear Roadway/Skew	10.6 /		Dept. Reviewer Name	
AADT/Year	1,090 / 2012 (A)		Dept. Review Date	
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	261			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	3495	3854	SPE	76.8	152X51	4.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	4 wire o/h W r/w	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Passing direction changes at bottom
Vertical Alignment		7	7	Of sag. In large sag curve with good sight distance.
Roadway Width (m)	10.600			
Embankment		6	N	Some minor erosion on NE bank, silt fence has been put into redirect water.-05-Apr-2011
Sideslope (__:1)	4.0			
(Height of Cover(m) : 10)				Snow covered.
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		4	N	Scour at toe of embankment 1m back.
(Type : NONE)				Snow covered
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	N	Scour at toe of embankment 1m back.
				Snow covered
Beavers (Y/N)	No			
Upstream End General Rating		4	4	GR carried over - 05-Apr-2011
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3495, Rise (mm): 3854, Type: SPE)				
Barrel Last Accessible Date	11-Feb-2013			
Special Features				
Special Feature				
(Type :)				Ice 2.4 from crown
Special Feature				
(Type :)				
Roof		5	5	Measurements not taken due to ice on floor-shape looks adequate.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		5	5	Inward deflection.
Measured Span (mm)	3430			
Measured At Ring No.	12			
Deflection (mm)	65			
Percent Deflection	2			
Floor		N	N	Under ice.
Bulge (mm)	0			
Measured At Ring No.	12			
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		5	5	Sidewall seams are being pushed inwards with occassional dimpling around bolts.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				1N stagger.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Superficial rust 5-7 o'clock. -24-July-2009
Corrosion By Soil (Y/N)	Yes			Under ice
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): 3495, Rise (mm): 3854, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(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		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		4	4	Concrete slope protection breaking up. Only 20% visible
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		N	N	Only 5% visible
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			Couldn't tell due to snow cover.
Above/Below (mm)	0			
Scour Protection		4	4	20x20m scour hole.
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	SCOUR HOLE APPROX. 20MX20M.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		3	4	Cobble pile in front of inlet 24-July-2009 Channel makes a 90 degree turn into culvert from North side.
Bank Stability		4	4	Slumping @ NE.
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		3	4	

Structure Usage				
		Last	Now	Explanation of Condition

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) (%)	54.8/55.2	Est. Repl. Yr	2017	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor u/s end to check if 90 deg. channel has negative effects to culvert inlet.		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	Brian Pientsch		Previous Assistant's Name	Lisbeth Medina			
Next Inspection Date	11-Nov-2014		Previous Inspection Date	05-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							