Bridge Culvert Inspection

Bridge File Number	74083 -1 Bridge Culvert	Form Type	CUL1
Year Built/Lined	1963/2010	Lot No.	4
Bridge or Town Name	SPIRIT RIVER	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO KSITUAN RIVER, 8.10.82.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	727:02 C1 13.699	Assistant Class	
Water Body Cl./Year		Inspection Date	20-Mar-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 36 TWP 79 RGE 7 W6M	Data Entry Date	28-Mar-2012
Longitude, Latitude	-118:57:58, 55:53:05	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	27-Mar-2012
Contract Main. Area	CMA05	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	14 /	Dept. Review Date	30-Oct-2012
AADT/Year	240 / 2011 (A)	Follow-Up By	
Road Classification	RLU-209G-90		
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 FULL LINER	-	2700	MP	58	125X26	3.5	ROUND

Special Features	
Special Features Comment	

Utilities (Located at)

Utility Attachments			
Telephone	WEST R/W	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	ACCESS TO BUILDING (W) 50 M S. & N. ACCESS E. & W. 125 M S.
Vertical Alignment		8	8	
Roadway Width (m)	14.000			
Embankment		9	4	1mDx1mWx3mL erosion scour NE ditch.
Sideslope (__:1)	4.0			
(Height of Cover(m) : **4**)				
Guardrail (Y/N)	No			8mWx5mLx0.8mD slide on NE bank.
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	
Collar		9	9	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		9	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	110			
Scour Protection		9	N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		9	N	Snow covered
Beavers (Y/N)	Yes			
Upstream End General Rating		**9**	**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP**)				
Barrel Last Accessible Date	20-Mar-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof			9	estimated due to ice.
Measured Rise (mm)	2628			@ cl
Measured At Ring No.	2			
Sag (mm)	72			
Percent Sag	3			
Sidewall			9	
Measured Span (mm)	2772			@ cl
Measured At Ring No.				
Deflection (mm)	72			
Percent Deflection	3			
Floor			N	ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams			9	
Separation (mm)				
Longitudinal Seams			X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating			9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 2700, Type: MP**)				
Fish Passage Adequacy			9	
Baffle			X	
(Type :)				
Waterway Adequacy			9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating			**9**	

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		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	410			
Scour Protection		9	N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		9	N	Snow covered
Beavers (Y/N)	No			
Downstream End General Rating		**9**	**9**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		8	4	8mWx5mLx0.5mD slide on NE bank.
HWM (m below Top of Culvert)				HWM NOT VISIBLE
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**4**	

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						

Structural Condition Rating (Last/Now) (%)	**77.8/100.0**	**Sufficiency Rating (Last/Now) (%)**	**87.8/96.5**	Est. Repl. Yr	2070	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor banks.	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	Russel Vanderschaaf	Previous Assistant's Name			
Next Inspection Date	20-Jun-2015	Previous Inspection Date	27-Nov-2010		
Inspection Cycle (Default) (months)	39				
Comment					