

Bridge Culvert Inspection				
Bridge File Number	08250 -1 Bridge Culvert		Form Type	CULE
Year Built/Lined	1966/1987		Lot No.	1
Bridge or Town Name	ELK POINT		Inspector Name	Kris Bosters
Located Over	ATIMOSWE CREEK, 6.14, WATERCRS-ST		Inspector Class	BR CLS A
Located On	646:02 C1 44.015		Assistant Name	Brian Cote
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Dec-2012
Legal Land Location	NW SEC 36 TWP 56 RGE 7 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-110:54:56, 53:53:14		Data Entry Date	23-Jan-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA08		Review Date	19-Dec-2012
Clear Roadway/Skew	12 / -11 deg. (LHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year	720 / 2011 (A)		Dept. Review Date	23-Jan-2013
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN Partially Lined	-	4920	SP	89	152X51	4.0	ROUND
2	MAIN PARTIAL LINER	-	4300	SP	23.8	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Buried cable 10m South of c/l.	Gas	
Power	Power pole to the S.E.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	No passing EB. On grade and horizontal curve to East with limited sight distance.
Vertical Alignment	7	7	
Roadway Width (m)	10.000		
Embankment	4	4	NE ditch erosion-1mx0.5mx10m-visible through snow.
Sideslope (_ :1)	3.0		
(Height of Cover(m) : 9.7)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	N		NW
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	7	7	Wide transverse cracks @ 300mm.
Collar	7	N	Wide transverse cracks @ 300mm.-27-Apr-2011

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		7	N	
Heaving (mm)	500			
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		7	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	Carried fwd.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4920, Type: SP)				
Barrel Last Accessible Date	10-Dec-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		7	3	3 rings near d/s along North sidewall bulging inwards (~N150mm reverse curvature), no cracking yet.-photo Occuring in original section. Percent deflection inwards.
Measured Span (mm)	4260			
Measured At Ring No.	8			
Deflection (mm)	660			
Percent Deflection	13			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	6	
Separation (mm)				
Longitudinal Seams		N	6	1N
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4920, Type: SP)				
Coating		7	5	Corrosion in original section.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	3	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	5	Bevel bent inwards on North side.-photo
Heaving (mm)	300			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	4	Erosion along North side at bevel.~0.5m deep and 3m long.-photo
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	4	Erosion along North side of bevel.
Beavers (Y/N)	No			
Downstream End General Rating		7	4	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		X	X	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Upstream End General Rating		N	N	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4300, Type: SP)				
Barrel Last Accessible Date				Inaccessible. Observed from ends. Looks OK from both sides. Water flowing through this section.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		7	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		N	N	
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4300, Type: SP)				
Coating		7	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	jump up from pipe #1.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	Last rated N on 27-Apr-2012
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		X	X	
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Downstream End General Rating		N	N	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Meanders both directions.
Bank Stability		5	5	Sloughing banks - d/s minor
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	Yes			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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	2013	Reduce to 21 month cycle.					
OTHER ACTION	2013	Assessment for repalce/replace.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/33.3	Sufficiency Rating (Last/Now) (%)	65.0/52.2	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor NE bank. Monitor barrel deflection not recommended as the d/s end is following same pattern at u/s end.		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	Wade Nanninga		Previous Assistant's Name				
Next Inspection Date	10-Mar-2016		Previous Inspection Date	27-Apr-2011			
Inspection Cycle (Default) (months)	39						
Comment							