

Bridge Culvert Inspection			
Bridge File Number	09812 -1 Bridge Culvert	Form Type	CUL1
Year Built	1975	Lot No.	1
Bridge or Town Name	ACME	Inspector Name	Owen Salava
Located Over	2ND ORDER TRIBUTARY TO KNEEHILLS CREEK, 3.46.17.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	575:02 C1 22.772	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	25-Jan-2011
Legal Land Location	SE SEC 30 TWP 29 RGE 25 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:29:52, 51:30:12	Data Entry Date	03-Mar-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA20	Review Date	03-Feb-2011
Clear Roadway/Skew	10.3 /	Dept. Reviewer Name	Chris Black
AADT/Year	1,090 / 2009 (A)	Dept. Review Date	07-Mar-2011
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	6		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2610	2877	SPE	37.8	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment	5% vertical ellipse.							

**Utilities (Located at)**

Utility Attachments			
Telephone	South side.	Gas	
Power	4 wire o/h N r.o.w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Structure located directly W of T intersection to golf. Flat & straight - T intersection 20m E - coming from the South.
Vertical Alignment	7	7	
Roadway Width (m)	10.300		
Embankment	7	7	
Sideslope (__:1)	3.3		
(Height of Cover(m) : 2.5)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>7</b>	<b>7</b>	

**Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	Coating is wearing off & hole on side plate on West side. (Minor rust).
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		4	N	Snow covered.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		4	N	(Needs clay seal-starting to undermine. 20Feb2008).
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	GR carried forward from 20Feb2008.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SPE)				
Barrel Last Accessible Date	25-Jan-2011			4-9N plates/ring.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	6	(Avg rise @ ends 2870mm. Rise @ mid culvert 2790mm. 04Oct2004). Was not able to measure rise due to snow on floor.
Measured Rise (mm)	2790			
Measured At Ring No.				
Sag (mm)	87			
Percent Sag	3			
Sidewall		6	3	Hole in side R2 at 9co'clock (photo). Avg span @ ends 2615mm.  4.4%
Measured Span (mm)	2726			
Measured At Ring No.	6			
Deflection (mm)	116			
Percent Deflection	4			
Floor		N	N	(2 - 125mm slits rusting. 50mm silt, rocks in barrel near D/S end. 04Oct2004). Iced over.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
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	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	3	R2 perforation (photo).
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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): 2610, Rise (mm): 2877, Type: SPE)				
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>6</b>	<b>3</b>	Perforation.
Downstream 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	
Bevel End		N	6	(Rocks on floor of bevel end. 04Oct2004). Minor rust.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	N	(Rock 300 to 400mm below sloping edge of bevel. 04Oct2004). Snow covered.
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>7</b>	<b>7</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	2011	Repair hole in sidewall, weld on plate.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>66.7/33.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>67.6/51.8</b>	Est. Repl. Yr	2029	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Repairs hidden by snow. Assumed to be done due to silt fence at inlet/outlet.		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	Bryan Wai		Previous Assistant's Name				
Next Inspection Date	25-Apr-2014		Previous Inspection Date	20-Feb-2008			
Inspection Cycle (Default) (months)	39						
Comment							