

Bridge Culvert Inspection				
Bridge File Number	77777 -1 Bridge Culvert		Form Type	CUL1
Year Built	1973		Lot No.	4
Bridge or Town Name	JARVIE		Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO FRENCH CREEK, 8.11.84.4.3, WATERCRS-ST		Inspector Class	BR CLS B
Located On	801:02 C1 28.677		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	14-Dec-2010
Legal Land Location	NW SEC 11 TWP 65 RGE 26 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:50:12, 54:36:37		Data Entry Date	05-Jan-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA10		Review Date	15-Dec-2010
Clear Roadway/Skew	10.5 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	170 / 2009 (A)		Dept. Review Date	17-Jan-2011
Road Classification	RCU-209G-90		Follow-Up By	
Detour Length (km)	8			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2314	2352	SPE	39.6	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power	1 wire 20 m east.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag installed on top of East bevel.		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Poor sight distance north and south. In bottom of deep sag curve.
Vertical Alignment	5	5	
Roadway Width (m)	10.100		
Embankment	6	6	
Sideslope ( __:1)	3.0		
(Height of Cover(m) : 3)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>5</b>	<b>5</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		5	5	Bulging inwards at top of bevel. No change 12/10
Heaving (mm)	250			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection (Type : ) (Avg. Rock Size(mm) : )		6	N	Unknown.-Under snow
Scour/Erosion		6	N	Well vegetated.
Beavers (Y/N)	Yes			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</b>	GR carried forward.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2352, Type: SPE)</b>				
Barrel Last Accessible Date	14-Dec-2010			
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		N	7	Roof sag est. at less than 5%.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	30			
Percent Sag				
Sidewall		N	7	Minor construction dmage on sidewall of 2nd section from East.
Measured Span (mm)	2325			
Measured At Ring No.	4			
Deflection (mm)	11			
Percent Deflection	1			
Floor		N	N	(Damage to 2nd plate North side of inlet. Could not locate 09/97. 01/03/29) Covered with water/ice.
Bulge (mm)	100			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	6	Upper 2/3 rated.
Separation (mm)	0			
Longitudinal Seams		N	6	(2 seams under ice 600 mm could not inspect properly. Seams visible look good, but North side of barrel showing signs of minor crimping. 01/03/29) Lower seams under water/ice. Upper 2/3 inspected.
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)	No			
Coating		4	4	Rust pitting on bottom 1/3 of barrel. Corrosion at sidewall seams in bolt holes from soil and likely water corrosion.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2352, Type: SPE)				
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type : )				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>6</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		5	5	Sides pushed in.
Heaving (mm)	325			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		6	N	Under snow
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	N	Well vegetated.-Nov,2010
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	GR carried fwd.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				Not visible
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>60.7/65.7</b>	Est. Repl. Yr	2024	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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	14-Mar-2014		Previous Inspection Date	07-Aug-2007			
Inspection Cycle (Default) (months)	39						
Comment							