Bridge Culvert Inspection

Bridge File Number	73668 -1 Bridge Culvert	Form Type	CUL1
Year Built	1973	Lot No.	4
Bridge or Town Name	SUNSET HOUSE	Inspector Name	Brian Pientsch
Located Over	SNIPE CREEK, 8.10.58.7.18, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Lisbeth Medina
Located On	747:02 C1 19.026	Assistant Class	
Water Body Cl./Year		Inspection Date	30-Nov-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 20 TWP 72 RGE 19 W5M	Data Entry Date	21-Dec-2010
Longitude, Latitude	-116:52:36, 55:14:57	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	20-Dec-2010
Contract Main. Area	CMA06	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	9 /	Dept. Review Date	31-Mar-2011
AADT/Year	490 / 2009 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	50		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4054	SP	70.7	152X51	4.8	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		6	6	No passing both directions. Curve to the North.
Vertical Alignment		6	6	
Roadway Width (m)	9.000			
Embankment		8	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) :)				
Guardrail (Y/N)	Yes			West side only.
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				(East)
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		6	N	Covered with snow.

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		7	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		7	6	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	6	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4054, Type: SP**)				
Barrel Last Accessible Date	14-Dec-2001			Accessible until Ring 3-Thin layer of ice = 2 meters.
Special Features				
Special Feature				Shape of barrel appears adequate as viewed from 3rd ring. Some sag evident.
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Roof est. (Roof on d/s end is moving in - 92/02/20)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	100			
Percent Sag				
Sidewall		7	6	20011214 cl
Measured Span (mm)	4403			
Measured At Ring No.				
Deflection (mm)	136			
Percent Deflection	3			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
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)	No			
Coating		N	4	Pitting rust ,Soil side as well - evident from ends
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4054, Type: SP**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type :)				
Waterway Adequacy		4	5	(Icing.04.04.06)
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**N**	G.R. 6 -24-Jul-2007

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				(West)
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	4	Pitting rust visible above ice -level
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		6	5	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	5	
Beavers (Y/N)	No			
Downstream End General Rating		**4**	**4**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	HWM not visible.
Bank Stability		7	6	
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		**6**	**6**	

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) (%)	**77.8/55.6**	**Sufficiency Rating (Last/Now) (%)**	**59.9/52.5**	Est. Repl. Yr	2018	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	Brian Pientsch	Previous Assistant's Name	Tim Miskiman
Next Inspection Date	28-Feb-2014	Previous Inspection Date	24-Jul-2007
Inspection Cycle (Default) (months)	39		
Comment			