Bridge Culvert Inspection

Bridge File Number	72561 -1 Bridge Culvert	Form Type	CUL1
Year Built	1998	Lot No.	4
Bridge or Town Name	ELK POINT	Inspector Name	Wade Nanninga
Located Over	2ND ORDER TRIBUTARY TO ATIMOSWE CREEK, 6.14.1.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	41:22 C1 26.043	Assistant Class	
Water Body Cl./Year		Inspection Date	10-Apr-2012
Navigabil. Cl./Year		Data Entry By	Lisa Fairhurst
Legal Land Location	NW SEC 31 TWP 56 RGE 6 W4M	Data Entry Date	25-Apr-2012
Longitude, Latitude	-110:53:46, 53:53:15	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	24-Apr-2012
Contract Main. Area	CMA08	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	11.8 /	Dept. Review Date	04-May-2012
AADT/Year	1,790 / 2011 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
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	-	3050	SP	36.5	152X51		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	
Power	6 lines East edge of r/w.	Municipal	Waterline crossing over top of pipe @ East end.
Others	Lights to North.	Problem (Y/N)	No
Remarks	No BF tag installed.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	No passing due to SH 646 intersection. 100m North.
Vertical Alignment		8	8	
Roadway Width (m)	11.200			
Embankment		4	4	2mx.05mx0.8m deep scour @ SE ditch partially filled with water
Sideslope (__:1)	5.0			
(Height of Cover(m) : **0.7**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	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)	200			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
Beavers (Y/N)	Yes			Dam 5m u/s.
Upstream End General Rating		**9**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3050, Type: SP**)				
Barrel Last Accessible Date	14-Jul-2010			1.0m water. Viewed from ends. Looks good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	N	@ cl
Measured Rise (mm)	3070			
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		9	N	At c/l.
Measured Span (mm)	3020			
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		8	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	N	
Separation (mm)	0			
Longitudinal Seams		9	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			2N stagger.
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	Superficial corrosion.
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): 3050, Type: SP**)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**9**	**N**	GR 9 from July2010

Downstream 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	
Bevel End		9	9	
Heaving (mm)	50			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		8	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		9	9	
Bank Stability		9	9	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		**9**	**9**	

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) (%)	**100.0/55.6**	**Sufficiency Rating (Last/Now) (%)**	**95.1/69.8**	Est. Repl. Yr	2053	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor ditch erosion @ SE corner	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	10-Jan-2014	Previous Inspection Date	15-Jul-2010		
Inspection Cycle (Default) (months)	21				
Comment					