Bridge Culvert Inspection

Bridge File Number	75022 -1 Bridge Culvert	Form Type	CUL1
Year Built	1991	Lot No.	4
Bridge or Town Name	WHITEMUD CRE	Inspector Name	Brian Pientsch
Located Over	WABATANISK CREEK, 8.10.58.7.8.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Lisbeth Medina
Located On	676:04 C1 17.094	Assistant Class	
Water Body Cl./Year		Inspection Date	02-Feb-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 20 TWP 74 RGE 22 W5M	Data Entry Date	01-Mar-2011
Longitude, Latitude	-117:21:37, 55:25:29	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	22-Feb-2011
Contract Main. Area	CMA03	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	9 / 35 deg. (RHF)	Dept. Review Date	15-Nov-2011
AADT/Year	190 / 2010 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	6860	SP	91.4	152X51	6.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w	Gas	
Power	2 wire OH East r/w	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	In sag - no passing.
Vertical Alignment		5	5	
Roadway Width (m)	10.000			
Embankment		7	6	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **3.5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	6	
Collar		7	N	Under snow
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **500**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 6860, Type: SP**)				
Barrel Last Accessible Date	02-Feb-2011			Too wide/tall to measure. Shape looks good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	(1/2 7043, 1/2 7110mm, 7095 (2.7% inward - 2004/09/16)
Measured Rise (mm)				
Measured At Ring No.				Measurements not taken due to ice on floor.
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		7	N	Under ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)				
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			1N stagger
Coating		4	N	Pitting 1.5m wide strip of floor.-23-Oct-2007 Under ice Superficial rust above ice level.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 6860, Type: SP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		3	4	Outlet above S.B.-23-Oct-2007 Snoe cover
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		8	8	Rate based on 60% visibility.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			Snow cover
Above/Below (mm)	150			
Scour Protection		4	N	Concrete missing 8m D/S south bank 2m x 1.5m.-23-Oct-2007 Gabions underneath and riprap.-23-Oct-2007 Snow cover
(Type : **CONCRETE**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**4**	GR carried fwd.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM not visible Log across inlet.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		**5**	**5**	

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) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**71.1/70.4**	Est. Repl. Yr	2036	Maint. Reqd. (Y/N)	No

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	Eric Carcoux	Previous Assistant's Name			
Next Inspection Date	02-May-2014	Previous Inspection Date	23-Oct-2007		
Inspection Cycle (Default) (months)	39				
Comment					