

Bridge Culvert Inspection			
Bridge File Number	73261 -1 Bridge Culvert	Form Type	CUL1
Year Built	1966	Lot No.	1
Bridge or Town Name	SPIRIT RIVER	Inspector Name	Brian Pientsch
Located Over	2ND ORDER TRIBUTARY TO HOWARD CREEK, 8.10.82.2.1.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	49:04 C1 17.579	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	07-Jul-2011
Legal Land Location	SE SEC 27 TWP 78 RGE 7 W6M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-118:59:12, 55:46:52	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	11.2 / -24 deg. (LHF)	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,650 / 2010 (A)	Dept. Review Date	18-Nov-2011
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2120	SP	60.4	152X51	2.8	ROUND
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North & south R/W.	Gas	
Power	South R/W 4 wire.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	FIELD ENTRANCE TO DRILLING CO. YARD 350m W.
Vertical Alignment		8	8	
Roadway Width (m)	11.200			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 9.2)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		8	8	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
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		4	4	SW corner torn and tree growing through. Perforations in bevel floor.
Heaving (mm)	50			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2120, Type: SP)				
Barrel Last Accessible Date	07-Jul-2011			
Special Features				
Special Feature		8	8	
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		4	4	
Measured Rise (mm)	1920			
Measured At Ring No.	12			
Sag (mm)	200			
Percent Sag	9			
Sidewall		4	4	Corrugation profile is crimping at 9 o'clock at ring 12 & 13.
Measured Span (mm)	2260			
Measured At Ring No.	12			
Deflection (mm)	140			
Percent Deflection	7			
Floor		6	3	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Crack at 12 o'clock from ring 9-14 where seam is visible (photo)
Separation (mm)	2			
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		4	3	Extensive perforation in floor of R1-R3 and u/s bevel.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2120, Type: SP)				
Fish Passage Adequacy		5	5	
Baffle		X	N	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	3	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
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)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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	Assess					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/33.3	Sufficiency Rating (Last/Now) (%)	54.6/44.7	Est. Repl. Yr	2018	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor floor ability to transmit load from		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	07-Apr-2013		Previous Inspection Date	28-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							