

Bridge Culvert Inspection			
Bridge File Number	13779 -1 Bridge Culvert	Form Type	CUL1
Year Built	1999	Lot No.	2
Bridge or Town Name	GRIMSHAW	Inspector Name	Brian Pientsch
Located Over	2ND ORDER TRIBUTARY TO STRONG CREEK, 8.10.59.1.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	2A:36 C1 8.336	Assistant Name	Lisbeth Medina
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	08-Feb-2010
Legal Land Location	NE SEC 16 TWP 83 RGE 23 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:33:38, 56:12:06	Data Entry Date	10-Mar-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA04	Review Date	09-Mar-2010
Clear Roadway/Skew	7.3 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,100 / 2008 (A)	Dept. Review Date	07-Apr-2010
Road Classification	RCU-208-110	Follow-Up By	
Detour Length (km)	3		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4815	1650	SCA	10.7	380X140	3.4	ARCH
Special Features	BARREL DEICING PIPE							
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	No passing westbound.(Aug 23, 2006)
Vertical Alignment	7	7	No markings visible on ACP. Sharp curve to East and North.
Roadway Width (m)	6.600		
Embankment	7	7	
Sideslope (__:1)	4.0		
(Height of Cover (m) : <b>0.5</b> )			
Guardrail (Y/N)	Yes		East hazard markers damaged. 2nd poorly connected to posts. 2 posts broken and poorly connected on SW guardrail. 3 posts broken on NE guardrail.
<b>Approach Road / Embankment General Rating</b>	<b>7</b>	<b>6</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	5	5	Wide cracking on W and E end of headwall.
Collar	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape : )		4	4	Top plank & top of wingpile NE corner broken off.
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection (Type : <b>RIP RAP</b> ) (Avg. Rock Size (mm) : <b>500</b> )		6	6	Scour protection visible through snow.
Scour/Erosion		6	6	
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
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4815, Rise (mm): 1650, Type: SCA)				
Barrel Last Accessible Date	08-Feb-2010			
Special Features				
Special Feature (Type : <b>BARREL DEICING PIPE</b> )		8	7	
Special Feature (Type : )				
Roof		N	7	Floor covered with ice. Corrosion through bolts.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	6	at c/l.
Measured Span (mm)	4708			
Measured At Ring No.				
Deflection (mm)	107			
Percent Deflection	2			deflection inward.
Floor		N	N	Covered with ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	5	Superficial rust through bolts.
Separation (mm)	0			
Longitudinal Seams		N	6	Superficial corrosion through bolts.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	6	Superficial corrosion through bolts. Alkaling deposits through roof bolts.
Corrosion By Soil (Y/N)	Yes			
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): 4815, Rise (mm): 1650, Type: SCA)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	Yes			
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		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Minor spalling in connection with culvert barrel.
Collar		X	X	
Wingwalls		4	4	SE wing pile torn tin.
(Shape : )				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		7	6	Visible through snow.
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 400)				
Scour/Erosion		7	6	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		8	8	
Bank Stability		8	7	
HWM (m below Top of Culvert)	0.1			Debris over deicing pipe inside culvert barrel.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			Not visible-covered with snow.
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							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2010	Repair Guardrail Posts					
OTHER ACTION	2010	Repair Hazard Markers.					
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>61.9/66.1</b>	Est. Repl. Yr	2044	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	Brian Pientsch		Previous Assistant's Name	Jordan Evans			
Next Inspection Date	08-Nov-2011		Previous Inspection Date	15-May-2008			
Inspection Cycle (Default) (months)	21						
Comment							