Bridge Culvert Inspection

Bridge File Number	74903 -1 Bridge Culvert	Form Type	CUL1
Year Built	1958	Lot No.	2
Bridge or Town Name	CHERRY POINT	Inspector Name	Russel Vanderschaaf
Located Over	2ND ORDER TRIBUTARY TO PEACE RIVER, 8.10.95.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	717:02 C1 6.621	Assistant Class	
Water Body Cl./Year		Inspection Date	26-Aug-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 24 TWP 83 RGE 13 W6M	Data Entry Date	25-Sep-2012
Longitude, Latitude	-119:55:31, 56:12:22	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	23-Sep-2012
Contract Main. Area	CMA04	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	9 / -45 deg. (LHF)	Dept. Review Date	18-Dec-2012
AADT/Year	160 / 2011 (A)	Follow-Up By	
Road Classification	RCU-209G-90		
Detour Length (km)	8		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	SPE	39.4	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	10 M W. OF C/L	Gas	
Power	15 M E. OF C/L - 2 wire	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	In sag limiting sight distances.
Vertical Alignment		6	6	
Roadway Width (m)	9.000			
Embankment		6	6	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **0.5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

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		5	5	Damage to sides and bent top of bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		5	5	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	5	
Beavers (Y/N)	Yes			Beaver cage damaged, sitting atop of bevel. Beaverdam u/s bevel.
Upstream End General Rating		**5**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE**)				
Barrel Last Accessible Date	26-Aug-2012			
Special Features				
Special Feature				Vertical elbow @ u/s end of bevel.
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	2 RINGS WITH A HORIZONTAL CURVE D/S END TO BEVEL END. Roof pushed down 100mm at mid-point of R1.
Measured Rise (mm)	1858			
Measured At Ring No.	4			
Sag (mm)	33			
Percent Sag	2			
Sidewall		6	6	Repairs to sidewall at ring 1 @ 3:00 & 11:00.
Measured Span (mm)	1720			
Measured At Ring No.	4			
Deflection (mm)	4			
Percent Deflection	1			
Floor		4	4	1.2m long crease bulge in floor, rings 3 & 4.
Bulge (mm)	50			
Measured At Ring No.	3			
Abrasion (Y/N)	No			
Circumferential Seams		7	4	ONE SEAM 2 NUTS MISSING IN SIDE.
Separation (mm)	0			
Longitudinal Seams		7	7	1N Stagger
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Pitting & Scaling rust on floor.
Corrosion By Soil (Y/N)	No			
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): 1724, Rise (mm): 1901, Type: SPE**)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			Beaver dam and drift u/s bevel.-photo
Drift (Y/N)	Yes			
Barrel General Rating		**5**	**5**	

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		4	4	1.8m (unsupported)
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1000			
Scour Protection		4	4	Erosion around end of pipe.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		4	4	Scour hole 8m x 10m.
Beavers (Y/N)	No			
Downstream End General Rating		**4**	**4**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	Sloughing d/s
Bank Stability		5	5	
HWM (m below Top of Culvert)	0.6			HWM not visible.
Drift (Y/N)	Yes			Drift in trees, d/s.
Channel Bottom Degrading/Aggrading	DEGRADING			Dam d/s 30m + bevel
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**6**	**6**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION	2013	Beaverdam from u/s bevel.				
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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**65.4/65.4**	Est. Repl. Yr	2019	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	Monitor erosion. Monitor bulge in floor.	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	26-Nov-2015	Previous Inspection Date	07-May-2009		
Inspection Cycle (Default) (months)	39				
Comment					