

Bridge Culvert Inspection			
Bridge File Number	74108 -1 Bridge Culvert	Form Type	CUL1
Year Built	1999	Lot No.	4
Bridge or Town Name	FOX CREEK	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO OUTLET CREEK, 8.10.58.7.32.2.3, WATERCRS-ST	Inspector Class	BR CLS B
Located On	43:10 R1 46.781;43:10 L1 46.798	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Nov-2012
Legal Land Location	NW SEC 29 TWP 62 RGE 19 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:48:56, 54:23:45	Data Entry Date	17-Dec-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA03	Review Date	17-Dec-2012
Clear Roadway/Skew	35.3 / 20 deg. (RHF)	Dept. Reviewer Name	Steve Pasquan
AADT/Year	5,430 / 2011 (A)	Dept. Review Date	03-Jan-2013
Road Classification	RAD-412.4-120	Follow-Up By	
Detour Length (km)	1		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4610	SP	141.4	152X51	3.0,3.0,3.0	ROUND
Special Features	STORM WATER DRAIN							
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	N r/w	Gas	
Power	7 wire o/h N r/w	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Major turn off into Town of Fox Creek within 100 m. Turning lanes start just east of structure.
Vertical Alignment		8	8	
Roadway Width (m)	35.300			WB Lane 11.7m, EB lane 12.9m Service road 10.7m.
Embankment		N	N	Erosion gully @ SE 15m long, 500 wide, 500 deep. Drainage cause (5 X 5 X 1m) scour on bank just u/s of SW apron. - 06-May-2009
Sideslope (__:1)	5.0			
(Height of Cover(m) : 1.5)				Snow covered
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)	CONCRETE			
Headwall		8	8	
Collar		N	N	Snow covered.
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	25			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	N	Scour SE corner.-06-May-2009
(Type : <b>RIP RAP</b> )				Snow covered
(Avg. Rock Size(mm) : <b>450</b> )				
Scour/Erosion		N	N	5 X 5 X 1m scour on bank SE corner of apron.-06-May-2009 Snow covered.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	GR carried fwd
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>4610</b> , Type: <b>SP</b> )				
Barrel Last Accessible Date	28-Nov-2012			Ice 3.6m from crown, only access 18 rings from d/s end.
<b>Special Features</b>				
Special Feature		N	7	Two drains in each median @ R13 & 15 from d/s end. 0.7 x 0.7 x 0.5M sink hole at N drain.-06-May-2009 First two drains from d/s end ok.
(Type : <b>STORM WATER DRAIN</b> )				
Special Feature				Snow covered.
(Type : )				
Roof		7	7	Estimated due to ice.
Measured Rise (mm)				Upward
Measured At Ring No.				
Sag (mm)	73			
Percent Sag	2			
Sidewall		7	7	(Repaired construction damage. 6 additional holes & bolts added & probably a plate on the dirt side, second last ring - 2005/10/18). 9 rings from d/s end Inward
Measured Span (mm)	4537			
Measured At Ring No.				
Deflection (mm)	73			
Percent Deflection	2			
Floor		N	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	(1 bolt pulled through & repaired. - 2004/01/14)
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				1N Stagger.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	(Minor superficial rust on floor. - 2002/07/14)
Corrosion By Soil (Y/N)	No			
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): 4610, Type: SP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type : WEIR)				
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		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		N	N	Snow covered.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	
Bevel End		8	8	20m dia tree over collar.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>8</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	75 degree bend 15m d/s.
Bank Stability		5	5	
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable
Beavers (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>6</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							
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>73.0/73.6</b>	Est. Repl. Yr	2052	Maint. Req. (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	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	28-Aug-2014		Previous Inspection Date	07-Mar-2011			
Inspection Cycle (Default) (months)	21						
Comment							