

Bridge Culvert Inspection				
Bridge File Number	73437 -1 Bridge Culvert		Form Type	CUL1
Year Built	1961		Lot No.	4
Bridge or Town Name	HIGH LEVEL		Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO BOYER RIVER, 8.10.23.9, WATERCRS-ST		Inspector Class	BR CLS B
Located On	35:14 C1 8.817		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	15-Nov-2011
Legal Land Location	NE SEC 30 TWP 105 RGE 20 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:17:55, 58:09:06		Data Entry Date	13-Dec-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA01		Review Date	12-Dec-2011
Clear Roadway/Skew	10.7 /		Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,290 / 2010 (A)		Dept. Review Date	10-Jan-2012
Road Classification	RAU-210-110		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
1	MAIN	3495	3854	SPE	48.2	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	6	Road curves to North.
Vertical Alignment	7	7	Slight vertical sag concrete.
Roadway Width (m)	10.700		
Embankment	5	4	Sagging around d/s end of culvert.
Sideslope ( __:1)	3.0		
(Height of Cover(m) : 2.5)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>7</b>	<b>6</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	7	6	
Collar	7	N	Snow covered.
Wingwalls	X	X	
(Shape : )			
Cutoff Wall	N	4	700mm above culvert invert.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	NW side of bevel deflected inward approx. 400 mm.
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	5	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3495, Rise (mm): 3854, Type: SPE)</b>				
Barrel Last Accessible Date	18-Feb-2010			Water 1m deep -not frozen in middle.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	N	Floor covered with ice.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		6	N	
Measured Span (mm)	3577			
Measured At Ring No.	6			
Deflection (mm)	82			
Percent Deflection	2			
Floor		N	N	Covered with ice/water.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	N	
Separation (mm)	0			
Longitudinal Seams		5	N	Alkaling deposits in seam bolts.-18-Feb-2010  1N stagger
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	N	ALKALI STAINS ON SEAMS Pitting rust lower 1/2.-18-Feb-2010
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			(Ponding 2800 below crown-May 16,2008)

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3495, Rise (mm): 3854, Type: SPE)				
Fish Passage Adequacy		5	5	Beaver dam at u/s bevel end.
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	N	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>5</b>	<b>N</b>	
Downstream 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	
Bevel End		6	5	
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		6	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			Beaverdams u/s & d/s cuttings.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>6</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							
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>56.2/65.1</b>	Est. Repl. Yr	2015	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor deflection on sidewall.		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	Brian Pientsch		Previous Assistant's Name	Lisbeth Medina			
Next Inspection Date	15-Aug-2013		Previous Inspection Date	18-Feb-2010			
Inspection Cycle (Default) (months)	21						
Comment							