

Bridge Culvert Inspection			
Bridge File Number	76515 -1 Bridge Culvert	Form Type	CULE
Year Built/Lined	1967/1996	Lot No.	2
Bridge or Town Name	DEBOLT	Inspector Name	Russel Vanderschaaf
Located Over	LITTLE PUSKWASKAU RIVER, 8.10.58.12.3, WATERCRS-ST	Inspector Class	BR CLS B
Located On	676:02 C1 2.411	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	16-Sep-2010
Legal Land Location	SW SEC 4 TWP 75 RGE 26 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	::, ::	Data Entry Date	29-Sep-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA03	Review Date	29-Sep-2010
Clear Roadway/Skew	12 / -35 deg. (LHF)	Dept. Reviewer Name	Steve Pasquan
AADT/Year	120 / 2008 (E)	Dept. Review Date	23-Nov-2010
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	11		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
2	MAIN FULL LINER	-	3900	MP	67.5	125X26	3.5	ROUND
2	D/S FULL LINER	-	5540	SP	14.2	152X51	4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North side	Gas	
Power	South side 1 wire	Municipal	
Others		Problem (Y/N)	No
Remarks	ACCESS TO MD16 FIREPUMP, 300M EAST		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	RR 264, 150m west Short shallow sag.
Vertical Alignment		7	7	
Roadway Width (m)	10.000			
Embankment		7	7	
Sideslope (_ :1)	2.0			
(Height of Cover(m) : 6.8)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		6	6	A few chips from rock placement.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 450)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2 , Secondary Span, Location Code: MAIN , Span (mm): , Rise (mm): 3900 , Type: MP)				
Barrel Last Accessible Date	16-Sep-2010			Water 3.1m from crown of pipe at u/s end.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	7	Est sag due to silt
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	16			
Percent Sag	1			
Sidewall		9	7	40m from u/s end
Measured Span (mm)	3916			
Measured At Ring No.				
Deflection (mm)	16			
Percent Deflection	1			
Floor		9	7	
Bulge (mm)	0			
Measured At Ring No.	2			
Abrasion (Y/N)	No			
Circumferential Seams		X	4	5th seam damaged and catching drift.-photo Missing couplers 1 and 2 seams.
Separation (mm)	100			
Longitudinal Seams		9	X	
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)				
Longitudinal Stagger (Y/N)				
Coating		9	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3900, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		9	4	1.5 height difference between liner and d/s extension.
Baffle		X	4	
(Type :)				
Waterway Adequacy		9	X	Approx 100mm thk at d/s and 300mm at u/s. Drift caught on bolts near center line.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
Barrel General Rating		9	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: D/S, Span (mm): , Rise (mm): 5540, Type: SP)				
Barrel Last Accessible Date	16-Sep-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	9	Est due to silt buildup
Measured Rise (mm)	5591			
Measured At Ring No.	2			
Sag (mm)	51			
Percent Sag	1			
Sidewall		9	9	
Measured Span (mm)	5559			
Measured At Ring No.	2			
Deflection (mm)	19			
Percent Deflection	1			
Floor		9	9	
Bulge (mm)	0			
Measured At Ring No.	2			
Abrasion (Y/N)	No			
Circumferential Seams		X	9	
Separation (mm)				
Longitudinal Seams		9	9	2N
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)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		9	9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: D/S, Span (mm): , Rise (mm): 5540, Type: SP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		9	4	1.5m height difference between liner and d/s extension
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		9	9	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	
Collar		9	9	
Wingwalls		9	9	
(Shape :)				
Cutoff Wall		9	9	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		9	9	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion		9	9	
Beavers (Y/N)	No			
Downstream End General Rating		9	9	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	BANKS SLUMPING U/S & D/S NO HWM VISIBLE U/S beaver dam 30m
Bank Stability		9	9	
HWM (m below Top of Culvert)				No HWM visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	Yes			

Structure Usage				
		Last	Now	Explanation of Condition
(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	2010	Remove bolts protruding from culvert liner					
OTHER ACTION	2010	Repair damaged seam					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/77.8	Sufficiency Rating (Last/Now) (%)	63.0/78.7	Est. Repl. Yr	2040	Maint. Reqd. (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	Laurie McCarron		Previous Assistant's Name	Russel Vanderschaaf			
Next Inspection Date	16-Jun-2015		Previous Inspection Date	07-Oct-2008			
Inspection Cycle (Default) (months)	57						
Comment							