

Bridge Culvert Inspection			
Bridge File Number	76906 -1 Bridge Culvert	Form Type	CUL1
Year Built/Lined	1969/1990	Lot No.	2
Bridge or Town Name	OWEN	Inspector Name	Russel Vanderschaaf
Located Over	FINDLEY CREEK, 8.10.58.31.6, WATERCRS-ST	Inspector Class	BR CLS B
Located On	40:34 C1 6.867	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	22-Aug-2012
Legal Land Location	SE SEC 14 TWP 57 RGE 6 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:46:27, 53:55:29	Data Entry Date	25-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05	Review Date	24-Sep-2012
Clear Roadway/Skew	8.2 /	Dept. Reviewer Name	David Morrison
AADT/Year	1,590 / 2011 (A)	Dept. Review Date	18-Dec-2012
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	60		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
2	MAIN FULL LINER	-	2000	MP	57.3	68X13	3.5	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

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

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	No passing either direction. Steep grade to the east estimated 6%.
Vertical Alignment		5	5	
Roadway Width (m)	8.000			
Embankment		8	8	
Sideslope ( _ :1)	3.0			
(Height of Cover(m) : 6)				
Guardrail (Y/N)	Yes			NW 7 broken posts + E 8 broken.
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	<b>5</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		6	6	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	4	Covered in drift 50mm-200mm dia.-photo
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		4	4	Fill settled on sides 700 wide, 400 deep, 2m long.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>200</b> )				
Scour/Erosion		4	4	Fill settled on sides, 700 wide, 400 deep, 2m long.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>2</b> , Secondary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>2000</b> , Type: <b>MP</b> )				
Barrel Last Accessible Date	22-Aug-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	17m from u/s end
Measured Rise (mm)	2044			holes w/rebar expod at 2:00 and 10:00.
Measured At Ring No.				
Sag (mm)	44			
Percent Sag	4			
Sidewall		7	7	20m approx from u/s end.
Measured Span (mm)	1932			4 dents at 8:00 near centerline.
Measured At Ring No.				Inward deflection.
Deflection (mm)	68			
Percent Deflection	4			
Floor		7	7	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)				
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		6	6	Minor superficial rust on floor 1.3m wide.
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 # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2000, Type: MP)				
Fish Passage Adequacy		4	4	Outlet above streambed.
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	200-300mm dia u/s end bevel.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)		CONCRETE		
Headwall		7	7	
Collar		7	7	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	Formed W/H-pile. May 24, 2007
Bevel End		7	7	
Heaving (mm)				
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)		1000		
Scour Protection		7	7	Braced with H-pile frame.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
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		8	8	
Bank Stability		7	7	Steep bank d/s.
HWM (m below Top of Culvert)		4.0		(HWM LATH ON U/S SIDESLOPE (98/06/21))
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading		DEGRADING		
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>8</b>	<b>8</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2013	from u/s bevel					
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>62.2/62.2</b>	Est. Repl. Yr	2019	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)							
Proposed Action							
Previous Inspector's Name	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	22-May-2014		Previous Inspection Date	17-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							