

Bridge Culvert Inspection			
Bridge File Number	76028 -1 Bridge Culvert	Form Type	CUL1
Year Built	1964	Lot No.	4
Bridge or Town Name	SWAN HILLS	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO SWAN RIVER, 8.11.80.39.17, WATERCRS-ST	Inspector Class	BR CLS B
Located On	33:12 C1 26.645	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-Feb-2013
Legal Land Location	SW SEC 27 TWP 68 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:17:24, 54:54:53	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	11.4 / 12 deg. (RHF)	Dept. Reviewer Name	
AADT/Year	1,090 / 2012 (A)	Dept. Review Date	
Road Classification	RAU-210-110	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	MAIN	3495	3854	SPE	106.7	152X51	4.2	ELLIPSE
Special Features	SHOTCRETE BEAM							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	6 wire O/H East r/w & 3 wire W r/w 50m North	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Curve sag & limited site distance.
Vertical Alignment	7	7	No passing northbound. Intersection at NW.
Roadway Width (m)	11.400		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 10)			
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	5	5	Spalling on N. collar.
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	N	Perforated in floor.-(50x100mm)-24-Jul-2009
Heaving (mm)	100			Under ice/water
Invert Above/Below Stream Bed	BELOW			Couldn't tell due to snow cover.
Above/Below (mm)	600			
Scour Protection		5	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		5	N	
Beavers (Y/N)	No			
Upstream End General Rating		3	3	GR carried forward.
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	24-Jul-2009			Ice 1.5m d/s. and ice 2.4m u/s from crown.
Special Features				
Special Feature		N	7	Near outlet end shotcrete clips placed but no shotcrete-none required.
(Type : SHOTCRETE BEAM)				
Special Feature				
(Type :)				
Roof		7	7	Couldn't measure due to ice. Shape looked ok - est. sag.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	89			
Percent Sag	2			
Sidewall		6	6	Could only measure to ring 22 due to ice height.
Measured Span (mm)	3518			
Measured At Ring No.	18			
Deflection (mm)	76			
Percent Deflection	2			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.	22			
Abrasion (Y/N)	Yes			
Circumferential Seams		N	5	Inspected to ring 22
Separation (mm)	0			
Longitudinal Seams		N	5	Inspected to ring 22 1N stagger.
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)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	Scaling below 10 o'clock, due to soil side corrosion.-24-Jul-2009
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

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)				
Fish Passage Adequacy		4	4	Outlet. 1.0m above s/b.
Baffle		X	X	
(Type :)				
Waterway Adequacy		4	4	Scour d/s end.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		5	5	Sides pushed in at top.
Heaving (mm)	0			
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)	1000			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 400)		4	4	The streambed rock was too small and is rolled downstream.-05-Apr-2011 Snow covered Scour hole 8m W x 6m L d/s.
Scour/Erosion		4	4	Scour hole 8m wide x 6m long.-photo
Beavers (Y/N)		No		
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading		DEGRADING		
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							
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) (%)	43.9/43.4	Est. Repl. Yr	2017	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor u/s & d/s erosion.-24-Jul-2009		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							