

Bridge Culvert Inspection			
Bridge File Number	73927 -1 Bridge Culvert	Form Type	CUL1
Year Built	1966	Lot No.	2
Bridge or Town Name	SPIRIT RIVER	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO HOWARD CREEK, 8.10.82.2.4, WATERCRS-ST	Inspector Class	BR CLS A
Located On	49:04 C1 5.773	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	06-Jul-2011
Legal Land Location	NW SEC 34 TWP 78 RGE 8 W6M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-119:09:08, 55:48:14	Data Entry Date	12-Aug-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA05	Review Date	13-Jul-2011
Clear Roadway/Skew	11 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,650 / 2010 (A)	Dept. Review Date	18-Nov-2011
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	10		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1720	1902	SPE	36.6	152X51	4.0	ELLIPSE
Special Features	CONC FLOOR							
Special Features Comment								

**Utilities (Located at)**

Utility Attachments							
Telephone	West and East			Gas	40m north		
Power	3 line o/h 50m west			Municipal			
Others				Problem (Y/N)	No		
Remarks							

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	ACCESS - 50M NORTH IN SLIGHT SAG, passing both directions.
Vertical Alignment	7	7	
Roadway Width (m)	11.000		
Embankment	8	8	Gabion wall at d/s end.
Sideslope (__:1)	3.0		
(Height of Cover(m) : 2)			
Guardrail (Y/N)	Yes		West section hit. 5 broken posts.
<b>Approach Road / Embankment General Rating</b>	<b>6</b>	<b>6</b>	

**Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	50			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	25			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1720, Rise (mm): 1902, Type: SPE)				
Barrel Last Accessible Date	06-Jul-2011			
<b>Special Features</b>				
Special Feature		7	7	500 x 300 mm Rough termination of floor @ u/s end.
(Type : <b>CONC FLOOR</b> )				
Special Feature				
(Type : )				
Roof		5	5	Est With conc. floor. 300 x 150mm hole in roof from construction in R3 - no problem. It was fixed with an outside plate.
Measured Rise (mm)	1807			
Measured At Ring No.	7			
Sag (mm)	95			
Percent Sag	5			
Sidewall		5	5	
Measured Span (mm)	1830			
Measured At Ring No.	7			
Deflection (mm)	110			
Percent Deflection	6			
Floor		7	7	Rated areas not covered with concrete.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	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		6	6	Minor superficial on floor U/S of concrete.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			Caused by abrupt beginning of concrete floor.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1720, Rise (mm): 1902, Type: SPE)				
Fish Passage Adequacy		4	4	Steep slope and conc. floor.
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>5</b>	<b>5</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	N	
Collar		X	X	
Wingwalls		X	N	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 450)				
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	
Bank Stability		5	5	Vertical banks d/s
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Beaver signs upstream.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>5</b>	<b>5</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	2011	Repair guardrail					
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>54.1/54.2</b>	Est. Repl. Yr	2025	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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	06-Apr-2013		Previous Inspection Date	27-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							