

Bridge Culvert Inspection			
Bridge File Number	72884 -1 Bridge Culvert	Form Type	CUL1
Year Built	1995	Lot No.	4
Bridge or Town Name	SUNDRE	Inspector Name	Owen Salava
Located Over	BEARBERRY CREEK, 3.98, WATERCRS-ST	Inspector Class	BR CLS A
Located On	584:02 C1 20.343	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Oct-2011
Legal Land Location	NW SEC 14 TWP 33 RGE 7 W5M	Data Entry By	Marcia Chavez
Longitude, Latitude	-114:53:57, 51:50:12	Data Entry Date	29-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA29	Review Date	14-Nov-2011
Clear Roadway/Skew	9.5 / -19 deg. (LHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	470 / 2010 (A)	Dept. Review Date	02-Dec-2011
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	5		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	5070	SP	63.4	152X51	4.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	West r/w.	Gas	
Power		Municipal	
Others		Problem (Y/N)	Yes
Remarks	Phone cable through pipe. Cable loose and hanging - photo.		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Hill to South & North.
Vertical Alignment	6	6	No passing.
Roadway Width (m)	9.500		
Embankment	7	7	Some 25mm settlement in ACP @ pipe. Flat over pipe @ bottom of slope.
Sideslope ( __:1)	3.0		
(Height of Cover(m) : 3.9)			
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	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	8	8	
Collar	7	7	5mm wide cracks.
Wingwalls	X	X	
(Shape : )			
Cutoff Wall	N	N	Submerged.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 5070, Type: SP)				
Barrel Last Accessible Date	15-Mar-2006			Deep water with thin ice; viewed from both ends, shape looks good.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		8	8	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	(1000mm silt with 600mm deep water. 15/Mar/2006)
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		N	N	(15/Mar/2006)
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	Some rust coming through bolt holes @ south.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	NEG			
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): 5070, Type: SP)				
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	G.R. was "8" from 15/Mar/2006.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		7	7	5mm wide cracks.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	Submerged.
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		4	4	Both banks sloughing in - photos.
HWM (m below Top of Culvert)	0.5			Grass in bushes @ U/S & D/S.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Small dam in U/S channel - photo.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>4</b>	<b>4</b>	

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	2012	Remove phone cable from inside culvert & drill through road fill.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>65.0/65.0</b>	Est. Repl. Yr	2047	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2006.07.28 With normal maintenance culvert should be good until 2050.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	27-Jan-2015		Previous Inspection Date	24-Sep-2009			
Inspection Cycle (Default) (months)	39						
Comment							