

Bridge Culvert Inspection			
Bridge File Number	74187 -1 Bridge Culvert	Form Type	CUL1
Year Built	1997	Lot No.	3
Bridge or Town Name	VIKING	Inspector Name	Jason Saly
Located Over	2ND ORDER TRIBUTARY TO BIRCH LAKE, 6.5.18.3.2.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	36:18 C1 17.154	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Jan-2013
Legal Land Location	NW SEC 24 TWP 49 RGE 13 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:47:04, 53:14:51	Data Entry Date	12-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA14	Review Date	19-Jan-2013
Clear Roadway/Skew	11.8 /	Dept. Reviewer Name	Darron Ahlstedt
AADT/Year	1,150 / 2011 (A)	Dept. Review Date	13-Feb-2013
Road Classification	RAU-211.8-110	Follow-Up By	
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	-	2700	MP	38	68X13	3.5	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	Plowed in West ditch.	Gas	
Power	2 wires OH 25m West of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Horizontal curve begins 100m north. Good sight distance both directions. Turning lane starts @ pipe on NB lane. No passing NB.
Vertical Alignment	8	8	
Roadway Width (m)	11.600		
Embankment	6	N	Wide transverse ACP crack across full width of road - photo. Snow covered.
Sideslope ( __:1)	3.0		
(Height of Cover(m) : 2)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>6</b>	<b>6</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	E		
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		8	7	(100mm silting @ inlet floor, tapers to zero @ 1/3 L. 30/May/2006).
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	N	Snow covered.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		8	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>2700</b> , Type: <b>MP</b> )				
Barrel Last Accessible Date	09-Jan-2013			
Special Features				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	7	Could not measure rise due to ice
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	50			Estimated.
Percent Sag				
Sidewall		8	7	Span at W end =2627=73mm=2.7% Span at midpipe=2676=24mm Span at E end=2666=345mm
Measured Span (mm)	2627			
Measured At Ring No.				
Deflection (mm)	73			Inwards 2.7%
Percent Deflection	3			
Floor		N	N	(Minor upward dent 3.0m from outlet. 30/May/2006) Covered by water/ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	6	Minor dents along seams.
Separation (mm)	60			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		8	7	Minor
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
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): 2700, Type: MP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	(Minor silting will easily flush in a flood. 30/May/2006)
Icing (Y/N)	No			(10Aug2009). Iced over.
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		8	N	Snow covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		8	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>N</b>	GR was 8 from 09Dec2010.
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	Gentle curves U/S & D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.9			(28/Mar/2008) HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			(10Aug2009). Snow covered.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<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	2013	Seal trans. crack in ACP over pipe.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>88.9/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>87.1/77.4</b>	Est. Repl. Yr	2044	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)	N						
Proposed Action	2007.05.19 check site again in two years to determine continued usage.						
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	09-Oct-2014		Previous Inspection Date	09-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							