

Bridge Culvert Inspection			
Bridge File Number	13765 -1 Bridge Culvert	Form Type	CUL1
Year Built	1960	Lot No.	2
Bridge or Town Name	GRANDE PRAIR	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO BEAR RIVER, 8.10.58.18.2.7, WATERCRS-ST	Inspector Class	BR CLS B
Located On	672:04 C1 25.712	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-May-2010
Legal Land Location	SE SEC 15 TWP 73 RGE 7 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:58:47, 55:18:58	Data Entry Date	21-Jun-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA05	Review Date	07-Jun-2010
Clear Roadway/Skew	7.6 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,210 / 2009 (A)	Dept. Review Date	10-Sep-2010
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	10		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1500	SP	20.7	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	SOUTH R/W	Gas	
Power	NORTH R/W - 1 wire	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Farm residence entrance - E. side.
Vertical Alignment	7	7	Field entrance - W. side. No passing West bound.
Roadway Width (m)	9.000		
Embankment	8	8	
Sideslope (__:1)	3.5		
(Height of Cover(m) : 4)			
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)	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	3	(0.4m of end of bevel has perforations.
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	0			
Scour Protection		N	4	Scour undermined bevel 0.4m.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		N	4	
Beavers (Y/N)	No			
Upstream End General Rating		3	3	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 1500 , Type: SP)				
Barrel Last Accessible Date	11-May-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	6	upward defl.
Measured Rise (mm)	1549			
Measured At Ring No.	5			
Sag (mm)	49			
Percent Sag	3			
Sidewall		7	6	inward defl.
Measured Span (mm)	1450			
Measured At Ring No.	5			
Deflection (mm)	50			
Percent Deflection	3			
Floor		N	4	Corrosion in floor. PERFORATIONS D/S BEVEL END.-photo
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	Poor nesting of seams from ring 8 -11.
Separation (mm)	10			
Longitudinal Seams		6	6	1N
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		N	4	Deep pitting rust on floor -photo
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
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: SP)				
Fish Passage Adequacy		4	4	0.5m drop at outlet.
Baffle		X	X	
(Type :)				
Waterway Adequacy		4	4	0.5 x 6 x 3m scour hole d/s.-photo
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	6	
Downstream 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 :)				
Cutoff Wall		X	X	
Bevel End		N	3	(Perforations in floor bevel end last corrugation.2003.11.17)
Heaving (mm)	50			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	4	
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	4	(0.5 x 6 x 3m scour hole. Bevel unsupported for 0.5m.
Beavers (Y/N)		No		
Downstream End General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		8	8	
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	2010	20m3 class 1 d/s					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2010	Repair floor, concrete floor lining.					
OTHER ACTION	2010	Recommend assessment to evaluate					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
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OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/66.7	Sufficiency Rating (Last/Now) (%)	31.9/46.5	Est. Repl. Yr	2017	Maint. Req'd. (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	Colin Roy		Previous Assistant's Name				
Next Inspection Date	11-Aug-2013		Previous Inspection Date	13-Feb-2007			
Inspection Cycle (Default) (months)	39						
Comment							