Bridge Culvert Inspection

Bridge File Number	77067 -1 Bridge Culvert	Form Type	CUL1
Year Built	1980	Lot No.	4
Bridge or Town Name	THREE CREEKS	Inspector Name	Brian Pientsch
Located Over	CARMON CREEK, 8.10.49, WATERCRS-ST	Inspector Class	BR CLS A
Located On	986:02 C1 11.439	Assistant Name	Clem Guenette
Water Body Cl./Year		Assistant Class	BR CLS B
Navigabil. Cl./Year		Inspection Date	22-Mar-2013
Legal Land Location	SE SEC 22 TWP 85 RGE 19 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:54:42, 56:22:58	Data Entry Date	05-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA04	Review Date	03-Apr-2013
Clear Roadway/Skew	8.6 /	Dept. Reviewer Name	
AADT/Year	1,120 / 2012 (A)	Dept. Review Date	
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	135		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2314	2552	SPE	39.6	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Buried cable along North rw	Gas	
Power	3 wire o/h along North row	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		8	8	
Roadway Width (m)	8.600			
Embankment		8	8	Snow - no evident problems.
Sideslope (__:1)	4.0			
(Height of Cover(m) : **2.4**)				
Guardrail (Y/N)	No			
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		5	N	Dents around bevel edge. 150mmx80mm tear along West side.-01-Apr-2011 Snow covered
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		5	N	No evident problems Snow covered
(Type : **NONE**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	N	Snow covered
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**5**	General rating carried forward.

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2552, Type: SPE**)				
Barrel Last Accessible Date	22-Mar-2013			907mm ice to crown
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Evidence of sagging, est.300mm sag. (Rise 2563 at 4th ring.-00/06/22) Edge bent at u/s end. 60mmx50mm tear at 1 o'clock, ring 1.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	11			
Percent Sag				
Sidewall		7	7	Unable to measure due to ice. (Span 2350 @ ring 5 - 01-Apr-2011)
Measured Span (mm)	2350			
Measured At Ring No.	5			
Deflection (mm)	36			
Percent Deflection	2			
Floor		N	N	Under ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	
Separation (mm)				
Longitudinal Seams		6	6	1N
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	4	Pitting rust above waterline. Alkaline deposit through roof bolts.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2552, Type: SPE**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type :)				
Waterway Adequacy		3	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**6**	

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		5	N	Snow covered
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	N	EROSION AROUND EDGES OF BEVEL 2005/10/20 Snow covered.
(Type : **NONE**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		**4**	**4**	General rating carried forward.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)	0.2			Grass caught in bolts.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Couldn't tell due to snow cover.
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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**66.7/66.7**	**Sufficiency Rating (Last/Now) (%)**	**50.3/57.0**	Est. Repl. Yr	2021	Maint. Reqd. (Y/N)	No

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	Brian Pientsch	Previous Assistant's Name	Lisbeth Medina		
Next Inspection Date	22-Jun-2016	Previous Inspection Date	01-Apr-2011		
Inspection Cycle (Default) (months)	39				
Comment					