

Bridge Culvert Inspection			
Bridge File Number	09208 -1 Bridge Culvert	Form Type	CUL1
Year Built	1981	Lot No.	4
Bridge or Town Name	GROUARD	Inspector Name	Brian Pientsch
Located Over	2ND ORDER TRIBUTARY TO SALT CREEK, 8.11.80.54.1.3.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	750:02 C1 30.418	Assistant Name	Lisbeth Medina
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	02-Dec-2010
Legal Land Location	NE SEC 34 TWP 76 RGE 14 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:04:29, 55:37:53	Data Entry Date	21-Dec-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA06	Review Date	20-Dec-2010
Clear Roadway/Skew	8.7 /	Dept. Reviewer Name	David Morrison
AADT/Year	560 / 2009 (A)	Dept. Review Date	31-Mar-2011
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	50		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	3510	3890	SPE	39	152X51	3.0	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	Sag curve. Limited sight distances
Vertical Alignment		7	7	No passing Northbound lane.
Roadway Width (m)	8.700			
Embankment		7	4	Minor slump 4m widex8m longx0.6m deep on East embankment.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 2)				
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		X	X	
Collar		7	N	Under snow
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	Superficial rust.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	6	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		6	6	
Beavers (Y/N)	Yes			5m from culvert invert
<b>Upstream End General Rating</b>		<b>6</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3510, Rise (mm): 3890, Type: SPE)				
Barrel Last Accessible Date	02-Dec-2010			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	No rise measurement due to ice on floor.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	3479			
Measured At Ring No.	5			Deflection inward
Deflection (mm)	31			
Percent Deflection	1			
Floor		N	N	Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)				
Longitudinal Seams		7	7	
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		6	5	Superficial rust visible, lower half.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3510, Rise (mm): 3890, Type: SPE)				
Fish Passage Adequacy		5	5	300mm drop D/S.
Baffle		X	X	
(Type : )				
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		E		
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	North side pushed in from riprap replacement. (Photo)
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	HWM not visible.
Bank Stability		6	6	
HWM (m below Top of Culvert)				
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>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>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>71.2/71.9</b>	Est. Repl. Yr	2026	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor d/s bevel. Monitor slump on East embankment.		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	Tim Miskiman			
Next Inspection Date	02-Mar-2014		Previous Inspection Date	25-Jul-2007			
Inspection Cycle (Default) (months)	39						
Comment							