Bridge Culvert Inspection

Bridge File Number	80976 -1 Bridge Culvert	Form Type	CUL1
Year Built	1976	Lot No.	4
Bridge or Town Name	NEW FISH CK	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO CLOUSTON CREEK, 8.1.44.7.7.6, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Clem Guenette
Located On	49:12 C1 22.023	Assistant Class	BR CLS B
Water Body Cl./Year		Inspection Date	14-Dec-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NE SEC 31 TWP 72 RGE 21 W5M	Data Entry Date	12-Jan-2013
Longitude, Latitude	-117:12:41, 55:16:51	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	09-Jan-2013
Contract Main. Area	CMA03	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	12.3 /	Dept. Review Date	21-Mar-2013
AADT/Year	1,870 / 2011 (A)	Follow-Up By	
Road Classification	RAU-213.4-120		
Detour Length (km)	60		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2100	MP	36.5	68X13	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Buried East r/w.	Gas	
Power	5 wire OH & 4 wire OH West r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		9	9	
Roadway Width (m)	12.300			
Embankment		8	8	6:1 on east side.
Sideslope (__:1)	4.0			
(Height of Cover(m) : **0.5**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**9**	**9**	

Upstream 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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		N	N	Snow covered.
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	Overgrown. Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**5**	GR carried over-05-May-2009

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2100, Type: MP**)				
Barrel Last Accessible Date	14-Dec-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	Minor dents in the roof from point loads near ends. Slice & indent in roof 3m from d/s end. Fill visible. 350mm Dep x 400mm Long first seam.
Measured Rise (mm)	1980			
Measured At Ring No.	1			
Sag (mm)	120			
Percent Sag	6			
Sidewall		5	5	Measured @ Section 1
Measured Span (mm)	2214			
Measured At Ring No.	1			
Deflection (mm)	114			
Percent Deflection	5			
Floor		N	4	Perforation @ first seam. @ c/l
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	3	1st circumferential seam poorly nested and coupler rusted through, infiltration @ seam 2.
Separation (mm)	95			
Longitudinal Seams		X	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		4	4	Deep pitting , scaling rust & perforation on floor. 5:00 to 7:00
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): , Rise (mm): 2100, Type: MP**)				
Fish Passage Adequacy		X	3	Drop structure (1.4 m) at outlet is impossible for fish passage.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**5**	**5**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		A stilling basin of sheet piling at d/s end. 6.6 m long, 3.5 m wide, drop to steam bottom is 2.3 m.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		7	7	
Collar		X	X	
Wingwalls		5	5	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	2300			
Scour Protection		5	5	Disturbed slopes @ sides of wingwalls.
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**5**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)	1.0			Grass in fence.-10-Feb-2011
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		**8**	**8**	

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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**59.7/52.2**	Est. Repl. Yr	2017	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor seam separation and slice in roof. Monniotor corrosion.	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	14-Sep-2014	Previous Inspection Date	10-Feb-2011		
Inspection Cycle (Default) (months)	21				
Comment					