

Bridge Culvert Inspection			
Bridge File Number	73394 -1 Bridge Culvert	Form Type	CUL1
Year Built	1981	Lot No.	2
Bridge or Town Name	SUNSET HOUSE	Inspector Name	Brian Pientsch
Located Over	STEEP CREEK, 8.10.58.7.18.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	747:02 C1 18.172	Assistant Name	Lisbeth Medina
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	30-Nov-2010
Legal Land Location	NW SEC 17 TWP 72 RGE 19 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:53:10, 55:14:37	Data Entry Date	21-Dec-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA06	Review Date	20-Dec-2010
Clear Roadway/Skew	9 / -46 deg. (LHF)	Dept. Reviewer Name	David Morrison
AADT/Year	490 / 2009 (A)	Dept. Review Date	24-Feb-2011
Road Classification	RCU-209-110	Follow-Up By	
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	-	1800	SP	100.6	152X51	3.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	West r/w	Gas	
Power	x's road over pipe - 2 wire	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	SLIGHT SAG IN ROAD Intersection immediately south.
Vertical Alignment		8	8	
Roadway Width (m)	9.000			
Embankment		4	4	Embankment sloughing on West sideslope 5 x 10 x 0.3m.
Sideslope ( :1)	2.0			
(Height of Cover(m) : 8)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		E		East
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		7	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		3	3	Channels enter from South and it is both are aligned to north side of bevel.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		3	3	Around inlet sloughing 2m into embankment. (Photo)
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>3</b>	<b>3</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: SP)				
Barrel Last Accessible Date	30-Nov-2010			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	Measurements couldn't be taken due to ice on floor.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		8	8	Inward
Measured Span (mm)	1762			
Measured At Ring No.	16			
Deflection (mm)	38			
Percent Deflection	2			
Floor		N	N	Ice on floor
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
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)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	5	Superficial on bottom half Soil side near outlet. Alkaline deposits through bolts and longitudinal seams.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		(West)
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	900			
Scour Protection		4	4	Scour and sloughing banks along bevel edge 3m to north and South. Photo
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		4	4	Scour along bevel edge
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		3	3	At inlet, channels enter from South and it is aligned to North side of bevel.
Bank Stability		7	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
<b>Channel General Rating</b>		<b>3</b>	<b>3</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2010	50m3/class 1					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2010	Re-align channel & riprap at inlet					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>65.0/65.1</b>	Est. Repl. Yr	2026	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor West embankment.		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							