

Bridge Culvert Inspection			
Bridge File Number	78644 -1 Bridge Culvert	Form Type	CUL1
Year Built	1977	Lot No.	1
Bridge or Town Name	SWAN HILLS	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO SWAN RIVER, 8.11.80.39.7, WATERCRS-ST	Inspector Class	BR CLS B
Located On	33:14 C1 20.463	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Feb-2013
Legal Land Location	SW SEC 3 TWP 71 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:18:02, 55:06:59	Data Entry Date	13-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA06	Review Date	07-Apr-2013
Clear Roadway/Skew	9.8 / 10 deg. (RHF)	Dept. Reviewer Name	
AADT/Year	770 / 2012 (A)	Dept. Review Date	
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	99		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1500	MP	49.4	68X13	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	In sag curve with limited sight distance, no passing SB.
Vertical Alignment		7	7	
Roadway Width (m)	9.800			
Embankment		4	N	Toe of sideslope has slid in a semi-circle around pipe. Appears stable with riprap. -23-Jul,2009 2m wide x 1m deepx15m long gully in NE corner. Snow covered
Sideslope (__:1)	3.0			
(Height of Cover(m) : 3.6)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	N	Bevel end has distortions at bottom of both sides. -23-Jul-2009
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			Drift at inlet - photo.-23-Jul-2009
Above/Below (mm)	100			Under snow.
Scour Protection		N	N	Scoured 200 deep, 1m wide, 1.5m back along North bevel.-23-Jul-2009
(Type : NONE)				Under snow
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	GR carried fwd.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: MP)				
Barrel Last Accessible Date	23-Jul-2009			Both ends completely submerged in snow/ice.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	At c/l.-23-Jul-2009
Measured Rise (mm)	1593			
Measured At Ring No.				Outward.-23-Jul-2009
Sag (mm)	93			
Percent Sag	6			
Sidewall		N	N	At c/l.-23-Jul-2009
Measured Span (mm)	1430			
Measured At Ring No.				Inward.-23-Jul-2009
Deflection (mm)	70			
Percent Deflection	5			
Floor		N	N	At c/l.-23-Jul-2009
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	At joint with D/S bevel. Dimpled couplers.-23-Jul-2009
Separation (mm)	190			
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		N	N	Superficial rust 5-7 o'clock.-23-Jul-2009
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 1500, Type: MP)				
Fish Passage Adequacy		4	4	Outlet above S.B.-23-Jul-2009
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	N	(Icing. 2006/03/14)
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	GR 6--23-Jul-2009
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		D/S end submerged in snow.
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 has been bolted back onto barrel. Bevel was previously bent and has been straightened.-23-Jul-2009
Heaving (mm)	0			Under snow
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	600			
Scour Protection		6	N	Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		6	N	Snow covered
Beavers (Y/N)		No		
Downstream End General Rating		5	5	GR carried fwd.
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	2013	U/S end.-23-Jul-2009- carried over					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Level 2					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	59.3/59.3	Est. Repl. Yr	2017	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Barrel has been inaccessible for 2 inspections, as per BIM manual a Level 2 is recommended.		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	12-Nov-2014		Previous Inspection Date	06-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							